



## REPORT

# Acoustic Assessment Report Version 2.0

*Lehigh Hanson Materials Limited - Picton*

Submitted to:

**Lehigh Hanson Materials Limited , Picton**

1370 County Road 49  
Prince Edward, ON  
K0K 2T0

Submitted by:

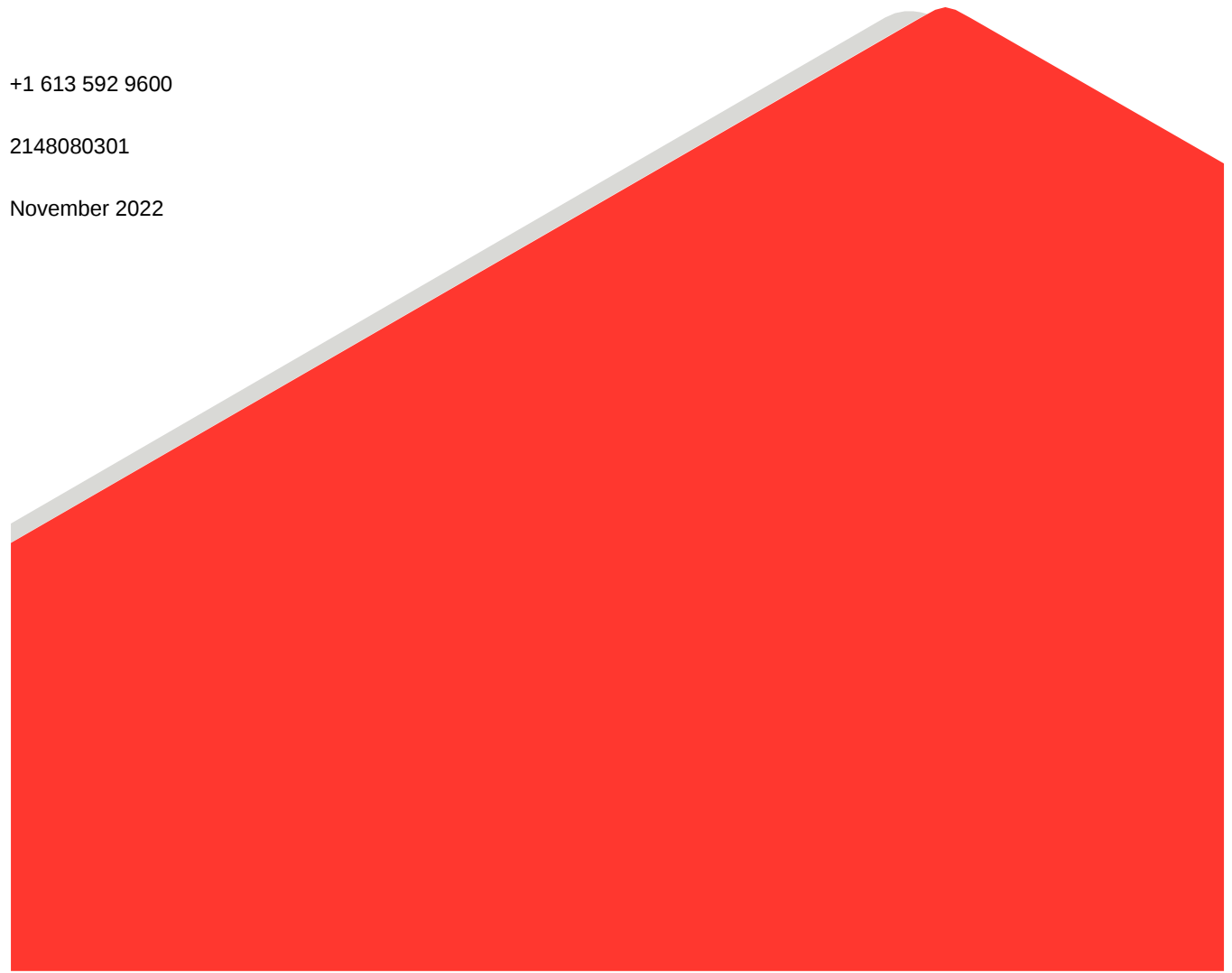
**Golder Associates Ltd.**

1931 Robertson Road, Ottawa, Ontario, K2H 5B7, Canada

+1 613 592 9600

2148080301

November 2022

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## Distribution List

Electronic copy - Lehigh Hanson Materials Limited

Electronic copy - Golder Associates Ltd.

## Document Version Control

This Acoustic Assessment Report (AAR) documents the operations at the Lehigh Hanson Materials Limited (Lehigh) Picton Cement Facility and has been prepared in accordance with Ontario Ministry of the Environment, Conservation and Parks (MECP) noise guidelines, NPC 233 “Information to be Submitted for Approval of Stationary Sources of Sound” (NPC 233) and NPC 300 “Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning” (NPC 300). The AAR is a living document and should be kept up-to-date at all times. Therefore, it is necessary to have appropriate version control. This version control will allow facility personnel, compliance auditors, or the MECP to track and monitor AAR changes over time.

As facility operations change and noise sources are added or removed, this AAR will need to be updated as required. When the AAR is updated, the version number should be updated accordingly.

| Version | Date          | Revision Description                                                                                                                                                              | Prepared By            | Reviewed By<br>(Facility Contact)    |
|---------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------|
| 1.0     | February 2018 | Original Acoustic Assessment Report to support the Environmental Compliance Approval (ECA) Application                                                                            | Golder Associates Ltd. | Nick Papanicolaou<br>(Lehigh Hanson) |
| 1.1     | June 2019     | Updated Acoustic Assessment Report – revised document based on MECP comments received during ECA approval process                                                                 | Golder Associates Ltd. | Nick Papanicolaou<br>(Lehigh Hanson) |
| 1.2     | June 2022     | Updated Acoustic Assessment Report – changes in operations in 2021                                                                                                                | Golder Associates Ltd. | Nick Papanicolaou<br>(Lehigh Hanson) |
| 2.0     | October 2022  | Updated Acoustic Assessment Report reflecting changes associated with the introduction of sources associated with Alternative Low Carbon Fuel and Cement Dome Conversion projects | Golder Associates Ltd. | Nick Papanicolaou<br>(Lehigh Hanson) |

## Executive Summary

Lehigh Hanson Materials Ltd. (Lehigh) is undertaking efforts to use Alternative Low Carbon Fuels (ALCFs) to supplement part of the fossil fuels required to make portland cement at their Picton Cement Plant (the Site). ALCFs are in use in many cement plants all over the world and represent a proven technology to reduce greenhouse gas emissions. The Site is located at 1370 Hwy 49, Picton, Ontario and currently operates with Environmental Compliance Approval (ECA) for air and noise, #0073-BHGQHC, issued October 31, 2019.

Lehigh has prepared an application under Part II.1 of the *Ontario Environmental Protection Act* (EPA) to amend the existing ECA to allow for a Non-Demonstration (Permanent) Project to use ALCFs at the Site, satisfying Ontario Regulation (O. Reg.) 79/15 (as amended by O. Reg. 54/21 and 824/21) (the ECA Amendment Application).

Golder Associates Ltd. (Golder) was retained to update the existing Acoustic Assessment Report (AAR) that was previously completed in June 2022 (Version 1.2) to document the potential changes in the Facility noise emissions due to introduction of noise sources associated with ALCF Project. Additionally, Lehigh is undertaking a Cement Dome Conversion project and this AAR includes these proposed modifications.

The Facility includes quarry operations comprising of drilling and blasting, limestone crushing, two process kilns fueled with a mixture of coal and coke, eight mills equipped with baghouses, baghouses serving various processes, ancillary equipment (i.e., air compressors, ventilation fans, electrical substations), mobile equipment (i.e., haul trucks, loaders, shipping trucks), an emergency diesel generator, a backup water pump, and ship unloading activities. The Facility can operate up to 24 hours per day, 7 days per week, 52 weeks per year, and has a proposed maximum production limit of 1.4 million tonnes of clinker manufactured per year.

This AAR has been completed in accordance with the Ontario Ministry of the Environment, Conservation and Parks (MECP) publications NPC 233 "Information to be Submitted for Approval of Stationary Sources of Sound" (NPC 233) and NPC 300 "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning" (NPC 300). The purpose of the assessment is to evaluate the overall sound emissions of the Facility with respect to MECP noise guidelines.

All relevant sound levels for sources were obtained from on-site measurements taken on October 4, 5, 18 & 19, 2017 and May 13, 2022, manufacturers' data, information from Lehigh, or their designate, and/or Golder's database of similar sources. Noise level predictions were generated using this data. Due to the nature of the sources, the Facility is not expected to be a significant source of vibration for cement manufacturing; the blasting associated with the quarry operations is considered in the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRF) assessment.

Seven locations have been identified as being representative of the most sensitive Point(s) of Reception (POR(s)) near the Facility in accordance with NPC 300 guidelines. Based on the results of this assessment, sound levels from the Facility operations on the surrounding PORs are expected to be at or below the applicable MECP sound level limits when noise controls, as specified in the Noise Abatement Action Plan (NAAP) in Appendix I, are implemented. Therefore, the Facility can operate in compliance with the MECP noise sound level limits as specified in NPC 300.

The information provided in this report could be used to derive proprietary information on Lehigh as well as production numbers at the Facility. This information is thus considered to be a trade secret and of a proprietary nature by Lehigh. It is therefore requested that it be held in confidence and not released to anyone outside of the review procedure without prior consent of Lehigh Hanson. This request relies on Section 17 of the Ontario Freedom of Information and Protection of Individual Privacy Act.

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## ACOUSTIC ASSESSMENT REPORT CHECKLIST

Company Name: Lehigh Hanson Materials Limited

1370 County Rd 49

Company Address: Prince Edward, ON

1370 County Rd 49

Location Facility Prince Edward, ON

The attached Acoustic Assessment Report was prepared in accordance with the guidance in the ministry document "Information to be Submitted for Approval of Stationary Sources of Sound" (NPC 233) dated October 1995 and the minimum required information identified in the check-list on the reverse of this sheet has been submitted.

### Company Contact:

Name: Nick Papanicolaou

Title: Environmental Manager

Phone Number: (613) 438-0361

Signature: 

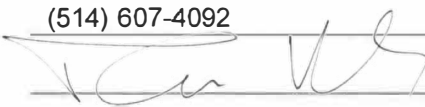
Date: November 24, 2022

### Technical Contact:

Name: Tomasz Nowak

Representing: Golder Associates Ltd.

Phone Number: (514) 607-4092

Signature: 

Date: November 24, 2022

*Recreated by Golder Associates Ltd. from Ontario Ministry of Environment, Conservation and Parks Publication PIBS 5356e*

## Acoustic Assessment Report Checklist

| Required Information |                                                                       | Submitted                               | Explanation/Reference |
|----------------------|-----------------------------------------------------------------------|-----------------------------------------|-----------------------|
| <b>1.0</b>           | <b>Introduction</b> (Project Background and Overview)                 | <input checked="" type="checkbox"/> Yes | Section 1.0           |
| <b>2.0</b>           | <b>Facility Description</b>                                           |                                         |                       |
|                      | 2.1 Operating hours of facility and significant Noise Sources         | <input checked="" type="checkbox"/> Yes | Section 2.0 & 3.0     |
|                      | 2.2 Site Plan identifying all significant Noise Sources               | <input checked="" type="checkbox"/> Yes | Figures 2             |
| <b>3.0</b>           | <b>Noise Source Summary</b>                                           |                                         |                       |
|                      | 3.1 Noise Source Summary Table                                        | <input checked="" type="checkbox"/> Yes | Table 1               |
|                      | 3.2 Source noise emissions specifications                             | <input checked="" type="checkbox"/> Yes | Table 1               |
|                      | 3.3 Source power/capacity ratings                                     | <input checked="" type="checkbox"/> Yes | Table 1, Appendix C   |
|                      | 3.4 Noise control equipment description and acoustical specifications | <input checked="" type="checkbox"/> Yes | Table 1, Appendix C   |
| <b>4.0</b>           | <b>Point of Reception Noise Impact Calculations</b>                   |                                         |                       |
|                      | 4.1 Point of Reception Noise Impact Table                             | <input checked="" type="checkbox"/> Yes | Tables 2, 4, 6, 8     |
|                      | 4.2 Point(s) of Reception (POR) list and description                  | <input checked="" type="checkbox"/> Yes | Section 4.0, Table 1  |
|                      | 4.3 Land-use Zoning Plan                                              | <input checked="" type="checkbox"/> Yes | Appendix A            |
|                      | 4.4 Scaled Area Location Plan                                         | <input checked="" type="checkbox"/> Yes | Figure 1              |
|                      | 4.5 Procedure used to assess noise impacts at each POR                | <input checked="" type="checkbox"/> Yes | Section 6.1           |
|                      | 4.6 List of parameters/assumptions used in calculations               | <input checked="" type="checkbox"/> Yes | Section 6.1           |
| <b>5.0</b>           | <b>Acoustics Assessment Summary</b>                                   |                                         |                       |
|                      | 5.1 Acoustic Assessment Summary Table                                 | <input checked="" type="checkbox"/> Yes | Tables 3, 5, 7, 9     |
|                      | 5.2 Rationale for selecting applicable noise guideline limits         | <input checked="" type="checkbox"/> Yes | Section 5.0           |
|                      | 5.3 Predictable Worst-Case Impacts Operating Scenario                 | <input checked="" type="checkbox"/> Yes | Section 2.0 & 3.0     |
| <b>6.0</b>           | <b>Conclusions</b>                                                    |                                         |                       |
|                      | Statement of compliance with the selected noise performance limits    | <input checked="" type="checkbox"/> Yes | Section 7.0           |
| <b>7.0</b>           | <b>Appendices</b> (Provide details such as)                           | <input checked="" type="checkbox"/> Yes |                       |
|                      | Listing of Insignificant Noise Sources                                | <input checked="" type="checkbox"/> Yes | Appendix E            |
|                      | Manufacturer's Noise Specifications                                   | <input checked="" type="checkbox"/> Yes | Appendix C            |
|                      | Calculations                                                          | <input checked="" type="checkbox"/> Yes | Appendix H            |
|                      | Instrumentation                                                       | <input checked="" type="checkbox"/> Yes | Appendix F            |
|                      | Meteorology during Sound Level Measurements                           | <input checked="" type="checkbox"/> Yes | Appendix G            |
|                      | Raw Data from Measurements                                            | <input checked="" type="checkbox"/> Yes | Appendix C            |
|                      | Drawings (Facility / Equipment)                                       | <input checked="" type="checkbox"/> Yes | Figures               |

Recreated by Golder Associates Ltd., from Ontario Ministry of Environment, Conservation and Parks Publication PIBS 5356e

## 1.0 INTRODUCTION

Lehigh Hanson Materials Ltd. (Lehigh) is undertaking efforts to use Alternative Low Carbon Fuels (ALCFs) to supplement part of the fossil fuels required to make portland cement at their Picton Cement Plant (the Site). ALCFs are in use in many cement plants all over the world and represent a proven technology to reduce greenhouse gas emissions. The Site is located at 1370 Hwy 49, Picton, Ontario and currently operates with Environmental Compliance Approval (ECA) for air and noise, #0073-BHGQHC, issued October 31, 2019.

Lehigh has prepared an application under Part II.1 of the *Ontario Environmental Protection Act* (EPA) to amend the existing ECA to allow for a Non-Demonstration (Permanent) Project to use ALCFs at the Site, satisfying Ontario Regulation (O. Reg.) 79/15 (as amended by O. Reg. 54/21 and 824/21) (the ECA Amendment Application).

Golder Associates Ltd.(Golder) was retained to update the existing Acoustic Assessment Report (AAR) that was previously completed in June 2022 (Version 1.2) to document the potential changes in the Facility noise emissions due to introduction of noise sources associated with ALCF and Cement Dome Conversion projects.

As part of the ECA Amendment Application, Lehigh is requesting approval for the following:

- ALCF daily throughput of up to 200 tonnes per day, which may include the following materials:
  - Construction & Demolition (C&D) Materials; including but not limited to primarily wood material with minor amounts of non-recyclable paper and plastic.
  - Industrial, Commercial, and Institutional (IC&I) Materials; including but not limited to primarily non-recyclable paper, plastic and textiles wood material, and tire fibre and fluff.
  - The combustible fraction of non-recyclable household waste (commonly referred to as Refuse Derived Fuel [RDF]).
  - Discarded treated seed.
- Installation of new conveyance and storage equipment for ALCFs at the Site using enclosed containers and buildings.

Additionally, equipment and operations associated with the Cement Dome Conversion Project (CDC) have been assessed in this AAR since the last version of the AAR.

This AAR has been completed in accordance with the Ontario Ministry of the Environment, Conservation and Parks (MECP) publications NPC 233 "Information to be Submitted for Approval of Stationary Sources of Sound" (NPC 233) and NPC 300 "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning" (NPC 300). The purpose of the assessment is to evaluate the overall sound emissions of the Facility with respect to MECP noise guidelines.

A site location plan showing the location of the Facility and the most sensitive Point(s) of Reception (POR(s)) is provided in Figure 1. Noise sensitive PORs were selected that are representative of sensitive receptors surrounding the Facility. For this assessment, seven locations have been selected to be representative of the existing PORs and are identified in Figure 1. POR020 is approximately 815 metres from the closest stationary noise source assessed in this AAR.

A site layout plan, showing the locations of the significant noise sources, is provided in Figure 2. The surrounding lands are used for rural, urban residential, environmental protection and open space purposes. A zoning map for the property and surrounding areas is provided in Appendix A.

Sound level limits for the Facility operations on neighbouring PORs were established in accordance with MECP guidelines. Using sound power levels obtained from on site measurements taken on October 4, 5, 18 & 19, 2017 and May 13, 2022, manufacturers' data, information from Lehigh Hanson, or their designate, and Golder's database of similar sources, noise predictions of the Facility's operations onto neighbouring PORs were completed to determine the potential noise impacts. To help understand the analysis and recommendations made in this report, a brief discussion of noise terminology is provided in Appendix B.

The information provided in this report could be used to derive proprietary information on Lehigh as well as production numbers at the Facility. This information is thus considered to be a trade secret and of a proprietary nature by Lehigh Hanson. It is therefore requested that it be held in confidence and not released to anyone outside of the review procedure without prior consent of Lehigh Hanson. This request relies on Section 17 of the Ontario Freedom of Information and Protection of Individual Privacy Act.

Based on the provided information the acoustically significant pieces of equipment associated with CDC and ALCF projects will include:

- ALCF
  - Enclosed loading area with operations of a loader and a truck
  - Enclosed screen and reject bins
  - Enclosed fuel injection blower
- CDC
  - Outdoor Dust Collector
  - Outdoor Blower
  - Floor Aeration Blowers (located inside the building BU-323-6 )
  - Dust collector, Convey Air Compressor and Screw Pump (located inside the building BU-327-3)

Furthermore, Lehigh informed Golder that the equipment associated with the Kiln 3 will no longer be used on the site and therefore Golder removed the sources associated with the Kiln 3 from the current noise model of the Facility. The removed sources included:

- K3 Cooling Kiln Fan 1, 2, 3 and 4 (K3S001 to K3S004)
- Kiln 3 Dust Collector Fan 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 (K3S005 to KS3014)
- Kiln 3 Fan I.D. (K3S015)
- Kiln 3 Baghouse (K3S016)
- K3 Cooler Compt 1, 2, 3, 4 and 5 (K3S017 to K3S021)
- Kiln 3 Feed System (Dust Collector) (5-14) (K3S023)
- Kiln 3 - Fan 1 (K3S024)
- Kiln 3 Stack with baghouse (4-1) (K3S025)
- Waste Dust Bin - Dust Collector (K3S022)

## 2.0 FACILITY DESCRIPTION

Lehigh manufactures cement. A quarry is located adjacent to the cement plant in which raw materials (limestone and shale) are extracted. These raw materials are transferred to the plant by truck and either fed directly to the primary crusher or stockpiled nearby the crusher (and later fed to the crusher). Once the limestone is crushed to less than eight (8) inches in diameter, it is fed to a grinder. There are ball mills, which are used to produce various grades of cement by grinding clinker and gypsum. Cement and clinker are mainly sent off-site by ship with a small percentage by truck. There are also support operations at the Facility, namely: air compressors, comfort heating, ventilating and air conditioning equipment and a welding shop.

The Facility also has an emergency diesel generator and backup water pump.

The Facility can operate up to 24 hours per day, 7 days per week, 52 weeks per year, and has a proposed maximum production limit of 1.4 million tonnes of clinker manufactured per year.

### 3.0 NOISE SOURCE SUMMARY

The primary noise sources of concern that could operate at the Site are summarized below, they include:

- Process equipment – dust collectors and fans;
- Bay doors and louvers;
- Silo exhausts;
- Mobile equipment on-site (i.e., loaders);
- Electrical substations;
- Air compressors;
- Ventilation;
- Conveyance equipment;
- Shipping truck traffic;
- Haul trucks;
- An emergency diesel generator; and
- A backup water pump.

The equipment associated with the ALCF project is understood to be enclosed or housed in the designated building /structure to limit noise emissions. The following major noise sources associated with the ALCF project were considered:

- ALCF fuel loader
- ALCF delivery truck
- Screen
- Reject bin
- Fuel injection blower

The majority of the equipment associated with the CDC project, with the exception of the outdoor dust collector (CD\_DCF) and blower (CDC\_B), will be located inside a dedicated building to limit the noise emission into the environment. It is expected that, due to equipment being enclosed, the predominant noise emission path will be via building openings (i.e., louvers). The louver noise emission was calculated using equipment data and building parameters. It is further expected that the building walls will not be a significant noise source. The following significant noise sources associated with the CDC project were considered:

- Building BU-323-6 louver
- Building BU-327-3 south and north louver
- Blower
- Dust collector

All the identified primary noise sources are summarized in the attached Table 1 and illustrated in Figure 2.

The respective noise data is provided in Appendix C. Nomenclature used to describe sound characteristics, location and noise control used in Table 1 is provided in Appendix D. A list of insignificant noise sources is provided in Appendix E. In preparing the assessment, efforts were taken to ensure that the source numbering convention was consistent with the information submitted by Lehigh, to the MECP, as part of the documentation provided in the Emission Summary and Dispersion Modelling (ESDM) Report.

## **3.1 Worst Case Operation Scenarios**

### **3.1.1 Worst Case Operation Scenarios – General Operations**

Generally, the Facility can be operational 24 hours a day, with main hours from 0700 to 1900, but activities vary between the various periods of the day. Therefore, the worst-case operating scenario was established and considered for the daytime, evening, and nighttime periods. Primary noise sources were conservatively assumed to operate continuously during a 24-hour period and/or an entire one-hour period during the predictable worst-case hour period; except for the following mobile noise sources:

- quarry haul truck and loader were limited to daytime only (0700-1900); up to 5 trips between the quarry and the primary crusher in a given hour were assessed.
- coal haul trucks were limited to daytime only (0700-1900); up to 5 trips between the coal pile and the coal fuel area in a given hour were assessed.
- shipping trucks were assumed to occur throughout the 24-hour day with up to 5 trucks in a given hour plus one truck associated with the ALCF project (total of six in a given hour).

### **3.1.2 Worst Case Operation Scenarios – Emergency Diesel Generator**

The emergency diesel generator is periodically tested during the daytime period of 0700 to 1900. It is tested separately from the backup water pump testing.

### **3.1.3 Worst Case Operation Scenarios – Backup Water Pump**

The backup water pump is periodically tested during the daytime period of 0700 to 1900. It is tested separately from the emergency diesel generator testing.

## 4.0 POINTS OF RECEPTION

A total of seven PORs were identified as being representative of the sensitive receptors near the Facility as shown in Figure 1. The identified PORs are summarized below.

- POR003 – Two story residence located at Elmbrook Road, west of the Facility;
- POR006 – Single story residence located at Elmbrook Road, west of the Facility;
- POR016 – Single story residence located along shoreline, north of the Facility;
- POR020 – Two story residence located at White Chapel Road, south of the Facility;
- POR037 – Single story residence located on Highway 33, southeast of the Facility;
- POR044 – Two story residence located on Highway 33, southeast of the Facility;
- POR061 – Two story residence located on Highway 33, southeast of the Facility.

## 5.0 ASSESSMENT CRITERIA

The PORs located near the Facility are in an area defined as Class 3 as per MECP publication NPC 300. A Class 3 area can best be described as a rural area.

In assessing stationary noise sources, the MECP has established exclusionary Plane of Window (POW) and Outdoor sound level limits for Class 3 areas. The POW sound level limit for the noise sensitive receptors in a Class 3 area is described as follows:

*The sound level limit at a POW POR is set as the higher of either the applicable exclusionary limit of 45 dBA in the daytime period of 07:00-19:00, 40 dBA in the evening period of 19:00-23:00 and 40 dBA in the night-time period of 23:00-07:00, or the minimum background sound level that occurs or is likely to occur during the time period corresponding to the operation of the stationary source under impact assessment.*

The Outdoor sound level limit for the noise sensitive receptors in a Class 3 area is described as follows:

*The sound level limit at an outdoor POR is set as the higher of either the applicable exclusionary limit of 45 dBA in the daytime period of 07:00-19:00 and 40 dBA in the evening period of 19:00-23:00, or the minimum background sound level that occurs or is likely to occur during the time period corresponding to the operation of the stationary source under impact assessment. In general, the outdoor POR will be protected during the night-time as a consequence of meeting the sound level limit at the adjacent POW.*

The One Hour Equivalent Sound Level ( $L_{eq}$ ) MECP exclusionary sound level limits for a POR in a Class 3 area are the following:

- Daytime (07:00-19:00) – Class 3 POW = 45 dBA / Class 3 Outdoor = 45 dBA;
- Evening (19:00-23:00) – Class 3 POW = 40 dBA / Class 3 Outdoor = 40 dBA;
- Night-time (23:00-07:00) – Class 3 POW = 40 dBA / Class 3 Outdoor = N/A.

## 6.0 IMPACT ASSESSMENT

### 6.1 Method

All relevant sound levels for sources were obtained from on-site measurements taken on October 4, 5, 18 & 19, 2017 and May 13, 2022, manufacturers' data, information from Lehigh, or their designate, and/or Golder's database of similar sources. During the May 2022 site visit, Golder verified the acoustic performance of the noise controls implemented at the Facility as of the date of the site visit. Noise data has been summarized in Appendix C. In the absence of a detailed noise data equipment noise predictions were based on the expected sound pressure level of 85 dBA at 1 m from the equipment. Noise impact predictions were generated using this data.

The source sound pressure level measurements taken at the Facility during the October 2017 and May 2022 site visits were carried out using a Larson Davis 831 sound level meter. The instrument was calibrated before and after the sound level measurements and the calibration verified. The instrument provided the spectral (i.e. frequency) content of the noise source(s) under review and are valuable tools for identifying, quantifying and ranking noise source emissions from equipment at a given POR. Measuring equipment used in this study meets the MECF requirements, and calibration certificates are provided in Appendix F.

Weather during the site visits was cloudy to clear conditions and is summarized as follows

| Date             | Temperature (°C) | Wind Speed (km/hr) |
|------------------|------------------|--------------------|
| October 4, 2017  | 20 to 24         | 15 to 26           |
| October 5, 2017  | 13 to 19         | 0 to 26            |
| October 18, 2017 | 11 to 18         | 0 to 19            |
| October 19, 2017 | 16 to 19         | 17 to 32           |
| May 13, 2022     | 24 to 26         | 9 to 14            |

Please Note: Outdoor measurements were not completed during periods of wind gusts. Weather data is available in Appendix G.

The predictive analysis was carried out using the commercially available software package Cadna/A V 2021 MR 2 (build: 185.5161). The predicted levels take into consideration that the sound from a stationary point noise source spreads spherically and attenuates at a rate of 6 dB per doubling of distance. Further, attenuation from barriers, ground effect and air absorption may be included in the analysis as determined from ISO 9613 (part 2), which is the current standard used for outdoor sound propagation predictions. It should be noted that this standard makes provisions to include a correction to address for downwind or ground-based temperature inversion conditions. Noise predictions have been made assuming a downwind or moderate temperature inversion conditions for all PORs, a design condition consistent with the accepted practice of the MECF.

As described in ISO 9613 (part 2), ground factor values that represent the ground effect on sound levels range between 0 and 1. Based on the specific site conditions, the ground factor values used in the modelling were, a ground factor of 0 for waterbodies (onsite and offsite) between the Facility and PORs, a ground factor value of 0.2 for the surface on the property of the Facility which is made up of a combination of asphalt, concrete, gravel and landscaped areas, and a ground factor value of 0.8 for the surrounding area which is mainly made up of grassed or treed areas in between the Facility and the most sensitive PORs surrounding the Facility.

## 6.2 Results

### 6.2.1 Noise Impact Assessment – General Operations

The Facility's operations, as described in Section 3.0, were modelled to determine the predictable worst-case sound levels at the identified PORs. Sound levels were predicted at each POR location for both POW and Outdoor PORs. Outdoor POR sound levels (at a height of 1.5 m) were predicted by calculating sound levels within the POR property boundaries and if applicable within 30 m of the POW, consistent with NPC 300 requirements.

The higher of the POW or Outdoor sound levels, relative to the applicable sound level limit, were reported for the respective POR.

Table 2 in the Tables Section of this Report summarizes the predicted sound levels from each individual source (i.e., partial levels) at the identified PORs due to the Facility operations. Table 3 provides a summary of the overall sound levels at the identified PORs due to the Facility operations. Sample calculations are provided in Appendix H. It should be noted that, in relation to the larger overall Facility, the introduction of the ALCF and Cement Dome Conversion projects is not expected to substantially alter the noise emissions of the Facility at the identified off-site PORs.

As the predictions indicate that the Facility could operate above the applicable sound level limits, Appendix I documents a Noise Abatement Action Plan (NAAP), detailing the mitigative approach, as presented for the ECA application, which will allow the Facility to demonstrate compliance with applicable noise limits. A number of the identified controls have been implemented as of the May 2022 site visit. The original NAAP has been updated to identify which sources have been modified. This is demonstrated in the NAAP with bold text identifying the mitigated sources. Tables 4 and 5 provide a summary of the mitigated predicted sound levels from each individual source (i.e., partial levels) at the identified PORs due to the Facility operations and a summary of the overall sound levels at the identified PORs due to the Facility operations, respectively.

### 6.2.2 Noise Impact Assessment – Emergency Diesel Generator

Facility operations include one emergency diesel generator. The generator is periodically tested during the daytime hours (0700-1900). As per MECP publication NPC 300, there is a +5dB allowance over the established performance limit for periodic testing of emergency equipment.

Tables 6 and 7 in the Tables Section summarizes the sound level predictions on the PORs during the periodic testing. The predicted sound levels from the periodic testing of the emergency diesel generator at the identified PORs are below the applicable MECP noise level limit for generator testing.

### 6.2.3 Noise Impact Assessment – Backup Water Pump

Facility operations include one backup water pump. The backup water pump is periodically tested during the daytime hours (0700-1900). As per MECP publication NPC 300, there is a +5dB allowance over the established performance limit for periodic testing of emergency equipment.

Tables 8 and 9 in the Tables Section summarizes the sound level predictions on the PORs during the periodic testing. The predicted sound levels from the periodic testing of the backup water pump at the identified PORs are below the applicable MECP noise level limit for generator testing.

## 7.0 CONCLUSION

Golder Associates Ltd, a member of WSP, (Golder) was retained to update the existing Acoustic Assessment Report (AAR) that was previously completed in June 2022 (Version 1.2) to document the potential changes in the Facility noise emissions due to introduction of noise sources associated with ALCF and Cement Dome Conversion projects. Using onsite measurements, manufacturers' data, data provided by Lehigh, or their designate, and database of similar noise sources, Golder predicted the noise levels on the identified Points of Reception (PORs) during the Facility's predictable worst-case hour of general operation and for emergency equipment.

The predictive analysis indicates the noise emissions, associated with the Facility general operations, are expected to above the applicable MECF sound level limits. A mitigative approach has been documented in a Noise Abatement Action Plan (NAAP), which details an approach for the Facility general operations to demonstrate compliance with applicable noise limits. With the implementation of the controls documented in the NAAP, the Facility is expected to be able to operate in compliance with the prescribed sound level limits. It should be noted that, in relation to the larger overall Facility, the introduction of the ALCF and Cement Dome Conversion projects is not expected to substantially alter the noise emissions of the Facility at the identified off-site PORs.

The predictive analysis indicates the noise emissions for the Emergency Diesel Generator and Backup Water Pump testing are below the applicable MECF noise limits at the identified PORs.

## 8.0 LIMITATIONS OF REPORT

### 8.1 Standard of Care

Golder Associates Ltd. has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering and science professions currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made. It should be noted that in April 2021, Golder Associates Ltd. was acquired by and is now a member of the WSP family of companies. Golder Associates Ltd. remains as a legal entity and is the contracting entity for this report.

### 8.2 Basis and Use of the Report

This Acoustic Assessment Report (AAR) was prepared for the exclusive use of Lehigh Hanson Materials Limited (Lehigh) (the Client) and once finalized, are intended to fulfil Ontario Ministry of the Environment, Conservation and Parks (MECP) data requirements of an ECA Amendment Application for a Non-Demonstration (Permanent) Project under Ontario Regulation (O. Reg.) 79/15 (as amended by O. Reg. 54/21 and 824/21) of the Ontario Environmental Protection Act for the proposed Alternative Low Carbon Fuels (ALCFs) project at its cement manufacturing facility located at 1370 County Rd 49 in Prince Edward Ontario (the Facility).

The AAR and supporting documents are based on observations of Facility operations, discussions with the Client about current Facility practices, review of documentation provided by the Client and calculations made to identify potential noise impacts beyond the property boundary. This AAR cannot account for changes in Facility conditions and operational practices completed after it has been finalized or submitted by the Client to the MECP.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client and the applicable regulatory authorities that are authorized to rely on the report as Authorized Users, subject to the limitations and purposes described herein. No other party may use or rely on this report or any portion thereof without Golder's express written consent. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as all electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges that electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client and any Authorized Users can not rely upon the electronic media versions of Golder's report or other work products, unless it was directly provided by Golder.

When evaluating the Facility and developing this report, Golder has relied on information provided by the Client, the regulatory authorities, and others. Golder has acted in good faith and accepts no responsibility for any deficiencies, misstatements, or inaccuracies contained in this report resulting from omissions, misinterpretations or falsifications by those who provided Golder with information.

## Signature Page

### Golder Associates Ltd.



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



Joe Tomaselli, M.Eng., P.Eng.  
*Team Lead/Senior Acoustics, Noise and Vibration Engineer*

TN/JT/ng/ca

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## TABLES

Table 1: Facility Source Summary

| Source ID | Source Description                               | Overall Daytime Sound Power Level (dBA) | Overall Evening Sound Power Level (dBA) | Overall Night-time Sound Power Level (dBA) | Source Location | Sound Characteristics | Noise Control Measures |
|-----------|--------------------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------------------------|-----------------|-----------------------|------------------------|
| FPS001    | Backup water pump                                | 104                                     | —                                       | —                                          | O               | S                     | U                      |
| GS001     | Emergency Generator                              | 116                                     | —                                       | —                                          | O               | S                     | U                      |
| USP001    | #1 Mill Stack (5-1)                              | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP002    | #2 Mill Stack (5-2)                              | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP003    | #3 Mill Stack (5-3)                              | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP004    | #4 Mill Stack (5-4)                              | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP005    | #5 Mill Stack (5-5)                              | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP006    | #6 & #7 Mill Stack (5-6)                         | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP007    | Ball Mill 7 - outside                            | 120                                     | 120                                     | 120                                        | O               | S                     | U                      |
| USP008    | Mill 10 (5-49)                                   | 120                                     | 120                                     | 120                                        | O               | S                     | U                      |
| SP009     | Slag dryer (5-48)                                | 108                                     | 108                                     | 108                                        | O               | S                     | U                      |
| USP010    | Packaging Silo (Silo #4) - dust collector (5-19) | 120                                     | 120                                     | 120                                        | O               | S                     | U                      |
| USP011    | Blend Silo 2 (5-10)                              | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| USP012    | Blend Silo 3 (5-11)                              | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| USP013    | Blend Silo 4 (#3 Kiln Feed) (5-12)               | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| SP014     | Blend Silo 5 (5-41) - Kiln 3                     | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| SP015     | Blend Silo 6 (5-13) - Kiln 3                     | 94                                      | 94                                      | 94                                         | O               | S                     | U                      |
| USP016    | Blend Silo compressors - Louver                  | 108                                     | 108                                     | 108                                        | O               | S                     | U                      |
| USP017    | Blend Silo compressors - Louver                  | 108                                     | 108                                     | 108                                        | O               | S                     | U                      |
| SP018     | Blend Silo compressors - Louver                  | 98                                      | 97                                      | 97                                         | O               | S                     | U                      |
| SP019     | Blend Silo compressors - Louver                  | 95                                      | 95                                      | 95                                         | O               | S                     | U                      |
| USP020    | Loesch Bldg - Cooling radiator                   | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| SP021     | Loesch Bldg - Preciptator rapper opening 1       | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| SP022     | Loesch Bldg - Preciptator rapper opening 2       | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| SP023     | Kiln 4 Stack with ESPs (4-2)                     | 88                                      | 88                                      | 88                                         | O               | S                     | U                      |
| SP024     | Main Stack - motor                               | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| SP025     | Expansion - Limestone Storage 105-1 (5-39)       | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| SP026     | Expansion - Hopper Feedoweights (5-47)           | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| SP027     | New Secondary Crusher (5-38)                     | 94                                      | 94                                      | 94                                         | O               | S                     | U                      |
| USP028    | S-2 to Crushed Limestone Conveyor (1-2)          | 106                                     | 106                                     | 106                                        | O               | S                     | U                      |
| USP029    | Primary Crusher - Dust collector (5-7)           | 108                                     | 108                                     | 108                                        | O               | S                     | U                      |
| USP030    | Secondary Crusher (FAM and Hammermill) (5-8)     | 117                                     | 117                                     | 117                                        | O               | S                     | U                      |
| USP031    | Dock Silo 1 (5-20)                               | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| USP032    | Dock Silo 2 (5-21)                               | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| USP033    | Dock Silo 3 (5-22)                               | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USP034    | Dock Silo 4 (5-23)                               | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| SP035     | Compressor - shore - door                        | 89                                      | 89                                      | 89                                         | O               | S                     | U                      |
| SP036     | Compressor - shore - louver                      | 91                                      | 91                                      | 91                                         | O               | S                     | U                      |
| SP037     | Compressor - shore - double door                 | 91                                      | 91                                      | 91                                         | O               | S                     | U                      |
| SP038     | C-15 Discharge to Dome (5-30)                    | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| SP039     | Coal Mill Dust Collector - North (5-31)          | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| SP040     | Coal Mill Dust Collector - South (5-31)          | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| USP041    | Pan conveyor (5-43)                              | 115                                     | 115                                     | 115                                        | O               | S                     | U                      |
| SP042     | Coal system - Schenck blower - 2nd floor opening | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| USP043    | North Fan Sources                                | 109                                     | 109                                     | 109                                        | O               | S                     | U                      |
| SP045     | Preheat tower - south side opening               | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| SP046     | Preheat tower - south side opening               | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| SP047     | Preheat tower - south side opening               | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| SP048     | Preheat tower - south side opening               | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| SP049     | Preheat tower - south side opening               | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| SP050     | Transformer                                      | 94                                      | 94                                      | 94                                         | O               | S                     | U                      |
| USP051    | Kiln 4 - Fan 1                                   | 114                                     | 114                                     | 114                                        | O               | S                     | U                      |
| USP052    | Kiln 4 - Fan 2                                   | 113                                     | 113                                     | 113                                        | O               | S                     | U                      |
| USP053    | Kiln 4 - Fan 3                                   | 115                                     | 115                                     | 115                                        | O               | S                     | U                      |
| SP054     | Kiln 4 - Fan 4                                   | 106                                     | 106                                     | 106                                        | O               | S                     | U                      |
| SP055     | Kiln 4 - Fan 5                                   | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| SP056     | Kiln 4 - Fan 6                                   | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| SP057     | Kiln 4 - Fan 7                                   | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| SP058     | Kiln 4 - Fan 8                                   | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| SP059     | Kiln 4 - Blue fan                                | 106                                     | 106                                     | 106                                        | O               | S                     | U                      |
| USP060    | Kiln 4 - B fan 1                                 | 106                                     | 106                                     | 106                                        | O               | S                     | U                      |
| USP061    | Kiln 4 - B fan 2                                 | 106                                     | 106                                     | 106                                        | O               | S                     | U                      |
| SP062     | Kiln 4 - Shell fan 1                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP063     | Kiln 4 - Shell fan 2                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP064     | Kiln 4 - Shell fan 3                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP065     | Kiln 4 - Shell fan 4                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP066     | Kiln 4 - Shell fan 5                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP067     | Kiln 4 - Shell fan 6                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP068     | Kiln 4 - Shell fan 7                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP069     | Kiln 4 - Shell fan 8                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP070     | Kiln 4 - Shell fan 9                             | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP071     | Kiln 4 - Shell fan 10                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP072     | Kiln 4 - Shell fan 11                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP073     | Kiln 4 - Shell fan 12                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP074     | Kiln 4 - Shell fan 13                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP075     | Kiln 4 - Shell fan 14                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP076     | Kiln 4 - Shell fan 15                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP077     | Kiln 4 - Shell fan 16                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP078     | Kiln 4 - Shell fan 17                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP079     | Kiln 4 - Shell fan 18                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP080     | Kiln 4 - Shell fan 19                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP081     | Kiln 4 - Shell fan 20                            | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| SP082     | Heat exchanger (1 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP083     | Heat exchanger (2 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP084     | Heat exchanger (3 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP085     | Heat exchanger (4 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP086     | Heat exchanger (5 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP087     | Heat exchanger (6 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP088     | Heat exchanger (7 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP089     | Heat exchanger (8 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP090     | Heat exchanger (9 of 16 fans)                    | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP091     | Heat exchanger (10 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP092     | Heat exchanger (11 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP093     | Heat exchanger (12 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP094     | Heat exchanger (13 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP095     | Heat exchanger (14 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP096     | Heat exchanger (15 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP097     | Heat exchanger (16 of 16 fans)                   | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| SP098     | Transformer                                      | 94                                      | 94                                      | 94                                         | O               | S                     | U                      |
| SP099     | Ship Genset (2000 kW)                            | 99                                      | 99                                      | 99                                         | O               | S                     | U                      |
| SP100     | Ship Genset (300 kW)                             | 86                                      | 86                                      | 86                                         | O               | S                     | U                      |
| SP101     | Clinker Ship Loading (5-27)                      | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| SP103     | Loader - quarry                                  | 113                                     | —                                       | —                                          | O               | S                     | U                      |
| USP105    | Loader - Coal pile                               | 113                                     | 113                                     | —                                          | O               | S                     | U                      |
| MSP007    | Ball Mill 7 - outside                            | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| MSP008    | Mill 10 (5-49)                                   | 95                                      | 95                                      | 95                                         | O               | S                     | U                      |
| MSP010    | Packaging Silo (Silo #4) - dust collector (5-19) | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| MSP011    | Blend Silo 2 (5-10)                              | 90                                      | 90                                      | 90                                         | O               | S                     | U                      |
| MSP013    | Blend Silo 4 (#3 Kiln Feed) (5-12)               | 91                                      | 91                                      | 91                                         | O               | S                     | U                      |
| MSP016    | Blend Silo compressors - Louver                  | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| MSP017    | Blend Silo compressors - Louver                  | 97                                      | 96                                      | 96                                         | O               | S                     | U                      |
| MSP020    | Loesch Bldg - Cooling radiator                   | 94                                      | 94                                      | 94                                         | O               | S                     | U                      |
| MSP028    | S-2 to Crushed Limestone Conveyor (1-2)          | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| MSP029    | Primary Crusher - Dust collector (5-7)           | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| MSP030    | Secondary Crusher (FAM and Hammermill) (5-8)     | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| MSP043    | North Fan Sources                                | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| MSP051    | Kiln 4 - Fan 1                                   | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| MSP052    | Kiln 4 - Fan 2                                   | 100                                     | 100                                     | 100                                        | O               | S                     | U                      |
| MSP053    | Kiln 4 - Fan 3                                   | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| MSP060upd | Kiln 4 - B fan 1                                 | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSP061upd | Kiln 4 - B fan 2                                 | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSP105    | Loader - Coal pile                               | 103                                     | 103                                     | —                                          | O               | S                     | U                      |
| USP008b   | Mill 10 Stack (5-49)                             | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP012    | Blend Silo 3 (5-11)                              | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSP001    | #1 Mill Stack (5-1)                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP002    | #2 Mill Stack (5-2)                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP003    | #3 Mill Stack (5-3)                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP004    | #4 Mill Stack (5-4)                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |

Table 1: Facility Source Summary

| Source ID   | Source Description                               | Overall Daytime Sound Power Level (dBA) | Overall Evening Sound Power Level (dBA) | Overall Night-time Sound Power Level (dBA) | Source Location | Sound Characteristics | Noise Control Measures |
|-------------|--------------------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------------------------|-----------------|-----------------------|------------------------|
| MSP005      | #5 Mill Stack (5-5)                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP006      | #6 & #7 Mill Stack (5-6)                         | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP031      | Dock Silo 1 (5-20)                               | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP032      | Dock Silo 2 (5-21)                               | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP033      | Dock Silo 3 (5-22)                               | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| MSP034upd   | Dock Silo 4 (5-23)                               | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| MSP041      | Pan conveyor (5-43)                              | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| MSP008b     | Mill 10 Stack (5-49)                             | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP016 upd  | Blend Silo compressors - Louver                  | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSP017upd   | Blend Silo compressors - Louver                  | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| SP018upd    | Blend Silo compressors - Louver                  | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| SP019upd    | Blend Silo compressors - Louver                  | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSP010upd   | Packaging Silo (Silo #4) - dust collector (5-19) | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| SP015upd    | Blend Silo 6 (5-13) - Kiln 3                     | 100                                     | 100                                     | 100                                        | O               | S                     | U                      |
| MSP029upd   | Primary Crusher - Dust collector (5-7)           | 98                                      | 98                                      | 98                                         | O               | S                     | U                      |
| MSP031upd   | Dock Silo 1 (5-20)                               | 87                                      | 87                                      | 87                                         | O               | S                     | U                      |
| MSP032upd   | Dock Silo 2 (5-21)                               | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSP033upd   | Dock Silo 3 (5-22)                               | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| MSP034      | Dock Silo 4 (5-23)                               | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| MSP012upd   | Blend Silo 3 (5-11)                              | 100                                     | 100                                     | 100                                        | O               | S                     | U                      |
| LCFP B      | LCFP blower                                      | 104                                     | 104                                     | 104                                        | O               | S                     | U                      |
| LCFP L      | LCFP loader                                      | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| LCFP S      | LCFP screen                                      | 107                                     | 107                                     | 107                                        | O               | S                     | U                      |
| LCFP S      | LCFP metal reject bin                            | 120                                     | 120                                     | 120                                        | O               | S                     | U                      |
| LCFP TU     | LCFP truck unloading                             | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| LCFP TI     | LCFP truck idling                                | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| BU 323 6 L  | CD Builing 323-6 louver                          | 104                                     | 104                                     | 104                                        | O               | S                     | U                      |
| BU 327 3 EL | CD Builing 327-3 exhaust louver                  | 100                                     | 100                                     | 100                                        | O               | S                     | U                      |
| BU 327 3 IL | CD Builing 327-3 intake louver                   | 100                                     | 100                                     | 100                                        | O               | S                     | U                      |
| CD DCF      | CD dust collector fan                            | 100                                     | 100                                     | 100                                        | O               | S                     | U                      |
| CDC B       | CDC Outdoor Blower                               | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| SL001       | Haul truck to crusher - Quarry (1-1)             | 116                                     | —                                       | —                                          | O               | S                     | U                      |
| SL002       | Haul truck to crusher - Plant (1-1)              | 116                                     | —                                       | —                                          | O               | S                     | U                      |
| SL003       | Coal haul truck to Kiln4 (3-7)                   | 116                                     | —                                       | —                                          | O               | S                     | U                      |
| SL004       | Highway truck - in                               | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| SL005       | Highway truck - out                              | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| LCFP T      | Low carbon fuel project delivery truck           | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USV001      | Ball Mill - Door A                               | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| USV002      | Ball Mill - Door B                               | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| USV003      | Ball Mill - Door D                               | 94                                      | 94                                      | 94                                         | O               | S                     | U                      |
| USV004      | Ball Mill - Door C                               | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| USV005      | Ball Mill - Door E                               | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| USV006      | Ball Mill - Door F                               | 99                                      | 99                                      | 99                                         | O               | S                     | U                      |
| USV007      | Blend Silo compressors - Baydoor                 | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| USV008      | Blend Silo compressors - Baydoor                 | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| USV009      | Blend Silo compressors - Double door             | 117                                     | 117                                     | 117                                        | O               | S                     | U                      |
| USV010      | Blend Silo compressors - Double door             | 115                                     | 115                                     | 115                                        | O               | S                     | U                      |
| USV011      | Blend Silo compressors - Baydoor                 | 117                                     | 117                                     | 117                                        | O               | S                     | U                      |
| USV012      | Blend Silo compressors - Baydoor                 | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| USV013      | Blend Silo compressors - Baydoor                 | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| USV014      | Loesch Bldg - Baydoor 1                          | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| USV015      | Loesch Bldg - Baydoor 2                          | 96                                      | 96                                      | 96                                         | O               | S                     | U                      |
| USV016      | Loesch Bldg - Baydoor 3                          | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| USV017      | Loesch Bldg - Baydoor 4                          | 99                                      | 99                                      | 99                                         | O               | S                     | U                      |
| USV018      | Loesch Bldg - Baydoor 5                          | 106                                     | 106                                     | 106                                        | O               | S                     | U                      |
| USV019      | Loesch Bldg - Compressor door                    | 113                                     | 113                                     | 113                                        | O               | S                     | U                      |
| SV020       | Loesch 1792 Feed                                 | 104                                     | 104                                     | 104                                        | O               | S                     | U                      |
| SV021       | 1792 Loesch Feed                                 | 104                                     | 104                                     | 104                                        | O               | S                     | U                      |
| USV022      | Screenhouse                                      | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| USV023      | Coal System - Baydoor                            | 104                                     | 104                                     | 104                                        | O               | S                     | U                      |
| USV024      | North Fan duct work                              | 103                                     | 103                                     | 103                                        | O               | S                     | U                      |
| USV025      | South Fan duct work                              | 101                                     | 101                                     | 101                                        | O               | S                     | U                      |
| USV027      | South Fan - motor 1                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| USV028      | South Fan - motor 2                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| USV029      | South Fan - motor 3                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| USV030      | South Fan - connection 1                         | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| USV031      | South Fan - connection 2                         | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| USV032      | South Fan - duct 1                               | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| USV033      | South Fan - duct 2                               | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| USV034      | South Fan - duct 3                               | 104                                     | 104                                     | 104                                        | O               | S                     | U                      |
| USV035      | South Fan - duct 4                               | 105                                     | 105                                     | 105                                        | O               | S                     | U                      |
| USV036      | South Fan - fan bearing                          | 102                                     | 102                                     | 102                                        | O               | S                     | U                      |
| MSV001      | Ball Mill - Door A                               | 81                                      | 81                                      | 81                                         | O               | S                     | U                      |
| MSV002      | Ball Mill - Door B                               | 77                                      | 77                                      | 77                                         | O               | S                     | U                      |
| MSV003      | Ball Mill - Door D                               | 74                                      | 74                                      | 74                                         | O               | S                     | U                      |
| MSV004      | Ball Mill - Door C                               | 76                                      | 76                                      | 76                                         | O               | S                     | U                      |
| MSV005      | Ball Mill - Door E                               | 77                                      | 77                                      | 77                                         | O               | S                     | U                      |
| MSV006      | Ball Mill - Door F                               | 79                                      | 79                                      | 79                                         | O               | S                     | U                      |
| MSV007      | Blend Silo compressors - Baydoor                 | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| MSV008      | Blend Silo compressors - Baydoor                 | 76                                      | 76                                      | 76                                         | O               | S                     | U                      |
| MSV009      | Blend Silo compressors - Double door             | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| MSV010      | Blend Silo compressors - Double door             | 95                                      | 95                                      | 95                                         | O               | S                     | U                      |
| MSV011      | Blend Silo compressors - Baydoor                 | 97                                      | 97                                      | 97                                         | O               | S                     | U                      |
| MSV012      | Blend Silo compressors - Baydoor                 | 77                                      | 77                                      | 77                                         | O               | S                     | U                      |
| MSV013      | Blend Silo compressors - Baydoor                 | 73                                      | 73                                      | 73                                         | O               | S                     | U                      |
| MSV014      | Loesch Bldg - Baydoor 1                          | 81                                      | 81                                      | 81                                         | O               | S                     | U                      |
| MSV015      | Loesch Bldg - Baydoor 2                          | 76                                      | 76                                      | 76                                         | O               | S                     | U                      |
| MSV016      | Loesch Bldg - Baydoor 3                          | 73                                      | 73                                      | 73                                         | O               | S                     | U                      |
| MSV017      | Loesch Bldg - Baydoor 4                          | 79                                      | 79                                      | 79                                         | O               | S                     | U                      |
| MSV018      | Loesch Bldg - Baydoor 5                          | 86                                      | 86                                      | 86                                         | O               | S                     | U                      |
| MSV019      | Loesch Bldg - Compressor door                    | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSV022      | Screenhouse                                      | 90                                      | 90                                      | 90                                         | O               | S                     | U                      |
| MSV023      | Coal System - Baydoor                            | 84                                      | 84                                      | 84                                         | O               | S                     | U                      |
| MSV024      | North Fan duct work                              | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSV025      | South Fan duct work                              | 91                                      | 91                                      | 91                                         | O               | S                     | U                      |
| MSV027      | South Fan - motor 1                              | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| MSV028      | South Fan - motor 2                              | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| MSV029      | South Fan - motor 3                              | 80                                      | 80                                      | 80                                         | O               | S                     | U                      |
| MSV030      | South Fan - connection 1                         | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| MSV031      | South Fan - connection 2                         | 85                                      | 85                                      | 85                                         | O               | S                     | U                      |
| MSV032      | South Fan - duct 1                               | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSV033      | South Fan - duct 2                               | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSV034      | South Fan - duct 3                               | 92                                      | 92                                      | 92                                         | O               | S                     | U                      |
| MSV035      | South Fan - duct 4                               | 93                                      | 93                                      | 93                                         | O               | S                     | U                      |
| MSV036      | South Fan - fan bearing                          | 90                                      | 90                                      | 90                                         | O               | S                     | U                      |

to address special characteristics (i.e. tonal), the adjustment is not included in the overall sound power level presented in Table 1. The noise modelling does not include time weighting or any adjustments that were considered in the noise modelling. The noise modelling includes any adjustments applied to the Sound Power Levels of sources.

SUMMARY TABLE NOMENCLATURE

Source Location

O - Outside the building, including on the roof  
I - Installed inside the building

Sound Characteristics

S - Steady  
QS - Quasi Steady Impulsive  
I - Impulsive  
B - Buzzing  
T - Tonal  
C - Cyclic

Noise Control Measures

S - Silencer, Acoustic Louver, Muffler  
A - Acoustic Lining, Plenum  
B - Barrier, Berm, Screening  
L - Lagging  
E - Acoustic Enclosure  
O - Other  
U - Uncontrolled

Table 2 Point of Reception Predicted Individual Source Sound Levels - Unmitigated Normal Operations (Stationary Source)

| Source ID | POR003       |                                      |                                      |                                         | OPOR003      |                                      |                                      | POR006       |                                      |                                      |                                         | OPOR006      |                                      |                                      | POR016       |                                      |                                      |                                         | OPOR016      |                                      |                                      | POR020       |                                      |                                      |                                         |
|-----------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level |
| USP001    | 1557         | 30                                   | 30                                   | 30                                      | 1539         | 25                                   | 25                                   | 1421         | 30                                   | 30                                   | 30                                      | 1404         | 30                                   | 30                                   | 1439         | 30                                   | 30                                   | 30                                      | 1409         | 30                                   | 30                                   | 1307         | 31                                   | 31                                   | 31                                      |
| USP002    | 1561         | 30                                   | 30                                   | 30                                      | 1543         | 25                                   | 25                                   | 1423         | 30                                   | 30                                   | 30                                      | 1405         | 30                                   | 30                                   | 1428         | 30                                   | 30                                   | 30                                      | 1399         | 30                                   | 30                                   | 1318         | 27                                   | 27                                   | 27                                      |
| USP003    | 1565         | 30                                   | 30                                   | 30                                      | 1548         | 25                                   | 25                                   | 1425         | 30                                   | 30                                   | 30                                      | 1407         | 30                                   | 30                                   | 1417         | 30                                   | 30                                   | 30                                      | 1387         | 31                                   | 31                                   | 1330         | 31                                   | 31                                   | 31                                      |
| USP004    | 1571         | 30                                   | 30                                   | 30                                      | 1553         | 25                                   | 25                                   | 1427         | 30                                   | 30                                   | 30                                      | 1409         | 30                                   | 30                                   | 1405         | 30                                   | 30                                   | 30                                      | 1375         | 31                                   | 31                                   | 1342         | 31                                   | 31                                   | 31                                      |
| USP005    | 1569         | 30                                   | 30                                   | 30                                      | 1552         | 25                                   | 25                                   | 1423         | 30                                   | 30                                   | 30                                      | 1405         | 30                                   | 30                                   | 1394         | 30                                   | 30                                   | 30                                      | 1364         | 31                                   | 31                                   | 1355         | 31                                   | 31                                   | 31                                      |
| USP006    | 1577         | 30                                   | 30                                   | 30                                      | 1560         | 25                                   | 25                                   | 1430         | 30                                   | 30                                   | 30                                      | 1412         | 30                                   | 30                                   | 1387         | 31                                   | 31                                   | 31                                      | 1357         | 31                                   | 31                                   | 1360         | 31                                   | 31                                   | 31                                      |
| USP007    | 1590         | 22                                   | 22                                   | 22                                      | 1573         | 18                                   | 18                                   | 1441         | 28                                   | 28                                   | 28                                      | 1423         | 28                                   | 28                                   | 1376         | 42                                   | 42                                   | 42                                      | 1347         | 43                                   | 43                                   | 1368         | 18                                   | 18                                   | 18                                      |
| USP008    | 1680         | 34                                   | 34                                   | 34                                      | 1663         | 32                                   | 32                                   | 1514         | 34                                   | 34                                   | 34                                      | 1497         | 34                                   | 34                                   | 1273         | 40                                   | 40                                   | 40                                      | 1243         | 40                                   | 40                                   | 1462         | 36                                   | 36                                   | 36                                      |
| SP009     | 1605         | 18                                   | 18                                   | 18                                      | 1588         | 8                                    | 8                                    | 1451         | 12                                   | 12                                   | 12                                      | 1433         | 12                                   | 12                                   | 1350         | 21                                   | 21                                   | 21                                      | 1321         | 22                                   | 22                                   | 1393         | 6                                    | 6                                    | 6                                       |
| SP014     | 1474         | 21                                   | 21                                   | 21                                      | 1456         | 16                                   | 16                                   | 1368         | 18                                   | 18                                   | 18                                      | 1350         | 17                                   | 17                                   | 1574         | 16                                   | 16                                   | 16                                      | 1545         | 16                                   | 16                                   | 1182         | 19                                   | 19                                   | 19                                      |
| SP015     | 1488         | 22                                   | 22                                   | 22                                      | 1470         | 19                                   | 19                                   | 1382         | 21                                   | 21                                   | 21                                      | 1364         | 20                                   | 20                                   | 1570         | 20                                   | 20                                   | 20                                      | 1541         | 20                                   | 20                                   | 1182         | 21                                   | 21                                   | 21                                      |
| SP021     | 1544         | 0                                    | 0                                    | 0                                       | 1526         | 0                                    | 0                                    | 1450         | 0                                    | 0                                    | 0                                       | 1432         | 0                                    | 0                                    | 1594         | 0                                    | 0                                    | 0                                       | 1564         | 0                                    | 0                                    | 1142         | 6                                    | 6                                    | 6                                       |
| SP022     | 1515         | 3                                    | 3                                    | 3                                       | 1497         | 3                                    | 3                                    | 1419         | 3                                    | 3                                    | 3                                       | 1401         | 4                                    | 4                                    | 1597         | 0                                    | 0                                    | 0                                       | 1567         | 0                                    | 0                                    | 1145         | 0                                    | 0                                    | 0                                       |
| SP023     | 1598         | 11                                   | 11                                   | 11                                      | 1580         | 6                                    | 6                                    | 1506         | 8                                    | 8                                    | 8                                       | 1488         | 8                                    | 8                                    | 1589         | 7                                    | 7                                    | 7                                       | 1559         | 8                                    | 8                                    | 1139         | 10                                   | 10                                   | 10                                      |
| SP024     | 1597         | 22                                   | 22                                   | 22                                      | 1579         | 21                                   | 21                                   | 1505         | 6                                    | 6                                    | 6                                       | 1487         | 6                                    | 6                                    | 1587         | 21                                   | 21                                   | 21                                      | 1557         | 21                                   | 21                                   | 1142         | 6                                    | 6                                    | 6                                       |
| SP025     | 1653         | 20                                   | 20                                   | 20                                      | 1636         | 15                                   | 15                                   | 1561         | 16                                   | 16                                   | 16                                      | 1543         | 16                                   | 16                                   | 1575         | 16                                   | 16                                   | 16                                      | 1545         | 16                                   | 16                                   | 1151         | 19                                   | 19                                   | 19                                      |
| SP026     | 1656         | 23                                   | 23                                   | 23                                      | 1638         | 18                                   | 18                                   | 1565         | 18                                   | 18                                   | 18                                      | 1547         | 18                                   | 18                                   | 1578         | 18                                   | 18                                   | 18                                      | 1549         | 18                                   | 18                                   | 1147         | 23                                   | 23                                   | 23                                      |
| SP027     | 1617         | 13                                   | 13                                   | 13                                      | 1599         | 5                                    | 5                                    | 1505         | 14                                   | 14                                   | 14                                      | 1487         | 14                                   | 14                                   | 1504         | 0                                    | 0                                    | 0                                       | 1475         | 0                                    | 0                                    | 1225         | 16                                   | 16                                   | 16                                      |
| USP028    | 1679         | 22                                   | 22                                   | 22                                      | 1661         | 19                                   | 19                                   | 1589         | 6                                    | 6                                    | 6                                       | 1572         | 6                                    | 6                                    | 1582         | 22                                   | 22                                   | 22                                      | 1553         | 22                                   | 22                                   | 1143         | 28                                   | 28                                   | 28                                      |
| USP030    | 1686         | 28                                   | 28                                   | 28                                      | 1668         | 26                                   | 26                                   | 1581         | 30                                   | 30                                   | 30                                      | 1563         | 23                                   | 23                                   | 1515         | 26                                   | 26                                   | 26                                      | 1486         | 26                                   | 26                                   | 1210         | 39                                   | 39                                   | 39                                      |
| SP035     | 1799         | 0                                    | 0                                    | 0                                       | 1782         | 0                                    | 0                                    | 1698         | 0                                    | 0                                    | 0                                       | 1680         | 0                                    | 0                                    | 1507         | 0                                    | 0                                    | 0                                       | 1478         | 0                                    | 0                                    | 1229         | 10                                   | 10                                   | 10                                      |
| SP036     | 1802         | 0                                    | 0                                    | 0                                       | 1784         | 0                                    | 0                                    | 1699         | 0                                    | 0                                    | 0                                       | 1681         | 0                                    | 0                                    | 1502         | 10                                   | 10                                   | 10                                      | 1473         | 10                                   | 10                                   | 1235         | 0                                    | 0                                    | 0                                       |
| SP037     | 1801         | 0                                    | 0                                    | 0                                       | 1783         | 0                                    | 0                                    | 1697         | 5                                    | 5                                    | 5                                       | 1679         | 0                                    | 0                                    | 1500         | 8                                    | 8                                    | 8                                       | 1471         | 8                                    | 8                                    | 1236         | 0                                    | 0                                    | 0                                       |
| SP039     | 1675         | 5                                    | 5                                    | 5                                       | 1658         | 3                                    | 3                                    | 1529         | 9                                    | 9                                    | 9                                       | 1511         | 9                                    | 9                                    | 1348         | 0                                    | 0                                    | 0                                       | 1319         | 0                                    | 0                                    | 1381         | 2                                    | 2                                    | 2                                       |
| SP040     | 1690         | 9                                    | 9                                    | 9                                       | 1672         | 6                                    | 6                                    | 1544         | 12                                   | 12                                   | 12                                      | 1526         | 12                                   | 12                                   | 1345         | 21                                   | 21                                   | 21                                      | 1315         | 21                                   | 21                                   | 1383         | 10                                   | 10                                   | 10                                      |
| USP041    | 1675         | 14                                   | 14                                   | 14                                      | 1657         | 13                                   | 13                                   | 1529         | 11                                   | 11                                   | 11                                      | 1512         | 11                                   | 11                                   | 1354         | 17                                   | 17                                   | 17                                      | 1325         | 17                                   | 17                                   | 1375         | 18                                   | 18                                   | 18                                      |
| SP042     | 1684         | 0                                    | 0                                    | 0                                       | 1666         | 0                                    | 0                                    | 1539         | 0                                    | 0                                    | 0                                       | 1521         | 0                                    | 0                                    | 1352         | 0                                    | 0                                    | 0                                       | 1323         | 0                                    | 0                                    | 1376         | 14                                   | 14                                   | 14                                      |
| USP043    | 1599         | 6                                    | 6                                    | 6                                       | 1582         | 4                                    | 4                                    | 1480         | 10                                   | 10                                   | 10                                      | 1462         | 10                                   | 10                                   | 1481         | 26                                   | 26                                   | 26                                      | 1452         | 26                                   | 26                                   | 1252         | 28                                   | 28                                   | 28                                      |
| SP045     | 1635         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1516         | 0                                    | 0                                    | 0                                       | 1498         | 0                                    | 0                                    | 1472         | 0                                    | 0                                    | 0                                       | 1443         | 0                                    | 0                                    | 1256         | 0                                    | 0                                    | 0                                       |
| SP046     | 1635         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1516         | 0                                    | 0                                    | 0                                       | 1498         | 0                                    | 0                                    | 1472         | 0                                    | 0                                    | 0                                       | 1443         | 0                                    | 0                                    | 1256         | 0                                    | 0                                    | 0                                       |
| SP047     | 1635         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1516         | 0                                    | 0                                    | 0                                       | 1498         | 0                                    | 0                                    | 1472         | 0                                    | 0                                    | 0                                       | 1443         | 0                                    | 0                                    | 1256         | 0                                    | 0                                    | 0                                       |
| SP048     | 1635         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1516         | 0                                    | 0                                    | 0                                       | 1498         | 0                                    | 0                                    | 1472         | 0                                    | 0                                    | 0                                       | 1443         | 0                                    | 0                                    | 1256         | 4                                    | 4                                    | 4                                       |
| SP049     | 1635         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1516         | 0                                    | 0                                    | 0                                       | 1498         | 0                                    | 0                                    | 1472         | 0                                    | 0                                    | 0                                       | 1443         | 0                                    | 0                                    | 1256         | 4                                    | 4                                    | 4                                       |
| SP050     | 1640         | 0                                    | 0                                    | 0                                       | 1622         | 0                                    | 0                                    | 1522         | 0                                    | 0                                    | 0                                       | 1504         | 0                                    | 0                                    | 1475         | 13                                   | 13                                   | 13                                      | 1445         | 13                                   | 13                                   | 1253         | 21                                   | 21                                   | 21                                      |
| USP051    | 1657         | 14                                   | 14                                   | 14                                      | 1640         | 13                                   | 13                                   | 1516         | 15                                   | 15                                   | 15                                      | 1498         | 15                                   | 15                                   | 1377         | 30                                   | 30                                   | 30                                      | 1348         | 30                                   | 30                                   | 1353         | 14                                   | 14                                   | 14                                      |
| USP052    | 1650         | 11                                   | 11                                   | 11                                      | 1633         | 10                                   | 10                                   | 1509         | 15                                   | 15                                   | 15                                      | 1491         | 15                                   | 15                                   | 1377         | 36                                   | 36                                   | 36                                      | 1348         | 36                                   | 36                                   | 1354         | 14                                   | 14                                   | 14                                      |
| USP053    | 1658         | 16                                   | 16                                   | 16                                      | 1641         | 14                                   | 14                                   | 1516         | 17                                   | 17                                   | 17                                      | 1499         | 17                                   | 17                                   | 1375         | 30                                   | 30                                   | 30                                      | 1345         | 31                                   | 31                                   | 1356         | 15                                   | 15                                   | 15                                      |
| SP054     | 1651         | 8                                    | 8                                    | 8                                       | 1634         | 6                                    | 6                                    | 1509         | 9                                    | 9                                    | 9                                       | 1491         | 9                                    | 9                                    | 1375         | 28                                   | 28                                   | 28                                      | 1345         | 29                                   | 29                                   | 1357         | 7                                    | 7                                    | 7                                       |
| SP055     | 1659         | 10                                   | 10                                   | 10                                      | 1642         | 9                                    | 9                                    | 1517         | 12                                   | 12                                   | 12                                      | 1499         | 12                                   | 12                                   | 1372         | 25                                   | 25                                   | 25                                      | 1342         | 25                                   | 25                                   | 1359         | 9                                    | 9                                    | 9                                       |
| SP056     | 1660         | 10                                   | 10                                   | 10                                      | 1643         | 9                                    | 9                                    | 1517         | 12                                   | 12                                   | 12                                      | 1500         | 12                                   | 12                                   | 1368         | 24                                   | 24                                   | 24                                      | 1339         | 25                                   | 25                                   | 1362         | 9                                    | 9                                    | 9                                       |
| SP057     | 1653         | 5                                    | 5                                    | 5                                       | 1636         | 4                                    | 4                                    | 1510         | 8                                    | 8                                    | 8                                       | 1492         | 8                                    | 8                                    | 1369         | 26                                   | 26                                   | 26                                      | 1340         | 26                                   | 26                                   | 1362         | 4                                    | 4                                    | 4                                       |
| SP058     | 1661         | 4                                    | 4                                    | 4                                       | 1644         | 3                                    | 3                                    | 1518         | 6                                    | 6                                    | 6                                       | 1500         | 6                                    | 6                                    | 1366         | 14                                   | 14                                   | 14                                      | 1336         | 14                                   | 14                                   | 1365         | 3                                    | 3                                    | 3                                       |
| SP059     | 1645         | 8                                    | 8                                    | 8                                       | 1628         | 2                                    | 2                                    | 1512         | 6                                    | 6                                    | 6                                       | 1494         | 3                                    | 3                                    | 1413         | 23                                   | 23                                   | 23                                      | 1384         | 23                                   | 23                                   | 1317         | 6                                    | 6                                    | 6                                       |
| USP060    | 1642         | 18                                   | 18                                   | 18                                      | 1624         | 12                                   | 12                                   | 1511         | 16                                   | 16                                   | 16                                      | 1493         | 13                                   | 13                                   | 1422         | 33                                   | 33                                   | 33                                      | 1392         | 33                                   | 33                                   | 1309         | 16                                   | 16                                   | 16                                      |
| USP061    | 1643         | 18                                   | 18                                   | 18                                      | 1626         | 12                                   | 12                                   | 1511         | 16                                   | 16                                   | 16                                      | 1493         | 13                                   | 13                                   | 1417         | 33                                   | 33                                   | 33                                      | 1387         | 35                                   | 35                                   | 1313         | 16                                   | 16                                   | 16                                      |
| SP062     | 1646         | 0                                    | 0                                    | 0                                       | 1629         | 0                                    | 0                                    | 1507         | 0                                    | 0                                    | 0                                       | 1489         | 0                                    | 0                                    | 1388         | 15                                   | 15                                   | 15                                      | 1359         | 15                                   | 15                                   | 1343         | 0                                    | 0                                    | 0                                       |
| SP063     | 1646         | 0                                    | 0                                    | 0                                       | 1629         | 0                                    | 0                                    | 1507         | 0                                    | 0                                    | 0                                       | 1489         | 0                                    | 0                                    | 1390         | 15                                   | 15                                   | 15                                      | 1360         | 15                                   | 15                                   | 1342         | 0                                    | 0                                    | 0                                       |
| SP064     | 1646         | 0                                    | 0                                    | 0                                       | 1628         | 0                                    | 0                                    | 1507         | 0                                    | 0                                    | 0                                       | 1489         | 0                                    | 0                                    | 1391         | 15                                   | 15                                   | 15                                      | 1361         | 15                                   | 15                                   | 1340         | 0                                    | 0                                    | 0                                       |
| SP065     | 1645         | 0                                    | 0                                    | 0                                       | 1628         | 0                                    | 0                                    | 1507         | 0                                    | 0                                    | 0                                       | 1489         | 0                                    | 0                                    | 1392         | 15                                   | 15                                   | 15                                      | 1363         | 15                                   | 15                                   | 1339         | 0                                    | 0                                    | 0                                       |
| SP066     | 1644         | 0                                    | 0                                    | 0                                       | 1627         | 0                                    | 0                                    | 1506         | 0                                    | 0                                    | 0                                       | 1489         | 0                                    | 0                                    | 1394         | 15                                   | 15                                   | 15                                      | 1364         | 15                                   | 15                                   | 1337         | 0                                    | 0                                    | 0                                       |
| SP067     | 1644         | 0                                    | 0                                    | 0                                       | 1627         | 0                                    | 0                                    | 1506         | 0                                    | 0                                    | 0                                       | 1489         | 0                                    | 0                                    | 1395         | 15                                   | 15                                   | 15                                      | 1366         | 15                                   | 15                                   | 1336         | 0                                    | 0                                    | 0                                       |
| SP068     | 1643         | 0                                    | 0                                    | 0                                       | 1626         | 0                                    | 0                                    | 1506         | 0                                    | 0                                    | 0                                       | 1488         | 0                                    | 0                                    | 1397         | 15                                   | 15                                   | 15                                      | 1367         | 15                                   | 15                                   | 1335         | 0                                    | 0                                    | 0                                       |
| SP069     | 1643         | 0                                    | 0                                    | 0                                       | 1625         | 0                                    | 0                                    | 1506         | 0                                    | 0                                    | 0                                       | 1488         | 0                                    | 0                                    | 1398         | 15                                   | 15                                   | 15                                      | 1369         | 14                                   | 14                                   | 1333         | 0                                    | 0                                    | 0                                       |
| SP070     | 1642         | 0                                    | 0                                    | 0                                       | 1625         | 0                                    | 0                                    | 1505         | 0                                    | 0                                    | 0                                       | 1488         | 0                                    | 0                                    | 1400         | 14                                   | 14                                   | 14                                      | 1370         | 14                                   | 14                                   | 1332         | 0                                    | 0                                    | 0                                       |
| SP071     | 1642         | 0                                    | 0                                    | 0                                       | 1624         | 0                                    | 0                                    | 1505         | 0                                    | 0                                    | 0                                       | 1488         | 0                                    | 0                                    | 1401         | 14                                   | 14                                   | 14                                      | 1372         | 14                                   | 14                                   | 1330         | 0                                    | 0                                    | 0                                       |
| SP072     | 1641         | 0                                    | 0                                    | 0                                       | 1624         | 0                                    | 0                                    | 1505         | 0                                    | 0                                    | 0                                       | 1488         | 0                                    | 0                                    | 1403         | 14                                   | 14                                   | 14                                      | 1373         | 14                                   | 14                                   | 1329         | 0                                    | 0                                    | 0                                       |
| SP073     | 1641         | 0                                    | 0                                    | 0                                       | 1623         | 0                                    | 0                                    | 1505         | 0                                    | 0                                    | 0                                       | 1487         | 0                                    | 0                                    | 1404         | 14                                   | 14                                   | 14                                      | 1374         | 14                                   | 14                                   | 1327         | 0                                    | 0                                    | 0                                       |
| SP074     | 1640         | 0                                    | 0                                    | 0                                       | 1623         | 0                                    | 0                                    | 1505         | 0                                    | 0                                    | 0                                       | 1487         | 0                                    | 0                                    | 1405         | 14                                   | 14                                   | 14                                      | 1376         | 14                                   | 14                                   | 1326         | 0                                    | 0                                    | 0                                       |
| SP075     | 1640         | 0                                    | 0                                    | 0                                       | 1622         | 0                                    | 0                                    | 1505         | 0                                    | 0                                    | 0                                       | 1487         | 0                                    | 0                                    | 1407         | 14                                   | 14                                   | 14                                      | 1377         | 14                                   | 14                                   | 1324         | 0                                    | 0                                    | 0                                       |

Table 2 Point of Reception Predicted Individual Source Sound Levels - Unmitigated Normal Operations (Stationary Source)

| Source ID   | POR003       |                                      |                                      |                                         | OPOR003      |                                      |                                      | POR006       |                                      |                                      |                                         | OPOR006      |                                      |                                      | POR016       |                                      |                                      |                                         | OPOR016      |                                      |                                      | POR020       |                                      |                                      |                                         |
|-------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|
|             | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level |
| SP076       | 1639         | 0                                    | 0                                    | 0                                       | 1622         | 0                                    | 0                                    | 1504         | 0                                    | 0                                    | 0                                       | 1487         | 0                                    | 0                                    | 1408         | 14                                   | 14                                   | 14                                      | 1379         | 14                                   | 14                                   | 1323         | 0                                    | 0                                    | 0                                       |
| SP077       | 1639         | 0                                    | 0                                    | 0                                       | 1621         | 0                                    | 0                                    | 1504         | 0                                    | 0                                    | 0                                       | 1486         | 0                                    | 0                                    | 1410         | 14                                   | 14                                   | 14                                      | 1380         | 14                                   | 14                                   | 1322         | 0                                    | 0                                    | 0                                       |
| SP078       | 1636         | 0                                    | 0                                    | 0                                       | 1618         | 0                                    | 0                                    | 1503         | 0                                    | 0                                    | 0                                       | 1486         | 0                                    | 0                                    | 1419         | 14                                   | 14                                   | 14                                      | 1389         | 14                                   | 14                                   | 1312         | 0                                    | 0                                    | 0                                       |
| SP079       | 1635         | 0                                    | 0                                    | 0                                       | 1618         | 0                                    | 0                                    | 1503         | 0                                    | 0                                    | 0                                       | 1485         | 0                                    | 0                                    | 1420         | 14                                   | 14                                   | 14                                      | 1390         | 14                                   | 14                                   | 1311         | 0                                    | 0                                    | 0                                       |
| SP080       | 1635         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1503         | 0                                    | 0                                    | 0                                       | 1485         | 0                                    | 0                                    | 1422         | 14                                   | 14                                   | 14                                      | 1392         | 14                                   | 14                                   | 1309         | 0                                    | 0                                    | 0                                       |
| SP081       | 1634         | 0                                    | 0                                    | 0                                       | 1617         | 0                                    | 0                                    | 1503         | 0                                    | 0                                    | 0                                       | 1485         | 0                                    | 0                                    | 1424         | 14                                   | 14                                   | 14                                      | 1394         | 14                                   | 14                                   | 1307         | 0                                    | 0                                    | 0                                       |
| SP082       | 1687         | 0                                    | 0                                    | 0                                       | 1670         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1369         | 6                                    | 6                                    | 6                                       | 1339         | 6                                    | 6                                    | 1359         | 0                                    | 0                                    | 0                                       |
| SP083       | 1688         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1366         | 6                                    | 6                                    | 6                                       | 1337         | 6                                    | 6                                    | 1361         | 0                                    | 0                                    | 0                                       |
| SP084       | 1689         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1364         | 6                                    | 6                                    | 6                                       | 1335         | 6                                    | 6                                    | 1363         | 0                                    | 0                                    | 0                                       |
| SP085       | 1689         | 0                                    | 0                                    | 0                                       | 1672         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1362         | 6                                    | 6                                    | 6                                       | 1333         | 6                                    | 6                                    | 1365         | 0                                    | 0                                    | 0                                       |
| SP086       | 1687         | 0                                    | 0                                    | 0                                       | 1670         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1369         | 6                                    | 6                                    | 6                                       | 1339         | 6                                    | 6                                    | 1359         | 0                                    | 0                                    | 0                                       |
| SP087       | 1688         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1366         | 6                                    | 6                                    | 6                                       | 1337         | 6                                    | 6                                    | 1361         | 0                                    | 0                                    | 0                                       |
| SP088       | 1689         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1364         | 6                                    | 6                                    | 6                                       | 1335         | 6                                    | 6                                    | 1363         | 0                                    | 0                                    | 0                                       |
| SP089       | 1689         | 0                                    | 0                                    | 0                                       | 1672         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1362         | 6                                    | 6                                    | 6                                       | 1333         | 6                                    | 6                                    | 1365         | 0                                    | 0                                    | 0                                       |
| SP090       | 1687         | 1                                    | 1                                    | 1                                       | 1670         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1369         | 6                                    | 6                                    | 6                                       | 1339         | 6                                    | 6                                    | 1359         | 0                                    | 0                                    | 0                                       |
| SP091       | 1688         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1366         | 6                                    | 6                                    | 6                                       | 1337         | 6                                    | 6                                    | 1361         | 0                                    | 0                                    | 0                                       |
| SP092       | 1689         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1364         | 6                                    | 6                                    | 6                                       | 1335         | 6                                    | 6                                    | 1363         | 0                                    | 0                                    | 0                                       |
| SP093       | 1689         | 0                                    | 0                                    | 0                                       | 1672         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1362         | 6                                    | 6                                    | 6                                       | 1333         | 6                                    | 6                                    | 1365         | 0                                    | 0                                    | 0                                       |
| SP094       | 1687         | 0                                    | 0                                    | 0                                       | 1670         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1369         | 6                                    | 6                                    | 6                                       | 1339         | 6                                    | 6                                    | 1359         | 0                                    | 0                                    | 0                                       |
| SP095       | 1688         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1529         | 0                                    | 0                                    | 1366         | 6                                    | 6                                    | 6                                       | 1337         | 6                                    | 6                                    | 1361         | 0                                    | 0                                    | 0                                       |
| SP096       | 1689         | 0                                    | 0                                    | 0                                       | 1671         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1364         | 6                                    | 6                                    | 6                                       | 1335         | 6                                    | 6                                    | 1363         | 0                                    | 0                                    | 0                                       |
| SP097       | 1689         | 0                                    | 0                                    | 0                                       | 1672         | 0                                    | 0                                    | 1547         | 0                                    | 0                                    | 0                                       | 1530         | 0                                    | 0                                    | 1362         | 6                                    | 6                                    | 6                                       | 1333         | 6                                    | 6                                    | 1365         | 0                                    | 0                                    | 0                                       |
| SP098       | 1818         | 12                                   | 12                                   | 12                                      | 1800         | 9                                    | 9                                    | 1708         | 10                                   | 10                                   | 10                                      | 1690         | 2                                    | 2                                    | 1469         | 17                                   | 17                                   | 17                                      | 1440         | 20                                   | 20                                   | 1268         | 3                                    | 3                                    | 3                                       |
| SP101       | 1846         | 0                                    | 0                                    | 0                                       | 1829         | 0                                    | 0                                    | 1754         | 0                                    | 0                                    | 0                                       | 1737         | 0                                    | 0                                    | 1548         | 9                                    | 9                                    | 9                                       | 1519         | 9                                    | 9                                    | 1202         | 18                                   | 18                                   | 18                                      |
| SP103       | 514          | 38                                   | —                                    | —                                       | 501          | 38                                   | —                                    | 292          | 36                                   | —                                    | —                                       | 274          | 36                                   | —                                    | 2104         | 25                                   | —                                    | —                                       | 2078         | 25                                   | —                                    | 1651         | 29                                   | —                                    | —                                       |
| USP105      | 1807         | 29                                   | 29                                   | —                                       | 1790         | 26                                   | 26                                   | 1802         | 22                                   | 22                                   | —                                       | 1784         | 22                                   | 22                                   | 1954         | 27                                   | 27                                   | —                                       | 1925         | 27                                   | 27                                   | 814          | 38                                   | 38                                   | —                                       |
| MSP011      | 1492         | 13                                   | 13                                   | 13                                      | 1475         | 8                                    | 8                                    | 1380         | 10                                   | 10                                   | 10                                      | 1362         | 9                                    | 9                                    | 1543         | 8                                    | 8                                    | 8                                       | 1513         | 9                                    | 9                                    | 1211         | 10                                   | 10                                   | 10                                      |
| MSP013      | 1481         | 12                                   | 12                                   | 12                                      | 1463         | 8                                    | 8                                    | 1367         | 11                                   | 11                                   | 11                                      | 1349         | 8                                    | 8                                    | 1545         | 9                                    | 9                                    | 9                                       | 1516         | 9                                    | 9                                    | 1212         | 10                                   | 10                                   | 10                                      |
| MSP020      | 1544         | 0                                    | 0                                    | 0                                       | 1527         | 0                                    | 0                                    | 1450         | 0                                    | 0                                    | 0                                       | 1432         | 0                                    | 0                                    | 1592         | 2                                    | 2                                    | 2                                       | 1562         | 2                                    | 2                                    | 1144         | 16                                   | 16                                   | 16                                      |
| USP008b     | 1675         | 15                                   | 15                                   | 15                                      | 1658         | 15                                   | 15                                   | 1509         | 16                                   | 16                                   | 16                                      | 1492         | 16                                   | 16                                   | 1274         | 22                                   | 22                                   | 22                                      | 1245         | 22                                   | 22                                   | 1461         | 16                                   | 16                                   | 16                                      |
| MSP034upd   | 1799         | 12                                   | 12                                   | 12                                      | 1781         | 0                                    | 0                                    | 1702         | 16                                   | 16                                   | 16                                      | 1684         | 14                                   | 14                                   | 1529         | 17                                   | 17                                   | 17                                      | 1500         | 17                                   | 17                                   | 1208         | 18                                   | 18                                   | 18                                      |
| MSP016_upd  | 1504         | 2                                    | 2                                    | 2                                       | 1486         | 0                                    | 0                                    | 1398         | 0                                    | 0                                    | 0                                       | 1380         | 0                                    | 0                                    | 1565         | 4                                    | 4                                    | 4                                       | 1535         | 4                                    | 4                                    | 1183         | 11                                   | 11                                   | 11                                      |
| MSP017upd   | 1504         | 2                                    | 2                                    | 2                                       | 1486         | 0                                    | 0                                    | 1398         | 0                                    | 0                                    | 0                                       | 1381         | 0                                    | 0                                    | 1564         | 4                                    | 4                                    | 4                                       | 1534         | 4                                    | 4                                    | 1184         | 11                                   | 11                                   | 11                                      |
| SP018upd    | 1506         | 3                                    | 3                                    | 3                                       | 1488         | 1                                    | 1                                    | 1398         | 0                                    | 0                                    | 0                                       | 1381         | 0                                    | 0                                    | 1558         | 3                                    | 3                                    | 3                                       | 1529         | 3                                    | 3                                    | 1189         | 11                                   | 11                                   | 11                                      |
| SP019upd    | 1506         | 3                                    | 3                                    | 3                                       | 1488         | 1                                    | 1                                    | 1399         | 6                                    | 6                                    | 6                                       | 1381         | 6                                    | 6                                    | 1557         | 3                                    | 3                                    | 3                                       | 1527         | 3                                    | 3                                    | 1191         | 11                                   | 11                                   | 11                                      |
| MSP010upd   | 1465         | 15                                   | 15                                   | 15                                      | 1448         | 11                                   | 11                                   | 1316         | 13                                   | 13                                   | 13                                      | 1298         | 13                                   | 13                                   | 1436         | 12                                   | 12                                   | 12                                      | 1406         | 12                                   | 12                                   | 1347         | 12                                   | 12                                   | 12                                      |
| MSP029upd   | 1766         | 12                                   | 12                                   | 12                                      | 1748         | 11                                   | 11                                   | 1684         | 11                                   | 11                                   | 11                                      | 1666         | 11                                   | 11                                   | 1602         | 15                                   | 15                                   | 15                                      | 1573         | 15                                   | 15                                   | 1134         | 22                                   | 22                                   | 22                                      |
| MSP031upd   | 1789         | 5                                    | 5                                    | 5                                       | 1771         | 1                                    | 1                                    | 1700         | 4                                    | 4                                    | 4                                       | 1682         | 2                                    | 2                                    | 1567         | 4                                    | 4                                    | 4                                       | 1537         | 5                                    | 5                                    | 1172         | 10                                   | 10                                   | 10                                      |
| MSP032upd   | 1792         | 11                                   | 11                                   | 11                                      | 1774         | 6                                    | 6                                    | 1700         | 9                                    | 9                                    | 9                                       | 1682         | 6                                    | 6                                    | 1555         | 10                                   | 10                                   | 10                                      | 1526         | 10                                   | 10                                   | 1183         | 16                                   | 16                                   | 16                                      |
| MSP033upd   | 1797         | 22                                   | 22                                   | 22                                      | 1779         | 16                                   | 16                                   | 1703         | 19                                   | 19                                   | 19                                      | 1685         | 17                                   | 17                                   | 1542         | 20                                   | 20                                   | 20                                      | 1513         | 20                                   | 20                                   | 1196         | 26                                   | 26                                   | 26                                      |
| MSP012upd   | 1476         | 10                                   | 10                                   | 10                                      | 1458         | 6                                    | 6                                    | 1366         | 8                                    | 8                                    | 8                                       | 1348         | 6                                    | 6                                    | 1557         | 7                                    | 7                                    | 7                                       | 1527         | 7                                    | 7                                    | 1200         | 8                                    | 8                                    | 8                                       |
| LCFP_B      | 1646         | 5                                    | 5                                    | 5                                       | 1629         | 4                                    | 4                                    | 1502         | 6                                    | 6                                    | 6                                       | 1485         | 6                                    | 6                                    | 1371         | 21                                   | 21                                   | 21                                      | 1342         | 22                                   | 22                                   | 1361         | 25                                   | 25                                   | 25                                      |
| LCFP_L      | 1711         | 18                                   | 18                                   | 18                                      | 1694         | 17                                   | 17                                   | 1530         | 18                                   | 18                                   | 18                                      | 1513         | 18                                   | 18                                   | 1202         | 25                                   | 25                                   | 25                                      | 1172         | 26                                   | 26                                   | 1534         | 20                                   | 20                                   | 20                                      |
| LCFP_S      | 1702         | 14                                   | 14                                   | 14                                      | 1685         | 13                                   | 13                                   | 1522         | 15                                   | 15                                   | 15                                      | 1505         | 15                                   | 15                                   | 1209         | 21                                   | 21                                   | 21                                      | 1180         | 22                                   | 22                                   | 1528         | 5                                    | 5                                    | 5                                       |
| LCFP_S      | 1703         | 9                                    | 9                                    | 9                                       | 1686         | 8                                    | 8                                    | 1523         | 10                                   | 10                                   | 10                                      | 1506         | 10                                   | 10                                   | 1209         | 17                                   | 17                                   | 17                                      | 1180         | 17                                   | 17                                   | 1528         | 11                                   | 11                                   | 11                                      |
| LCFP_TU     | 1713         | 6                                    | 6                                    | 6                                       | 1696         | 5                                    | 5                                    | 1532         | 6                                    | 6                                    | 6                                       | 1515         | 7                                    | 7                                    | 1198         | 13                                   | 13                                   | 13                                      | 1169         | 13                                   | 13                                   | 1538         | 8                                    | 8                                    | 8                                       |
| LCFP_TI     | 1716         | 5                                    | 5                                    | 5                                       | 1699         | 4                                    | 4                                    | 1534         | 5                                    | 5                                    | 5                                       | 1517         | 6                                    | 6                                    | 1194         | 11                                   | 11                                   | 11                                      | 1165         | 12                                   | 12                                   | 1542         | 7                                    | 7                                    | 7                                       |
| BU_323_6_L  | 1727         | 1                                    | 1                                    | 1                                       | 1709         | 0                                    | 0                                    | 1611         | 0                                    | 0                                    | 0                                       | 1593         | 0                                    | 0                                    | 1460         | 4                                    | 4                                    | 4                                       | 1431         | 4                                    | 4                                    | 1266         | 7                                    | 7                                    | 7                                       |
| BU_327_3_EL | 1682         | 11                                   | 11                                   | 11                                      | 1664         | 4                                    | 4                                    | 1557         | 12                                   | 12                                   | 12                                      | 1539         | 5                                    | 5                                    | 1434         | 7                                    | 7                                    | 7                                       | 1404         | 7                                    | 7                                    | 1292         | 20                                   | 20                                   | 20                                      |
| BU_327_3_IL | 1681         | 3                                    | 3                                    | 3                                       | 1663         | 1                                    | 1                                    | 1553         | 4                                    | 4                                    | 4                                       | 1535         | 2                                    | 2                                    | 1420         | 23                                   | 23                                   | 23                                      | 1391         | 23                                   | 23                                   | 1306         | 17                                   | 17                                   | 17                                      |
| CD_DCF      | 1684         | 14                                   | 14                                   | 14                                      | 1667         | 7                                    | 7                                    | 1561         | 8                                    | 8                                    | 8                                       | 1543         | 8                                    | 8                                    | 1438         | 7                                    | 7                                    | 7                                       | 1408         | 7                                    | 7                                    | 1288         | 22                                   | 22                                   | 22                                      |
| CDC_B       | 1687         | 18                                   | 18                                   | 18                                      | 1669         | 12                                   | 12                                   | 1563         | 15                                   | 15                                   | 15                                      | 1545         | 14                                   | 14                                   | 1436         | 22                                   | 22                                   | 22                                      | 1407         | 22                                   | 22                                   | 1289         | 22                                   | 22                                   | 22                                      |
| SL001       | 521 / 1040   | 36                                   | 0                                    | 0                                       | 507 / 1024   | 35                                   | 0                                    | 298 / 1006   | 36                                   | 0                                    | 0                                       | 281 / 989    | 36                                   | 0                                    | 1588 / 2123  | 26                                   | 0                                    | 0                                       | 1562 / 2094  | 26                                   | 0                                    | 927 / 1807   | 29                                   | 0                                    | 0                                       |
| SL002       | 1152 / 1771  | 25                                   | 0                                    | 0                                       | 1134 / 1753  | 22                                   | 0                                    | 1180 / 1695  | 20                                   | —                                    | —                                       | 1163 / 1677  | 20                                   | —                                    | 1627 / 2070  | 22                                   | 0                                    | 0                                       | 1598 / 2041  | 23                                   | 0                                    | 808 / 1111   | 33                                   | 0                                    | 0                                       |
| SL003       | 1628 / 1805  | 25                                   | 0                                    | 0                                       | 1610 / 1788  | 22                                   | 0                                    | 1530 / 1804  | 22                                   | 0                                    | 0                                       | 1513 / 1787  | 22                                   | —                                    | 1143 / 1999  | 29                                   | 0                                    | 0                                       | 1113 / 1970  | 29                                   | 0                                    | 770 / 1598   | 34                                   | 0                                    | 0                                       |
| SL004       | 1106 / 1515  | 14                                   | 14                                   | 14                                      | 1088 / 1498  | 12                                   | 12                                   | 1007 / 1361  | 14                                   | 14                                   | 14                                      | 989 / 1344   | 14                                   | 14                                   | 1374 / 1756  | 15                                   | 15                                   | 15                                      | 1345 / 1727  | 15                                   | 15                                   | 1156 / 1410  | 14                                   | 14                                   | 14                                      |
| SL005       | 1106 / 1452  | 13                                   | 13                                   | 13                                      | 1088 / 1435  | 11                                   | 11                                   | 1007 / 1299  | 13                                   | 13                                   | 13                                      | 989 / 1281   | 13                                   | 13                                   | 1432 / 1756  | 13                                   | 13                                   | 13                                      | 1402 / 1727  | 13                                   | 13                                   | 1156 / 1367  | 13                                   | 13                                   | 13                                      |
| LCFP_T      | 1107 / 1703  | 10                                   | 10                                   | 10                                      | 1090 / 1686  | 9                                    | 9                                    | 1004 / 1522  | 10                                   | 10                                   | 10                                      | 986 / 1505   | 10                                   | 10                                   | 1205 / 1746  | 11                                   | 11                                   | 11                                      | 1175 / 1717  | 11                                   | 11                                   | 1137 / 1533  | 10                                   | 10                                   | 10                                      |
| SV020       | 1581 / 1585  | 5                                    | 5                                    | 5                                       | 1563 / 1568  | 0                                    | 0                                    | 1464 / 1469  | 6                                    | 6                                    | 6                                       | 1446 / 1451  | 1                                    | 1                                    | 1497 / 1498  | 0                                    | 0                                    | 0                                       | 1468 / 1468  | 0                                    | 0                                    | 1237 / 1237  | 22                                   | 22                                   | 22                                      |

Table 2 Point of Reception Predicted Individual Source Sound Levels - Unmitigated Normal Operations (Stationary Source)

| Source ID | POR003       |                                      |                                      |                                         | OPOR003      |                                      |                                      | POR006       |                                      |                                      |                                         | OPOR006      |                                      |                                      | POR016       |                                      |                                      |                                         | OPOR016      |                                      |                                      | POR020       |                                      |                                      |                                         |
|-----------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level |
| SV021     | 1574 / 1579  | 4                                    | 4                                    | 4                                       | 1557 / 1561  | 0                                    | 0                                    | 1457 / 1462  | 6                                    | 6                                    | 6                                       | 1439 / 1444  | 1                                    | 1                                    | 1498 / 1499  | 4                                    | 4                                    | 4                                       | 1469 / 1469  | 4                                    | 4                                    | 1237 / 1238  | 23                                   | 23                                   | 23                                      |
| USV022    | 1695 / 1697  | 2                                    | 2                                    | 2                                       | 1678 / 1679  | 1                                    | 1                                    | 1584 / 1584  | 2                                    | 2                                    | 2                                       | 1566 / 1566  | 2                                    | 2                                    | 1478 / 1484  | 10                                   | 10                                   | 10                                      | 1448 / 1454  | 10                                   | 10                                   | 1242 / 1247  | 5                                    | 5                                    | 5                                       |
| USV024    | 1551 / 1602  | 22                                   | 22                                   | 22                                      | 1533 / 1585  | 13                                   | 13                                   | 1445 / 1486  | 22                                   | 22                                   | 22                                      | 1427 / 1468  | 21                                   | 21                                   | 1492 / 1548  | 23                                   | 23                                   | 23                                      | 1462 / 1518  | 23                                   | 23                                   | 1189 / 1240  | 29                                   | 29                                   | 29                                      |
| USV025    | 1548 / 1596  | 20                                   | 20                                   | 20                                      | 1530 / 1578  | 11                                   | 11                                   | 1442 / 1479  | 20                                   | 20                                   | 20                                      | 1424 / 1461  | 19                                   | 19                                   | 1493 / 1547  | 20                                   | 20                                   | 20                                      | 1464 / 1517  | 20                                   | 20                                   | 1192 / 1239  | 27                                   | 27                                   | 27                                      |
| USV027    | 1599 / 1600  | 0                                    | 0                                    | 0                                       | 1582 / 1583  | 0                                    | 0                                    | 1481 / 1482  | 0                                    | 0                                    | 0                                       | 1463 / 1464  | 0                                    | 0                                    | 1485 / 1485  | 0                                    | 0                                    | 0                                       | 1456 / 1456  | 0                                    | 0                                    | 1247 / 1247  | 13                                   | 13                                   | 13                                      |
| USV028    | 1599 / 1600  | 0                                    | 0                                    | 0                                       | 1582 / 1582  | 0                                    | 0                                    | 1481 / 1481  | 0                                    | 0                                    | 0                                       | 1463 / 1463  | 0                                    | 0                                    | 1483 / 1485  | 12                                   | 12                                   | 12                                      | 1454 / 1455  | 12                                   | 12                                   | 1248 / 1249  | 2                                    | 2                                    | 2                                       |
| USV029    | 1600 / 1601  | 0                                    | 0                                    | 0                                       | 1582 / 1583  | 0                                    | 0                                    | 1481 / 1482  | 0                                    | 0                                    | 0                                       | 1463 / 1465  | 0                                    | 0                                    | 1484 / 1484  | 12                                   | 12                                   | 12                                      | 1454 / 1454  | 12                                   | 12                                   | 1249 / 1249  | 0                                    | 0                                    | 0                                       |
| USV030    | 1600 / 1602  | 0                                    | 0                                    | 0                                       | 1583 / 1584  | 0                                    | 0                                    | 1482 / 1483  | 0                                    | 0                                    | 0                                       | 1464 / 1466  | 0                                    | 0                                    | 1485 / 1485  | 4                                    | 4                                    | 4                                       | 1455 / 1456  | 4                                    | 4                                    | 1247 / 1247  | 18                                   | 18                                   | 18                                      |
| USV031    | 1601 / 1602  | 0                                    | 0                                    | 0                                       | 1583 / 1585  | 0                                    | 0                                    | 1482 / 1484  | 0                                    | 0                                    | 0                                       | 1465 / 1466  | 0                                    | 0                                    | 1484 / 1484  | 17                                   | 17                                   | 17                                      | 1454 / 1454  | 17                                   | 17                                   | 1249 / 1249  | 5                                    | 5                                    | 5                                       |
| USV032    | 1602 / 1603  | 8                                    | 8                                    | 8                                       | 1584 / 1585  | 5                                    | 5                                    | 1483 / 1485  | 6                                    | 6                                    | 6                                       | 1466 / 1467  | 6                                    | 6                                    | 1485 / 1485  | 10                                   | 10                                   | 10                                      | 1456 / 1456  | 10                                   | 10                                   | 1247 / 1247  | 28                                   | 28                                   | 28                                      |
| USV033    | 1602 / 1603  | 6                                    | 6                                    | 6                                       | 1585 / 1586  | 5                                    | 5                                    | 1484 / 1485  | 8                                    | 8                                    | 8                                       | 1466 / 1467  | 8                                    | 8                                    | 1483 / 1483  | 24                                   | 24                                   | 24                                      | 1454 / 1454  | 24                                   | 24                                   | 1249 / 1249  | 11                                   | 11                                   | 11                                      |
| USV034    | 1601 / 1602  | 8                                    | 8                                    | 8                                       | 1584 / 1585  | 5                                    | 5                                    | 1483 / 1483  | 6                                    | 6                                    | 6                                       | 1465 / 1466  | 6                                    | 6                                    | 1483 / 1485  | 26                                   | 26                                   | 26                                      | 1454 / 1455  | 26                                   | 26                                   | 1247 / 1249  | 19                                   | 19                                   | 19                                      |
| USV035    | 1603 / 1603  | 6                                    | 6                                    | 6                                       | 1585 / 1586  | 5                                    | 5                                    | 1485 / 1485  | 6                                    | 6                                    | 6                                       | 1467 / 1467  | 6                                    | 6                                    | 1484 / 1485  | 24                                   | 24                                   | 24                                      | 1454 / 1456  | 24                                   | 24                                   | 1247 / 1248  | 28                                   | 28                                   | 28                                      |
| USV036    | 1604 / 1604  | 0                                    | 0                                    | 0                                       | 1586 / 1586  | 0                                    | 0                                    | 1485 / 1485  | 0                                    | 0                                    | 0                                       | 1467 / 1467  | 0                                    | 0                                    | 1484 / 1484  | 12                                   | 12                                   | 12                                      | 1454 / 1454  | 12                                   | 12                                   | 1248 / 1248  | 19                                   | 19                                   | 19                                      |
| MSV001    | 1567 / 1570  | 3                                    | 3                                    | 3                                       | 1549 / 1553  | 2                                    | 2                                    | 1436 / 1439  | 4                                    | 4                                    | 4                                       | 1418 / 1422  | 4                                    | 4                                    | 1450 / 1451  | 0                                    | 0                                    | 0                                       | 1421 / 1421  | 0                                    | 0                                    | 1291 / 1291  | 0                                    | 0                                    | 0                                       |
| MSV002    | 1554 / 1557  | 0                                    | 0                                    | 0                                       | 1536 / 1539  | 0                                    | 0                                    | 1422 / 1425  | 2                                    | 2                                    | 2                                       | 1404 / 1408  | 2                                    | 2                                    | 1452 / 1453  | 0                                    | 0                                    | 0                                       | 1423 / 1423  | 0                                    | 0                                    | 1292 / 1293  | 0                                    | 0                                    | 0                                       |
| MSV003    | 1551 / 1551  | 0                                    | 0                                    | 0                                       | 1533 / 1534  | 0                                    | 0                                    | 1417 / 1418  | 0                                    | 0                                    | 0                                       | 1400 / 1400  | 0                                    | 0                                    | 1448 / 1450  | 0                                    | 0                                    | 0                                       | 1418 / 1420  | 0                                    | 0                                    | 1297 / 1299  | 0                                    | 0                                    | 0                                       |
| MSV004    | 1553 / 1554  | 0                                    | 0                                    | 0                                       | 1536 / 1537  | 0                                    | 0                                    | 1418 / 1419  | 0                                    | 0                                    | 0                                       | 1401 / 1401  | 0                                    | 0                                    | 1441 / 1443  | 0                                    | 0                                    | 0                                       | 1411 / 1413  | 0                                    | 0                                    | 1304 / 1306  | 0                                    | 0                                    | 0                                       |
| MSV005    | 1561 / 1563  | 0                                    | 0                                    | 0                                       | 1544 / 1545  | 0                                    | 0                                    | 1417 / 1417  | 0                                    | 0                                    | 0                                       | 1399 / 1400  | 0                                    | 0                                    | 1402 / 1406  | 0                                    | 0                                    | 0                                       | 1373 / 1377  | 0                                    | 0                                    | 1343 / 1347  | 0                                    | 0                                    | 0                                       |
| MSV006    | 1566 / 1568  | 0                                    | 0                                    | 0                                       | 1549 / 1551  | 0                                    | 0                                    | 1419 / 1420  | 0                                    | 0                                    | 0                                       | 1401 / 1402  | 0                                    | 0                                    | 1389 / 1393  | 0                                    | 0                                    | 0                                       | 1360 / 1363  | 0                                    | 0                                    | 1357 / 1360  | 0                                    | 0                                    | 0                                       |
| MSV007    | 1489 / 1491  | 0                                    | 0                                    | 0                                       | 1471 / 1473  | 0                                    | 0                                    | 1385 / 1387  | 1                                    | 1                                    | 1                                       | 1368 / 1369  | 1                                    | 1                                    | 1574 / 1576  | 0                                    | 0                                    | 0                                       | 1544 / 1546  | 0                                    | 0                                    | 1175 / 1177  | 0                                    | 0                                    | 0                                       |
| MSV008    | 1474 / 1476  | 0                                    | 0                                    | 0                                       | 1457 / 1459  | 0                                    | 0                                    | 1370 / 1372  | 0                                    | 0                                    | 0                                       | 1352 / 1354  | 0                                    | 0                                    | 1577 / 1579  | 0                                    | 0                                    | 0                                       | 1547 / 1549  | 0                                    | 0                                    | 1177 / 1178  | 0                                    | 0                                    | 0                                       |
| MSV009    | 1502 / 1503  | 6                                    | 6                                    | 6                                       | 1485 / 1486  | 3                                    | 3                                    | 1398 / 1398  | 0                                    | 0                                    | 0                                       | 1380 / 1380  | 0                                    | 0                                    | 1566 / 1569  | 7                                    | 7                                    | 7                                       | 1536 / 1540  | 7                                    | 7                                    | 1179 / 1182  | 18                                   | 18                                   | 18                                      |
| MSV010    | 1505 / 1505  | 4                                    | 4                                    | 4                                       | 1487 / 1487  | 0                                    | 0                                    | 1398 / 1398  | 0                                    | 0                                    | 0                                       | 1381 / 1381  | 0                                    | 0                                    | 1560 / 1562  | 4                                    | 4                                    | 4                                       | 1530 / 1532  | 4                                    | 4                                    | 1186 / 1188  | 15                                   | 15                                   | 15                                      |
| MSV011    | 1507 / 1508  | 0                                    | 0                                    | 0                                       | 1489 / 1490  | 0                                    | 0                                    | 1399 / 1399  | 0                                    | 0                                    | 0                                       | 1381 / 1381  | 0                                    | 0                                    | 1550 / 1554  | 8                                    | 8                                    | 8                                       | 1521 / 1524  | 8                                    | 8                                    | 1194 / 1198  | 21                                   | 21                                   | 21                                      |
| MSV012    | 1469 / 1470  | 0                                    | 0                                    | 0                                       | 1452 / 1452  | 0                                    | 0                                    | 1359 / 1359  | 0                                    | 0                                    | 0                                       | 1341 / 1341  | 0                                    | 0                                    | 1558 / 1560  | 0                                    | 0                                    | 0                                       | 1528 / 1530  | 0                                    | 0                                    | 1200 / 1202  | 0                                    | 0                                    | 0                                       |
| MSV013    | 1473 / 1474  | 0                                    | 0                                    | 0                                       | 1455 / 1456  | 0                                    | 0                                    | 1360 / 1360  | 0                                    | 0                                    | 0                                       | 1342 / 1342  | 0                                    | 0                                    | 1547 / 1549  | 0                                    | 0                                    | 0                                       | 1517 / 1519  | 0                                    | 0                                    | 1211 / 1213  | 0                                    | 0                                    | 0                                       |
| MSV014    | 1526 / 1527  | 0                                    | 0                                    | 0                                       | 1508 / 1510  | 0                                    | 0                                    | 1421 / 1421  | 0                                    | 0                                    | 0                                       | 1403 / 1404  | 0                                    | 0                                    | 1555 / 1559  | 0                                    | 0                                    | 0                                       | 1526 / 1529  | 0                                    | 0                                    | 1183 / 1187  | 0                                    | 0                                    | 0                                       |
| MSV015    | 1521 / 1522  | 0                                    | 0                                    | 0                                       | 1503 / 1505  | 0                                    | 0                                    | 1420 / 1421  | 0                                    | 0                                    | 0                                       | 1403 / 1403  | 0                                    | 0                                    | 1572 / 1575  | 0                                    | 0                                    | 0                                       | 1542 / 1546  | 0                                    | 0                                    | 1167 / 1170  | 0                                    | 0                                    | 0                                       |
| MSV016    | 1545 / 1546  | 0                                    | 0                                    | 0                                       | 1527 / 1528  | 0                                    | 0                                    | 1441 / 1442  | 0                                    | 0                                    | 0                                       | 1423 / 1424  | 0                                    | 0                                    | 1554 / 1558  | 0                                    | 0                                    | 0                                       | 1525 / 1528  | 0                                    | 0                                    | 1180 / 1184  | 0                                    | 0                                    | 0                                       |
| MSV017    | 1542 / 1543  | 0                                    | 0                                    | 0                                       | 1524 / 1525  | 0                                    | 0                                    | 1441 / 1441  | 0                                    | 0                                    | 0                                       | 1423 / 1423  | 0                                    | 0                                    | 1564 / 1567  | 0                                    | 0                                    | 0                                       | 1534 / 1538  | 0                                    | 0                                    | 1171 / 1175  | 0                                    | 0                                    | 0                                       |
| MSV018    | 1539 / 1540  | 0                                    | 0                                    | 0                                       | 1521 / 1522  | 0                                    | 0                                    | 1440 / 1440  | 0                                    | 0                                    | 0                                       | 1422 / 1423  | 0                                    | 0                                    | 1575 / 1578  | 0                                    | 0                                    | 0                                       | 1545 / 1549  | 0                                    | 0                                    | 1160 / 1163  | 0                                    | 0                                    | 0                                       |
| MSV019    | 1542 / 1543  | 0                                    | 0                                    | 0                                       | 1524 / 1526  | 0                                    | 0                                    | 1449 / 1449  | 0                                    | 0                                    | 0                                       | 1432 / 1432  | 0                                    | 0                                    | 1594 / 1598  | 0                                    | 0                                    | 0                                       | 1565 / 1568  | 0                                    | 0                                    | 1138 / 1142  | 14                                   | 14                                   | 14                                      |
| MSV023    | 1693 / 1694  | 0                                    | 0                                    | 0                                       | 1675 / 1677  | 0                                    | 0                                    | 1544 / 1544  | 0                                    | 0                                    | 0                                       | 1526 / 1527  | 0                                    | 0                                    | 1329 / 1333  | 2                                    | 2                                    | 2                                       | 1299 / 1303  | 2                                    | 2                                    | 1396 / 1400  | 0                                    | 0                                    | 0                                       |

Table 2 Point of Reception Predicted Individual Source Sound Levels - Unmitigated Normal Operations (Stationary Source)

| Source ID | OPOR020      |                                      |                                      | POR037       |                                      |                                      |                                         | OPOR037      |                                      |                                      | POR044       |                                      |                                      |                                         | OPOR044      |                                      |                                      | POR061       |                                      |                                      |                                         | OPOR061      |                                      |                                      |
|-----------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level |
| USP001    | 1278         | 27                                   | 27                                   | 1662         | 22                                   | 22                                   | 22                                      | 1657         | 22                                   | 22                                   | 1875         | 29                                   | 29                                   | 29                                      | 1861         | 29                                   | 29                                   | 1757         | 30                                   | 30                                   | 30                                      | 1744         | 30                                   | 30                                   |
| USP002    | 1288         | 27                                   | 27                                   | 1667         | 25                                   | 25                                   | 25                                      | 1662         | 25                                   | 25                                   | 1876         | 29                                   | 29                                   | 29                                      | 1863         | 29                                   | 29                                   | 1765         | 23                                   | 23                                   | 23                                      | 1751         | 23                                   | 23                                   |
| USP003    | 1300         | 27                                   | 27                                   | 1671         | 25                                   | 25                                   | 25                                      | 1666         | 25                                   | 25                                   | 1877         | 29                                   | 29                                   | 29                                      | 1864         | 29                                   | 29                                   | 1772         | 22                                   | 22                                   | 22                                      | 1759         | 22                                   | 22                                   |
| USP004    | 1312         | 27                                   | 27                                   | 1676         | 30                                   | 30                                   | 30                                      | 1671         | 30                                   | 30                                   | 1879         | 29                                   | 29                                   | 29                                      | 1865         | 29                                   | 29                                   | 1779         | 22                                   | 22                                   | 22                                      | 1766         | 22                                   | 22                                   |
| USP005    | 1325         | 27                                   | 27                                   | 1687         | 30                                   | 30                                   | 30                                      | 1682         | 30                                   | 30                                   | 1887         | 29                                   | 29                                   | 29                                      | 1873         | 29                                   | 29                                   | 1793         | 23                                   | 23                                   | 23                                      | 1779         | 23                                   | 23                                   |
| USP006    | 1330         | 27                                   | 27                                   | 1684         | 30                                   | 30                                   | 30                                      | 1679         | 30                                   | 30                                   | 1881         | 29                                   | 29                                   | 29                                      | 1868         | 29                                   | 29                                   | 1792         | 30                                   | 30                                   | 30                                      | 1778         | 30                                   | 30                                   |
| USP007    | 1339         | 17                                   | 17                                   | 1679         | 17                                   | 17                                   | 17                                      | 1674         | 17                                   | 17                                   | 1873         | 17                                   | 17                                   | 17                                      | 1859         | 17                                   | 17                                   | 1790         | 17                                   | 17                                   | 17                                      | 1777         | 16                                   | 16                                   |
| USP008    | 1432         | 36                                   | 36                                   | 1674         | 41                                   | 41                                   | 41                                      | 1669         | 41                                   | 41                                   | 1837         | 40                                   | 40                                   | 40                                      | 1823         | 40                                   | 40                                   | 1816         | 40                                   | 40                                   | 40                                      | 1803         | 40                                   | 40                                   |
| SP009     | 1364         | 6                                    | 6                                    | 1685         | 3                                    | 3                                    | 3                                       | 1680         | 3                                    | 3                                    | 1872         | 2                                    | 2                                    | 2                                       | 1858         | 2                                    | 2                                    | 1803         | 3                                    | 3                                    | 3                                       | 1790         | 3                                    | 3                                    |
| SP014     | 1152         | 19                                   | 19                                   | 1655         | 22                                   | 22                                   | 22                                      | 1650         | 22                                   | 22                                   | 1906         | 17                                   | 17                                   | 17                                      | 1892         | 16                                   | 16                                   | 1711         | 23                                   | 23                                   | 23                                      | 1698         | 22                                   | 22                                   |
| SP015     | 1152         | 21                                   | 21                                   | 1642         | 25                                   | 25                                   | 25                                      | 1637         | 26                                   | 26                                   | 1891         | 20                                   | 20                                   | 20                                      | 1877         | 20                                   | 20                                   | 1700         | 25                                   | 25                                   | 25                                      | 1687         | 25                                   | 25                                   |
| SP021     | 1112         | 6                                    | 6                                    | 1566         | 10                                   | 10                                   | 10                                      | 1561         | 10                                   | 10                                   | 1821         | 0                                    | 0                                    | 0                                       | 1807         | 0                                    | 0                                    | 1624         | 10                                   | 10                                   | 10                                      | 1611         | 10                                   | 10                                   |
| SP022     | 1116         | 0                                    | 0                                    | 1595         | 0                                    | 0                                    | 0                                       | 1590         | 0                                    | 0                                    | 1852         | 0                                    | 0                                    | 0                                       | 1838         | 0                                    | 0                                    | 1650         | 0                                    | 0                                    | 0                                       | 1636         | 0                                    | 0                                    |
| SP023     | 1110         | 9                                    | 9                                    | 1512         | 7                                    | 7                                    | 7                                       | 1507         | 8                                    | 8                                    | 1765         | 7                                    | 7                                    | 7                                       | 1751         | 6                                    | 6                                    | 1578         | 8                                    | 8                                    | 8                                       | 1565         | 7                                    | 7                                    |
| SP024     | 1112         | 6                                    | 6                                    | 1514         | 4                                    | 4                                    | 4                                       | 1509         | 5                                    | 5                                    | 1767         | 27                                   | 27                                   | 27                                      | 1753         | 27                                   | 27                                   | 1581         | 11                                   | 11                                   | 11                                      | 1568         | 11                                   | 11                                   |
| SP025     | 1121         | 19                                   | 19                                   | 1463         | 23                                   | 23                                   | 23                                      | 1458         | 24                                   | 24                                   | 1710         | 23                                   | 23                                   | 23                                      | 1696         | 23                                   | 23                                   | 1541         | 24                                   | 24                                   | 24                                      | 1528         | 23                                   | 23                                   |
| SP026     | 1117         | 22                                   | 22                                   | 1458         | 26                                   | 26                                   | 26                                      | 1453         | 27                                   | 27                                   | 1706         | 25                                   | 25                                   | 25                                      | 1692         | 25                                   | 25                                   | 1536         | 26                                   | 26                                   | 26                                      | 1523         | 26                                   | 26                                   |
| SP027     | 1195         | 16                                   | 16                                   | 1547         | 22                                   | 22                                   | 22                                      | 1542         | 22                                   | 22                                   | 1775         | 21                                   | 21                                   | 21                                      | 1761         | 21                                   | 21                                   | 1636         | 22                                   | 22                                   | 22                                      | 1623         | 22                                   | 22                                   |
| USP028    | 1114         | 27                                   | 27                                   | 1433         | 31                                   | 31                                   | 31                                      | 1429         | 32                                   | 32                                   | 1682         | 30                                   | 30                                   | 30                                      | 1668         | 30                                   | 30                                   | 1514         | 31                                   | 31                                   | 31                                      | 1500         | 31                                   | 31                                   |
| USP030    | 1181         | 38                                   | 38                                   | 1469         | 27                                   | 27                                   | 27                                      | 1464         | 27                                   | 27                                   | 1697         | 39                                   | 39                                   | 39                                      | 1683         | 39                                   | 39                                   | 1566         | 36                                   | 36                                   | 36                                      | 1553         | 35                                   | 35                                   |
| SP035     | 1200         | 9                                    | 9                                    | 1364         | 14                                   | 14                                   | 14                                      | 1359         | 14                                   | 14                                   | 1581         | 12                                   | 12                                   | 12                                      | 1567         | 12                                   | 12                                   | 1485         | 14                                   | 14                                   | 14                                      | 1472         | 14                                   | 14                                   |
| SP036     | 1205         | 0                                    | 0                                    | 1365         | 15                                   | 15                                   | 15                                      | 1360         | 16                                   | 16                                   | 1580         | 14                                   | 14                                   | 14                                      | 1566         | 14                                   | 14                                   | 1488         | 15                                   | 15                                   | 15                                      | 1475         | 15                                   | 15                                   |
| SP037     | 1207         | 0                                    | 0                                    | 1368         | 0                                    | 0                                    | 0                                       | 1363         | 0                                    | 0                                    | 1582         | 0                                    | 0                                    | 0                                       | 1568         | 0                                    | 0                                    | 1490         | 0                                    | 0                                    | 0                                       | 1478         | 0                                    | 0                                    |
| SP039     | 1352         | 1                                    | 1                                    | 1608         | 19                                   | 19                                   | 19                                      | 1603         | 20                                   | 20                                   | 1791         | 24                                   | 24                                   | 24                                      | 1777         | 23                                   | 23                                   | 1737         | 18                                   | 18                                   | 18                                      | 1725         | 15                                   | 15                                   |
| SP040     | 1353         | 8                                    | 8                                    | 1596         | 23                                   | 23                                   | 23                                      | 1591         | 24                                   | 24                                   | 1776         | 25                                   | 25                                   | 25                                      | 1762         | 24                                   | 24                                   | 1728         | 20                                   | 20                                   | 20                                      | 1715         | 19                                   | 19                                   |
| USP041    | 1346         | 18                                   | 18                                   | 1604         | 21                                   | 21                                   | 21                                      | 1599         | 22                                   | 22                                   | 1788         | 40                                   | 40                                   | 40                                      | 1774         | 40                                   | 40                                   | 1732         | 21                                   | 21                                   | 21                                      | 1719         | 21                                   | 21                                   |
| SP042     | 1347         | 11                                   | 11                                   | 1596         | 4                                    | 4                                    | 4                                       | 1591         | 5                                    | 5                                    | 1779         | 20                                   | 20                                   | 20                                      | 1765         | 19                                   | 19                                   | 1726         | 0                                    | 0                                    | 0                                       | 1713         | 0                                    | 0                                    |
| USP043    | 1222         | 27                                   | 27                                   | 1582         | 10                                   | 10                                   | 10                                      | 1577         | 10                                   | 10                                   | 1805         | 9                                    | 9                                    | 9                                       | 1791         | 8                                    | 8                                    | 1674         | 30                                   | 30                                   | 30                                      | 1661         | 30                                   | 30                                   |
| SP045     | 1227         | 0                                    | 0                                    | 1551         | 0                                    | 0                                    | 0                                       | 1546         | 0                                    | 0                                    | 1769         | 3                                    | 3                                    | 3                                       | 1755         | 3                                    | 3                                    | 1650         | 4                                    | 4                                    | 4                                       | 1637         | 3                                    | 3                                    |
| SP046     | 1227         | 0                                    | 0                                    | 1551         | 0                                    | 0                                    | 0                                       | 1546         | 0                                    | 0                                    | 1769         | 4                                    | 4                                    | 4                                       | 1755         | 0                                    | 0                                    | 1650         | 5                                    | 5                                    | 5                                       | 1637         | 4                                    | 4                                    |
| SP047     | 1227         | 0                                    | 0                                    | 1551         | 0                                    | 0                                    | 0                                       | 1546         | 0                                    | 0                                    | 1769         | 4                                    | 4                                    | 4                                       | 1755         | 3                                    | 3                                    | 1650         | 4                                    | 4                                    | 4                                       | 1637         | 3                                    | 3                                    |
| SP048     | 1227         | 2                                    | 2                                    | 1551         | 3                                    | 3                                    | 3                                       | 1546         | 4                                    | 4                                    | 1769         | 2                                    | 2                                    | 2                                       | 1755         | 2                                    | 2                                    | 1650         | 3                                    | 3                                    | 3                                       | 1637         | 2                                    | 2                                    |
| SP049     | 1227         | 0                                    | 0                                    | 1551         | 0                                    | 0                                    | 0                                       | 1546         | 0                                    | 0                                    | 1769         | 3                                    | 3                                    | 3                                       | 1755         | 2                                    | 2                                    | 1650         | 3                                    | 3                                    | 3                                       | 1637         | 3                                    | 3                                    |
| SP050     | 1224         | 20                                   | 20                                   | 1544         | 17                                   | 17                                   | 17                                      | 1539         | 17                                   | 17                                   | 1763         | 14                                   | 14                                   | 14                                      | 1749         | 13                                   | 13                                   | 1643         | 25                                   | 25                                   | 25                                      | 1630         | 25                                   | 25                                   |
| USP051    | 1323         | 13                                   | 13                                   | 1603         | 31                                   | 31                                   | 31                                      | 1598         | 32                                   | 32                                   | 1794         | 31                                   | 31                                   | 31                                      | 1780         | 30                                   | 30                                   | 1724         | 31                                   | 31                                   | 31                                      | 1711         | 31                                   | 31                                   |
| USP052    | 1324         | 12                                   | 12                                   | 1610         | 30                                   | 30                                   | 30                                      | 1605         | 30                                   | 30                                   | 1802         | 30                                   | 30                                   | 30                                      | 1788         | 30                                   | 30                                   | 1730         | 31                                   | 31                                   | 31                                      | 1717         | 33                                   | 33                                   |
| USP053    | 1326         | 14                                   | 14                                   | 1604         | 30                                   | 30                                   | 30                                      | 1599         | 31                                   | 31                                   | 1794         | 31                                   | 31                                   | 31                                      | 1781         | 31                                   | 31                                   | 1726         | 31                                   | 31                                   | 31                                      | 1713         | 31                                   | 31                                   |
| SP054     | 1327         | 6                                    | 6                                    | 1611         | 23                                   | 23                                   | 23                                      | 1606         | 24                                   | 24                                   | 1802         | 20                                   | 20                                   | 20                                      | 1789         | 20                                   | 20                                   | 1732         | 25                                   | 25                                   | 25                                      | 1719         | 24                                   | 24                                   |
| SP055     | 1329         | 8                                    | 8                                    | 1605         | 24                                   | 24                                   | 24                                      | 1600         | 25                                   | 25                                   | 1795         | 23                                   | 23                                   | 23                                      | 1781         | 22                                   | 22                                   | 1728         | 24                                   | 24                                   | 24                                      | 1715         | 24                                   | 24                                   |
| SP056     | 1332         | 8                                    | 8                                    | 1607         | 24                                   | 24                                   | 24                                      | 1602         | 24                                   | 24                                   | 1796         | 21                                   | 21                                   | 21                                      | 1782         | 21                                   | 21                                   | 1730         | 26                                   | 26                                   | 26                                      | 1717         | 25                                   | 25                                   |
| SP057     | 1332         | 3                                    | 3                                    | 1614         | 20                                   | 20                                   | 20                                      | 1609         | 21                                   | 21                                   | 1803         | 16                                   | 16                                   | 16                                      | 1790         | 16                                   | 16                                   | 1736         | 22                                   | 22                                   | 22                                      | 1723         | 21                                   | 21                                   |
| SP058     | 1335         | 2                                    | 2                                    | 1608         | 19                                   | 19                                   | 19                                      | 1603         | 19                                   | 19                                   | 1796         | 15                                   | 15                                   | 15                                      | 1782         | 14                                   | 14                                   | 1732         | 19                                   | 19                                   | 19                                      | 1719         | 18                                   | 18                                   |
| SP059     | 1287         | 5                                    | 5                                    | 1586         | 29                                   | 29                                   | 29                                      | 1581         | 29                                   | 29                                   | 1787         | 21                                   | 21                                   | 21                                      | 1774         | 20                                   | 20                                   | 1698         | 24                                   | 24                                   | 24                                      | 1685         | 23                                   | 23                                   |
| USP060    | 1279         | 15                                   | 15                                   | 1583         | 35                                   | 35                                   | 35                                      | 1578         | 36                                   | 36                                   | 1787         | 32                                   | 32                                   | 32                                      | 1773         | 31                                   | 31                                   | 1693         | 34                                   | 34                                   | 34                                      | 1680         | 33                                   | 33                                   |
| USP061    | 1283         | 15                                   | 15                                   | 1584         | 35                                   | 35                                   | 35                                      | 1580         | 35                                   | 35                                   | 1787         | 32                                   | 32                                   | 32                                      | 1774         | 31                                   | 31                                   | 1696         | 34                                   | 34                                   | 34                                      | 1683         | 33                                   | 33                                   |
| SP062     | 1313         | 0                                    | 0                                    | 1605         | 16                                   | 16                                   | 16                                      | 1600         | 16                                   | 16                                   | 1800         | 17                                   | 17                                   | 17                                      | 1786         | 17                                   | 17                                   | 1722         | 18                                   | 18                                   | 18                                      | 1709         | 17                                   | 17                                   |
| SP063     | 1312         | 0                                    | 0                                    | 1604         | 15                                   | 15                                   | 15                                      | 1599         | 16                                   | 16                                   | 1800         | 17                                   | 17                                   | 17                                      | 1786         | 17                                   | 17                                   | 1722         | 18                                   | 18                                   | 18                                      | 1709         | 17                                   | 17                                   |
| SP064     | 1311         | 0                                    | 0                                    | 1604         | 16                                   | 16                                   | 16                                      | 1599         | 16                                   | 16                                   | 1799         | 17                                   | 17                                   | 17                                      | 1786         | 17                                   | 17                                   | 1721         | 18                                   | 18                                   | 18                                      | 1708         | 17                                   | 17                                   |
| SP065     | 1309         | 0                                    | 0                                    | 1603         | 16                                   | 16                                   | 16                                      | 1598         | 16                                   | 16                                   | 1799         | 17                                   | 17                                   | 17                                      | 1785         | 17                                   | 17                                   | 1720         | 17                                   | 17                                   | 17                                      | 1706         | 16                                   | 16                                   |
| SP066     | 1308         | 0                                    | 0                                    | 1602         | 15                                   | 15                                   | 15                                      | 1597         | 16                                   | 16                                   | 1799         | 17                                   | 17                                   | 17                                      | 1785         | 17                                   | 17                                   | 1719         | 18                                   | 18                                   | 18                                      | 1705         | 20                                   | 20                                   |
| SP067     | 1306         | 0                                    | 0                                    | 1602         | 16                                   | 16                                   | 16                                      | 1597         | 16                                   | 16                                   | 1799         | 17                                   | 17                                   | 17                                      | 1785         | 16                                   | 16                                   | 1717         | 22                                   | 22                                   | 22                                      | 1704         | 21                                   | 21                                   |
| SP068     | 1305         | 0                                    | 0                                    | 1601         | 16                                   | 16                                   | 16                                      | 1596         | 16                                   | 16                                   | 1798         | 16                                   | 16                                   | 16                                      | 1785         | 16                                   | 16                                   | 1716         | 22                                   | 22                                   | 22                                      | 1703         | 21                                   | 21                                   |
| SP069     | 1303         | 0                                    | 0                                    | 1600         | 16                                   | 16                                   | 16                                      | 1595         | 16                                   | 16                                   | 1798         | 16                                   | 16                                   | 16                                      | 1784         | 16                                   | 16                                   | 1715         | 22                                   | 22                                   | 22                                      | 1702         | 18                                   | 18                                   |
| SP070     | 1302         | 0                                    | 0                                    | 1600         | 19                                   | 19                                   | 19                                      | 1595         | 20                                   | 20                                   | 1798         | 16                                   | 16                                   | 16                                      | 1784         | 15                                   | 15                                   | 1714         | 18                                   | 18                                   | 18                                      | 1701         | 18                                   | 18                                   |
| SP071     | 1300         | 0                                    | 0                                    | 1599         | 20                                   | 20                                   | 20                                      | 1594         | 20                                   | 20                                   | 1798         | 16                                   | 16                                   | 16                                      | 1784         | 15                                   | 15                                   | 1713         | 18                                   | 18                                   | 18                                      | 1700         | 18                                   | 18                                   |
| SP072     | 1299         | 0                                    | 0                                    | 1598         | 20                                   | 20                                   | 20                                      | 1593         | 20                                   | 20                                   | 1797         | 15                                   | 15                                   | 15                                      | 1784         | 15                                   | 15                                   | 1712         | 18                                   | 18                                   | 18                                      | 1699         | 17                                   | 17                                   |
| SP073     | 1297         | 0                                    | 0                                    | 1598         | 20                                   | 20                                   | 20                                      | 1593         | 20                                   | 20                                   | 1797         | 15                                   | 15                                   | 15                                      | 1783         | 14                                   | 14                                   | 1711         | 18                                   | 18                                   | 18                                      | 1698         | 17                                   | 17                                   |
| SP074     | 1296         | 0                                    | 0                                    | 1597         | 20                                   | 20                                   | 20                                      | 1592         | 20                                   | 20                                   | 1797         | 14                                   | 14                                   | 14                                      | 1783         | 14                                   | 14                                   | 1710         | 18                                   | 18                                   | 18                                      | 1697         | 17                                   | 17                                   |
| SP075     | 1295         | 0                                    | 0                                    | 1597         | 20                                   | 20                                   | 20                                      | 1592         | 20                                   | 20                                   | 1797         | 14                                   | 14                                   | 14                                      | 1783         | 13                                   | 13                                   | 1710         | 18                                   | 18                                   | 18                                      | 1696         | 17                                   | 17                                   |

Table 2 Point of Reception Predicted Individual Source Sound Levels - Unmitigated Normal Operations (Stationary Source)

| Source ID   | OPOR020      |                                      |                                      | POR037       |                                      |                                      |                                         | OPOR037      |                                      |                                      | POR044       |                                      |                                      |                                         | OPOR044      |                                      |                                      | POR061       |                                      |                                      |                                         | OPOR061      |                                      |                                      |
|-------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|
|             | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level |
| SP076       | 1293         | 0                                    | 0                                    | 1596         | 20                                   | 20                                   | 20                                      | 1591         | 21                                   | 21                                   | 1797         | 14                                   | 14                                   | 14                                      | 1783         | 13                                   | 13                                   | 1709         | 18                                   | 18                                   | 18                                      | 1695         | 17                                   | 17                                   |
| SP077       | 1292         | 0                                    | 0                                    | 1596         | 20                                   | 20                                   | 20                                      | 1591         | 21                                   | 21                                   | 1797         | 13                                   | 13                                   | 13                                      | 1783         | 13                                   | 13                                   | 1708         | 18                                   | 18                                   | 18                                      | 1695         | 17                                   | 17                                   |
| SP078       | 1283         | 0                                    | 0                                    | 1591         | 20                                   | 20                                   | 20                                      | 1586         | 21                                   | 21                                   | 1795         | 12                                   | 12                                   | 12                                      | 1781         | 12                                   | 12                                   | 1701         | 15                                   | 15                                   | 15                                      | 1688         | 15                                   | 15                                   |
| SP079       | 1281         | 0                                    | 0                                    | 1591         | 23                                   | 23                                   | 23                                      | 1586         | 23                                   | 23                                   | 1795         | 13                                   | 13                                   | 13                                      | 1781         | 12                                   | 12                                   | 1700         | 17                                   | 17                                   | 17                                      | 1687         | 16                                   | 16                                   |
| SP080       | 1279         | 0                                    | 0                                    | 1590         | 21                                   | 21                                   | 21                                      | 1585         | 22                                   | 22                                   | 1795         | 13                                   | 13                                   | 13                                      | 1781         | 12                                   | 12                                   | 1699         | 17                                   | 17                                   | 17                                      | 1686         | 16                                   | 16                                   |
| SP081       | 1278         | 0                                    | 0                                    | 1589         | 22                                   | 22                                   | 22                                      | 1584         | 22                                   | 22                                   | 1794         | 14                                   | 14                                   | 14                                      | 1781         | 13                                   | 13                                   | 1698         | 17                                   | 17                                   | 17                                      | 1685         | 16                                   | 16                                   |
| SP082       | 1329         | 0                                    | 0                                    | 1578         | 10                                   | 10                                   | 10                                      | 1573         | 10                                   | 10                                   | 1765         | 10                                   | 10                                   | 10                                      | 1751         | 9                                    | 9                                    | 1706         | 4                                    | 4                                    | 4                                       | 1693         | 3                                    | 3                                    |
| SP083       | 1331         | 0                                    | 0                                    | 1579         | 10                                   | 10                                   | 10                                      | 1574         | 10                                   | 10                                   | 1765         | 10                                   | 10                                   | 10                                      | 1752         | 9                                    | 9                                    | 1707         | 4                                    | 4                                    | 4                                       | 1694         | 3                                    | 3                                    |
| SP084       | 1334         | 0                                    | 0                                    | 1580         | 10                                   | 10                                   | 10                                      | 1575         | 10                                   | 10                                   | 1766         | 10                                   | 10                                   | 10                                      | 1752         | 9                                    | 9                                    | 1709         | 4                                    | 4                                    | 4                                       | 1696         | 3                                    | 3                                    |
| SP085       | 1335         | 0                                    | 0                                    | 1581         | 10                                   | 10                                   | 10                                      | 1576         | 10                                   | 10                                   | 1766         | 10                                   | 10                                   | 10                                      | 1753         | 9                                    | 9                                    | 1710         | 5                                    | 5                                    | 5                                       | 1697         | 3                                    | 3                                    |
| SP086       | 1329         | 0                                    | 0                                    | 1578         | 5                                    | 5                                    | 5                                       | 1573         | 6                                    | 6                                    | 1765         | 10                                   | 10                                   | 10                                      | 1751         | 9                                    | 9                                    | 1706         | 1                                    | 1                                    | 1                                       | 1693         | 0                                    | 0                                    |
| SP087       | 1331         | 0                                    | 0                                    | 1579         | 5                                    | 5                                    | 5                                       | 1574         | 6                                    | 6                                    | 1765         | 10                                   | 10                                   | 10                                      | 1752         | 9                                    | 9                                    | 1707         | 2                                    | 2                                    | 2                                       | 1694         | 1                                    | 1                                    |
| SP088       | 1334         | 0                                    | 0                                    | 1580         | 5                                    | 5                                    | 5                                       | 1575         | 6                                    | 6                                    | 1766         | 10                                   | 10                                   | 10                                      | 1752         | 9                                    | 9                                    | 1709         | 2                                    | 2                                    | 2                                       | 1696         | 1                                    | 1                                    |
| SP089       | 1335         | 0                                    | 0                                    | 1581         | 5                                    | 5                                    | 5                                       | 1576         | 6                                    | 6                                    | 1766         | 10                                   | 10                                   | 10                                      | 1753         | 9                                    | 9                                    | 1710         | 5                                    | 5                                    | 5                                       | 1697         | 2                                    | 2                                    |
| SP090       | 1329         | 0                                    | 0                                    | 1578         | 5                                    | 5                                    | 5                                       | 1573         | 6                                    | 6                                    | 1765         | 3                                    | 3                                    | 3                                       | 1751         | 3                                    | 3                                    | 1706         | 0                                    | 0                                    | 0                                       | 1693         | 0                                    | 0                                    |
| SP091       | 1331         | 0                                    | 0                                    | 1579         | 4                                    | 4                                    | 4                                       | 1574         | 4                                    | 4                                    | 1765         | 6                                    | 6                                    | 6                                       | 1752         | 5                                    | 5                                    | 1707         | 7                                    | 7                                    | 7                                       | 1694         | 6                                    | 6                                    |
| SP092       | 1334         | 0                                    | 0                                    | 1580         | 5                                    | 5                                    | 5                                       | 1575         | 6                                    | 6                                    | 1766         | 6                                    | 6                                    | 6                                       | 1752         | 5                                    | 5                                    | 1709         | 6                                    | 6                                    | 6                                       | 1696         | 6                                    | 6                                    |
| SP093       | 1335         | 0                                    | 0                                    | 1581         | 5                                    | 5                                    | 5                                       | 1576         | 6                                    | 6                                    | 1766         | 6                                    | 6                                    | 6                                       | 1753         | 5                                    | 5                                    | 1710         | 0                                    | 0                                    | 0                                       | 1697         | 0                                    | 0                                    |
| SP094       | 1329         | 0                                    | 0                                    | 1578         | 5                                    | 5                                    | 5                                       | 1573         | 6                                    | 6                                    | 1765         | 0                                    | 0                                    | 0                                       | 1751         | 0                                    | 0                                    | 1706         | 0                                    | 0                                    | 0                                       | 1693         | 0                                    | 0                                    |
| SP095       | 1331         | 0                                    | 0                                    | 1579         | 0                                    | 0                                    | 0                                       | 1574         | 1                                    | 1                                    | 1765         | 1                                    | 1                                    | 1                                       | 1752         | 0                                    | 0                                    | 1707         | 3                                    | 3                                    | 3                                       | 1694         | 2                                    | 2                                    |
| SP096       | 1334         | 0                                    | 0                                    | 1580         | 4                                    | 4                                    | 4                                       | 1575         | 4                                    | 4                                    | 1766         | 0                                    | 0                                    | 0                                       | 1752         | 0                                    | 0                                    | 1709         | 2                                    | 2                                    | 2                                       | 1696         | 1                                    | 1                                    |
| SP097       | 1335         | 0                                    | 0                                    | 1581         | 0                                    | 0                                    | 0                                       | 1576         | 0                                    | 0                                    | 1766         | 0                                    | 0                                    | 0                                       | 1753         | 0                                    | 0                                    | 1710         | 0                                    | 0                                    | 0                                       | 1697         | 0                                    | 0                                    |
| SP098       | 1239         | 2                                    | 2                                    | 1374         | 25                                   | 25                                   | 25                                      | 1369         | 26                                   | 26                                   | 1577         | 25                                   | 25                                   | 25                                      | 1563         | 24                                   | 24                                   | 1506         | 24                                   | 24                                   | 24                                      | 1494         | 24                                   | 24                                   |
| SP101       | 1173         | 15                                   | 15                                   | 1295         | 19                                   | 19                                   | 19                                      | 1290         | 19                                   | 19                                   | 1519         | 18                                   | 18                                   | 18                                      | 1506         | 18                                   | 18                                   | 1416         | 19                                   | 19                                   | 19                                      | 1403         | 18                                   | 18                                   |
| SP103       | 1631         | 28                                   | —                                    | 2685         | 24                                   | —                                    | —                                       | 2680         | 25                                   | —                                    | 2978         | 24                                   | —                                    | —                                       | 2964         | 23                                   | —                                    | 2640         | 25                                   | —                                    | —                                       | 2626         | 25                                   | —                                    |
| USP105      | 786          | 37                                   | 37                                   | 1172         | 40                                   | 40                                   | —                                       | 1168         | 41                                   | 41                                   | 1532         | 38                                   | 38                                   | —                                       | 1519         | 37                                   | 37                                   | 1152         | 41                                   | 41                                   | —                                       | 1139         | 41                                   | 41                                   |
| MSP011      | 1181         | 10                                   | 10                                   | 1655         | 14                                   | 14                                   | 14                                      | 1650         | 14                                   | 14                                   | 1897         | 9                                    | 9                                    | 9                                       | 1883         | 8                                    | 8                                    | 1721         | 14                                   | 14                                   | 14                                      | 1707         | 14                                   | 14                                   |
| MSP013      | 1182         | 10                                   | 10                                   | 1667         | 13                                   | 13                                   | 13                                      | 1662         | 14                                   | 14                                   | 1910         | 8                                    | 8                                    | 8                                       | 1896         | 7                                    | 7                                    | 1731         | 13                                   | 13                                   | 13                                      | 1717         | 13                                   | 13                                   |
| MSP020      | 1115         | 16                                   | 16                                   | 1566         | 20                                   | 20                                   | 20                                      | 1561         | 20                                   | 20                                   | 1821         | 0                                    | 0                                    | 0                                       | 1807         | 0                                    | 0                                    | 1626         | 15                                   | 15                                   | 15                                      | 1612         | 14                                   | 14                                   |
| USP008b     | 1432         | 16                                   | 16                                   | 1678         | 20                                   | 20                                   | 20                                      | 1673         | 20                                   | 20                                   | 1841         | 19                                   | 19                                   | 19                                      | 1827         | 20                                   | 20                                   | 1819         | 19                                   | 19                                   | 19                                      | 1806         | 20                                   | 20                                   |
| MSP034upd   | 1179         | 18                                   | 18                                   | 1350         | 22                                   | 22                                   | 22                                      | 1345         | 23                                   | 23                                   | 1574         | 22                                   | 22                                   | 22                                      | 1560         | 21                                   | 21                                   | 1466         | 22                                   | 22                                   | 22                                      | 1453         | 22                                   | 22                                   |
| MSP016_upd  | 1153         | 11                                   | 11                                   | 1627         | 0                                    | 0                                    | 0                                       | 1623         | 0                                    | 0                                    | 1876         | 0                                    | 0                                    | 0                                       | 1862         | 0                                    | 0                                    | 1689         | 2                                    | 2                                    | 2                                       | 1675         | 2                                    | 2                                    |
| MSP017upd   | 1154         | 11                                   | 11                                   | 1628         | 0                                    | 0                                    | 0                                       | 1623         | 0                                    | 0                                    | 1876         | 0                                    | 0                                    | 0                                       | 1862         | 0                                    | 0                                    | 1690         | 2                                    | 2                                    | 2                                       | 1676         | 2                                    | 2                                    |
| SP018upd    | 1160         | 11                                   | 11                                   | 1630         | 0                                    | 0                                    | 0                                       | 1625         | 0                                    | 0                                    | 1876         | 0                                    | 0                                    | 0                                       | 1862         | 0                                    | 0                                    | 1693         | 6                                    | 6                                    | 6                                       | 1680         | 6                                    | 6                                    |
| SP019upd    | 1161         | 11                                   | 11                                   | 1630         | 0                                    | 0                                    | 0                                       | 1625         | 0                                    | 0                                    | 1876         | 0                                    | 0                                    | 0                                       | 1862         | 0                                    | 0                                    | 1694         | 6                                    | 6                                    | 6                                       | 1680         | 6                                    | 6                                    |
| MSP010upd   | 1318         | 12                                   | 12                                   | 1775         | 7                                    | 7                                    | 7                                       | 1770         | 7                                    | 7                                    | 1988         | 11                                   | 11                                   | 11                                      | 1975         | 10                                   | 10                                   | 1861         | 16                                   | 16                                   | 16                                      | 1848         | 16                                   | 16                                   |
| MSP029upd   | 1104         | 16                                   | 16                                   | 1338         | 22                                   | 22                                   | 22                                      | 1333         | 22                                   | 22                                   | 1587         | 21                                   | 21                                   | 21                                      | 1573         | 20                                   | 20                                   | 1428         | 22                                   | 22                                   | 22                                      | 1415         | 21                                   | 21                                   |
| MSP031upd   | 1142         | 8                                    | 8                                    | 1336         | 10                                   | 10                                   | 10                                      | 1331         | 11                                   | 11                                   | 1572         | 9                                    | 9                                    | 9                                       | 1558         | 9                                    | 9                                    | 1440         | 10                                   | 10                                   | 10                                      | 1427         | 10                                   | 10                                   |
| MSP032upd   | 1154         | 14                                   | 14                                   | 1341         | 16                                   | 16                                   | 16                                      | 1336         | 16                                   | 16                                   | 1573         | 14                                   | 14                                   | 14                                      | 1559         | 14                                   | 14                                   | 1449         | 15                                   | 15                                   | 15                                      | 1436         | 15                                   | 15                                   |
| MSP033upd   | 1167         | 24                                   | 24                                   | 1344         | 26                                   | 26                                   | 26                                      | 1339         | 26                                   | 26                                   | 1572         | 25                                   | 25                                   | 25                                      | 1558         | 25                                   | 25                                   | 1456         | 26                                   | 26                                   | 26                                      | 1443         | 25                                   | 25                                   |
| MSP012upd   | 1171         | 8                                    | 8                                    | 1664         | 11                                   | 11                                   | 11                                      | 1659         | 12                                   | 12                                   | 1910         | 11                                   | 11                                   | 11                                      | 1896         | 6                                    | 6                                    | 1724         | 12                                   | 12                                   | 12                                      | 1711         | 11                                   | 11                                   |
| LCFP_B      | 1332         | 23                                   | 23                                   | 1620         | 22                                   | 22                                   | 22                                      | 1615         | 23                                   | 23                                   | 1810         | 22                                   | 22                                   | 22                                      | 1797         | 21                                   | 21                                   | 1740         | 24                                   | 24                                   | 24                                      | 1727         | 24                                   | 24                                   |
| LCFP_L      | 1505         | 18                                   | 18                                   | 1712         | 25                                   | 25                                   | 25                                      | 1707         | 25                                   | 25                                   | 1855         | 24                                   | 24                                   | 24                                      | 1842         | 24                                   | 24                                   | 1869         | 19                                   | 19                                   | 19                                      | 1857         | 19                                   | 19                                   |
| LCFP_S      | 1498         | 3                                    | 3                                    | 1715         | 21                                   | 21                                   | 21                                      | 1710         | 22                                   | 22                                   | 1860         | 21                                   | 21                                   | 21                                      | 1847         | 20                                   | 20                                   | 1869         | 20                                   | 20                                   | 20                                      | 1857         | 20                                   | 20                                   |
| LCFP_S      | 1498         | 10                                   | 10                                   | 1713         | 15                                   | 15                                   | 15                                      | 1708         | 16                                   | 16                                   | 1859         | 15                                   | 15                                   | 15                                      | 1845         | 14                                   | 14                                   | 1868         | 10                                   | 10                                   | 10                                      | 1856         | 10                                   | 10                                   |
| LCFP_TU     | 1508         | 6                                    | 6                                    | 1713         | 13                                   | 13                                   | 13                                      | 1708         | 13                                   | 13                                   | 1855         | 13                                   | 13                                   | 13                                      | 1842         | 12                                   | 12                                   | 1872         | 8                                    | 8                                    | 8                                       | 1859         | 7                                    | 7                                    |
| LCFP_TI     | 1512         | 5                                    | 5                                    | 1715         | 12                                   | 12                                   | 12                                      | 1710         | 12                                   | 12                                   | 1856         | 12                                   | 12                                   | 12                                      | 1842         | 11                                   | 11                                   | 1874         | 7                                    | 7                                    | 7                                       | 1861         | 6                                    | 6                                    |
| BU_323_6_L  | 1236         | 6                                    | 6                                    | 1466         | 24                                   | 24                                   | 24                                      | 1461         | 25                                   | 25                                   | 1675         | 28                                   | 28                                   | 28                                      | 1662         | 28                                   | 28                                   | 1583         | 13                                   | 13                                   | 13                                      | 1570         | 12                                   | 12                                   |
| BU_327_3_EL | 1263         | 20                                   | 20                                   | 1531         | 7                                    | 7                                    | 7                                       | 1526         | 7                                    | 7                                    | 1736         | 3                                    | 3                                    | 3                                       | 1722         | 3                                    | 3                                    | 1646         | 22                                   | 22                                   | 22                                      | 1633         | 18                                   | 18                                   |
| BU_327_3_IL | 1276         | 15                                   | 15                                   | 1542         | 4                                    | 4                                    | 4                                       | 1537         | 4                                    | 4                                    | 1744         | 5                                    | 5                                    | 5                                       | 1730         | 5                                    | 5                                    | 1659         | 13                                   | 13                                   | 13                                      | 1646         | 12                                   | 12                                   |
| CD_DCF      | 1258         | 22                                   | 22                                   | 1525         | 6                                    | 6                                    | 6                                       | 1520         | 7                                    | 7                                    | 1731         | 4                                    | 4                                    | 4                                       | 1717         | 4                                    | 4                                    | 1639         | 23                                   | 23                                   | 23                                      | 1626         | 21                                   | 21                                   |
| CDC_B       | 1260         | 21                                   | 21                                   | 1524         | 21                                   | 21                                   | 21                                      | 1519         | 22                                   | 22                                   | 1729         | 23                                   | 23                                   | 23                                      | 1716         | 23                                   | 23                                   | 1639         | 26                                   | 26                                   | 26                                      | 1626         | 25                                   | 25                                   |
| SL001       | 904 / 1783   | 28                                   | 0                                    | 2006 / 2696  | 24                                   | 0                                    | 0                                       | 2002 / 2691  | 25                                   | 0                                    | 2366 / 2972  | 24                                   | 0                                    | 0                                       | 2352 / 2958  | 23                                   | 0                                    | 1908 / 2683  | 26                                   | 0                                    | 0                                       | 1895 / 2669  | 25                                   | 0                                    |
| SL002       | 780 / 1082   | 31                                   | 0                                    | 1319 / 1822  | 31                                   | 0                                    | 0                                       | 1314 / 1818  | 32                                   | 0                                    | 1575 / 2185  | 30                                   | 0                                    | 0                                       | 1561 / 2171  | 29                                   | 0                                    | 1394 / 1732  | 33                                   | 0                                    | 0                                       | 1381 / 1718  | 32                                   | 0                                    |
| SL003       | 742 / 1568   | 33                                   | 0                                    | 1174 / 1763  | 35                                   | 0                                    | 0                                       | 1170 / 1758  | 36                                   | 0                                    | 1532 / 1891  | 34                                   | 0                                    | 0                                       | 1518 / 1878  | 34                                   | 0                                    | 1136 / 1929  | 36                                   | 0                                    | 0                                       | 1122 / 1917  | 36                                   | 0                                    |
| SL004       | 1128 / 1381  | 13                                   | 13                                   | 1746 / 1979  | 10                                   | 10                                   | 10                                      | 1741 / 1974  | 10                                   | 10                                   | 1951 / 2263  | 8                                    | 8                                    | 8                                       | 1937 / 2249  | 8                                    | 8                                    | 1841 / 1975  | 13                                   | 13                                   | 13                                      | 1827 / 1961  | 10                                   | 10                                   |
| SL005       | 1128 / 1338  | 13                                   | 13                                   | 1796 / 1979  | 9                                    | 9                                    | 9                                       | 1791 / 1974  | 9                                    | 9                                    | 2008 / 2263  | 7                                    | 7                                    | 7                                       | 1995 / 2249  | 7                                    | 7                                    | 1841 / 1975  | 12                                   | 12                                   | 12                                      | 1827 / 1961  | 10                                   | 10                                   |
| LCFP_T      | 1108 / 1503  | 9                                    | 9                                    | 1695 / 1984  | 8                                    | 8                                    | 8                                       | 1690 / 1979  | 9                                    | 9                                    | 1862 / 2266  | 8                                    | 8                                    | 8                                       | 1849 / 2252  | 8                                    | 8                                    | 1729 / 1982  | 10                                   | 10                                   | 10                                      | 1716 / 1968  | 9                                    | 9                                    |
| SV020       | 1207 / 1208  | 21                                   | 21                                   | 1585 / 1590  | 21                                   | 21                                   | 21                                      | 1580 / 1585  | 22                                   | 22                                   | 1813 / 1818  | 22                                   | 22                                   | 22                                      | 1799 / 1804  | 20                                   | 20                                   | 1672 / 1676  | 23                                   | 23                                   | 23                                      | 1659 / 1662  | 21                                   | 21                                   |

Table 2 Point of Reception Predicted Individual Source Sound Levels - Unmitigated Normal Operations (Stationary Source)

| Source ID | OPOR020      |                                      |                                      | POR037       |                                      |                                      |                                         | OPOR037      |                                      |                                      | POR044       |                                      |                                      |                                         | OPOR044      |                                      |                                      | POR061       |                                      |                                      |                                         | OPOR061      |                                      |                                      |
|-----------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|--------------|--------------------------------------|--------------------------------------|-----------------------------------------|--------------|--------------------------------------|--------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level | Overall Night-time Sound Pressure Level | Distance (m) | Overall Daytime Sound Pressure Level | Overall Evening Sound Pressure Level |
| SV021     | 1208 / 1208  | 23                                   | 23                                   | 1592 / 1596  | 21                                   | 21                                   | 21                                      | 1587 / 1591  | 22                                   | 22                                   | 1820 / 1825  | 22                                   | 22                                   | 22                                      | 1806 / 1811  | 20                                   | 20                                   | 1677 / 1681  | 26                                   | 26                                   | 26                                      | 1664 / 1668  | 25                                   | 25                                   |
| USV022    | 1212 / 1218  | 5                                    | 5                                    | 1481 / 1483  | 19                                   | 19                                   | 19                                      | 1476 / 1478  | 19                                   | 19                                   | 1699 / 1699  | 29                                   | 29                                   | 29                                      | 1685 / 1686  | 29                                   | 29                                   | 1587 / 1591  | 30                                   | 30                                   | 30                                      | 1574 / 1578  | 29                                   | 29                                   |
| USV024    | 1160 / 1210  | 28                                   | 28                                   | 1571 / 1587  | 32                                   | 32                                   | 32                                      | 1566 / 1582  | 32                                   | 32                                   | 1796 / 1830  | 30                                   | 30                                   | 30                                      | 1782 / 1816  | 29                                   | 29                                   | 1658 / 1661  | 32                                   | 32                                   | 32                                      | 1644 / 1648  | 32                                   | 32                                   |
| USV025    | 1162 / 1210  | 27                                   | 27                                   | 1577 / 1591  | 30                                   | 30                                   | 30                                      | 1572 / 1586  | 30                                   | 30                                   | 1803 / 1833  | 27                                   | 27                                   | 27                                      | 1789 / 1819  | 28                                   | 28                                   | 1662 / 1666  | 30                                   | 30                                   | 30                                      | 1648 / 1653  | 30                                   | 30                                   |
| USV027    | 1218 / 1218  | 12                                   | 12                                   | 1578 / 1579  | 11                                   | 11                                   | 11                                      | 1573 / 1574  | 11                                   | 11                                   | 1802 / 1803  | 0                                    | 0                                    | 0                                       | 1788 / 1789  | 0                                    | 0                                    | 1669 / 1670  | 18                                   | 18                                   | 18                                      | 1656 / 1657  | 17                                   | 17                                   |
| USV028    | 1218 / 1220  | 1                                    | 1                                    | 1579 / 1580  | 11                                   | 11                                   | 11                                      | 1574 / 1575  | 8                                    | 8                                    | 1803 / 1803  | 0                                    | 0                                    | 0                                       | 1789 / 1789  | 0                                    | 0                                    | 1670 / 1671  | 12                                   | 12                                   | 12                                      | 1657 / 1658  | 11                                   | 11                                   |
| USV029    | 1219 / 1219  | 0                                    | 0                                    | 1578 / 1579  | 0                                    | 0                                    | 0                                       | 1573 / 1574  | 0                                    | 0                                    | 1801 / 1803  | 0                                    | 0                                    | 0                                       | 1788 / 1789  | 0                                    | 0                                    | 1670 / 1671  | 0                                    | 0                                    | 0                                       | 1657 / 1658  | 0                                    | 0                                    |
| USV030    | 1217 / 1218  | 16                                   | 16                                   | 1577 / 1578  | 16                                   | 16                                   | 16                                      | 1572 / 1573  | 16                                   | 16                                   | 1800 / 1802  | 0                                    | 0                                    | 0                                       | 1786 / 1788  | 0                                    | 0                                    | 1668 / 1669  | 23                                   | 23                                   | 23                                      | 1655 / 1656  | 22                                   | 22                                   |
| USV031    | 1219 / 1219  | 3                                    | 3                                    | 1577 / 1578  | 6                                    | 6                                    | 6                                       | 1572 / 1573  | 0                                    | 0                                    | 1800 / 1801  | 0                                    | 0                                    | 0                                       | 1786 / 1788  | 0                                    | 0                                    | 1669 / 1670  | 5                                    | 5                                    | 5                                       | 1656 / 1657  | 5                                    | 5                                    |
| USV032    | 1217 / 1217  | 27                                   | 27                                   | 1575 / 1576  | 29                                   | 29                                   | 29                                      | 1570 / 1572  | 29                                   | 29                                   | 1799 / 1800  | 8                                    | 8                                    | 8                                       | 1785 / 1786  | 8                                    | 8                                    | 1667 / 1668  | 32                                   | 32                                   | 32                                      | 1654 / 1655  | 31                                   | 31                                   |
| USV033    | 1219 / 1219  | 10                                   | 10                                   | 1576 / 1577  | 14                                   | 14                                   | 14                                      | 1571 / 1572  | 14                                   | 14                                   | 1799 / 1800  | 6                                    | 6                                    | 6                                       | 1785 / 1787  | 6                                    | 6                                    | 1668 / 1669  | 14                                   | 14                                   | 14                                      | 1655 / 1656  | 13                                   | 13                                   |
| USV034    | 1218 / 1219  | 18                                   | 18                                   | 1577 / 1577  | 29                                   | 29                                   | 29                                      | 1572 / 1573  | 30                                   | 30                                   | 1800 / 1801  | 7                                    | 7                                    | 7                                       | 1787 / 1787  | 7                                    | 7                                    | 1668 / 1669  | 30                                   | 30                                   | 30                                      | 1655 / 1656  | 29                                   | 29                                   |
| USV035    | 1217 / 1219  | 27                                   | 27                                   | 1575 / 1576  | 13                                   | 13                                   | 13                                      | 1570 / 1571  | 14                                   | 14                                   | 1799 / 1799  | 6                                    | 6                                    | 6                                       | 1785 / 1785  | 6                                    | 6                                    | 1667 / 1668  | 11                                   | 11                                   | 11                                      | 1653 / 1654  | 11                                   | 11                                   |
| USV036    | 1218 / 1218  | 17                                   | 17                                   | 1575 / 1575  | 0                                    | 0                                    | 0                                       | 1571 / 1571  | 1                                    | 1                                    | 1799 / 1799  | 0                                    | 0                                    | 0                                       | 1785 / 1785  | 0                                    | 0                                    | 1667 / 1667  | 0                                    | 0                                    | 0                                       | 1654 / 1654  | 0                                    | 0                                    |
| MSV001    | 1262 / 1262  | 0                                    | 0                                    | 1638 / 1641  | 0                                    | 0                                    | 0                                       | 1633 / 1636  | 0                                    | 0                                    | 1853 / 1857  | 0                                    | 0                                    | 0                                       | 1839 / 1843  | 0                                    | 0                                    | 1732 / 1735  | 0                                    | 0                                    | 0                                       | 1719 / 1722  | 0                                    | 0                                    |
| MSV002    | 1263 / 1263  | 0                                    | 0                                    | 1651 / 1654  | 0                                    | 0                                    | 0                                       | 1646 / 1649  | 0                                    | 0                                    | 1867 / 1871  | 0                                    | 0                                    | 0                                       | 1853 / 1857  | 0                                    | 0                                    | 1744 / 1746  | 0                                    | 0                                    | 0                                       | 1730 / 1733  | 0                                    | 0                                    |
| MSV003    | 1268 / 1269  | 0                                    | 0                                    | 1661 / 1661  | 0                                    | 0                                    | 0                                       | 1656 / 1656  | 0                                    | 0                                    | 1876 / 1876  | 0                                    | 0                                    | 0                                       | 1862 / 1863  | 0                                    | 0                                    | 1753 / 1754  | 0                                    | 0                                    | 0                                       | 1740 / 1741  | 0                                    | 0                                    |
| MSV004    | 1275 / 1276  | 0                                    | 0                                    | 1663 / 1664  | 0                                    | 0                                    | 0                                       | 1658 / 1659  | 0                                    | 0                                    | 1877 / 1877  | 0                                    | 0                                    | 0                                       | 1863 / 1863  | 0                                    | 0                                    | 1757 / 1758  | 0                                    | 0                                    | 0                                       | 1744 / 1745  | 0                                    | 0                                    |
| MSV005    | 1313 / 1317  | 0                                    | 0                                    | 1685 / 1687  | 0                                    | 0                                    | 0                                       | 1680 / 1682  | 0                                    | 0                                    | 1889 / 1890  | 0                                    | 0                                    | 0                                       | 1875 / 1876  | 0                                    | 0                                    | 1788 / 1790  | 0                                    | 0                                    | 0                                       | 1774 / 1777  | 0                                    | 0                                    |
| MSV006    | 1327 / 1331  | 0                                    | 0                                    | 1691 / 1693  | 0                                    | 0                                    | 0                                       | 1686 / 1688  | 0                                    | 0                                    | 1891 / 1892  | 0                                    | 0                                    | 0                                       | 1877 / 1878  | 0                                    | 0                                    | 1796 / 1799  | 0                                    | 0                                    | 0                                       | 1783 / 1786  | 0                                    | 0                                    |
| MSV007    | 1146 / 1147  | 0                                    | 0                                    | 1635 / 1636  | 0                                    | 0                                    | 0                                       | 1631 / 1632  | 0                                    | 0                                    | 1886 / 1888  | 0                                    | 0                                    | 0                                       | 1872 / 1874  | 0                                    | 0                                    | 1693 / 1694  | 0                                    | 0                                    | 0                                       | 1680 / 1680  | 0                                    | 0                                    |
| MSV008    | 1147 / 1148  | 0                                    | 0                                    | 1650 / 1651  | 0                                    | 0                                    | 0                                       | 1645 / 1646  | 0                                    | 0                                    | 1901 / 1903  | 0                                    | 0                                    | 0                                       | 1887 / 1889  | 0                                    | 0                                    | 1706 / 1706  | 0                                    | 0                                    | 0                                       | 1692 / 1693  | 0                                    | 0                                    |
| MSV009    | 1149 / 1153  | 17                                   | 17                                   | 1626 / 1627  | 0                                    | 0                                    | 0                                       | 1621 / 1622  | 0                                    | 0                                    | 1875 / 1876  | 0                                    | 0                                    | 0                                       | 1861 / 1862  | 0                                    | 0                                    | 1686 / 1689  | 8                                    | 8                                    | 8                                       | 1673 / 1675  | 8                                    | 8                                    |
| MSV010    | 1157 / 1158  | 15                                   | 15                                   | 1629 / 1629  | 0                                    | 0                                    | 0                                       | 1624 / 1624  | 0                                    | 0                                    | 1876 / 1876  | 0                                    | 0                                    | 0                                       | 1862 / 1862  | 0                                    | 0                                    | 1691 / 1692  | 8                                    | 8                                    | 8                                       | 1678 / 1679  | 8                                    | 8                                    |
| MSV011    | 1164 / 1168  | 20                                   | 20                                   | 1631 / 1633  | 0                                    | 0                                    | 0                                       | 1626 / 1628  | 0                                    | 0                                    | 1876 / 1877  | 15                                   | 15                                   | 15                                      | 1862 / 1863  | 14                                   | 14                                   | 1696 / 1698  | 19                                   | 19                                   | 19                                      | 1682 / 1685  | 18                                   | 18                                   |
| MSV012    | 1170 / 1172  | 0                                    | 0                                    | 1669 / 1670  | 0                                    | 0                                    | 0                                       | 1665 / 1665  | 0                                    | 0                                    | 1916 / 1916  | 0                                    | 0                                    | 0                                       | 1902 / 1902  | 0                                    | 0                                    | 1729 / 1730  | 0                                    | 0                                    | 0                                       | 1715 / 1716  | 0                                    | 0                                    |
| MSV013    | 1181 / 1183  | 0                                    | 0                                    | 1673 / 1674  | 0                                    | 0                                    | 0                                       | 1668 / 1669  | 0                                    | 0                                    | 1917 / 1917  | 0                                    | 0                                    | 0                                       | 1903 / 1903  | 0                                    | 0                                    | 1735 / 1736  | 0                                    | 0                                    | 0                                       | 1722 / 1723  | 0                                    | 0                                    |
| MSV014    | 1154 / 1157  | 0                                    | 0                                    | 1607 / 1608  | 0                                    | 0                                    | 0                                       | 1602 / 1603  | 0                                    | 0                                    | 1853 / 1853  | 0                                    | 0                                    | 0                                       | 1839 / 1839  | 0                                    | 0                                    | 1672 / 1674  | 0                                    | 0                                    | 0                                       | 1659 / 1661  | 0                                    | 0                                    |
| MSV015    | 1137 / 1141  | 0                                    | 0                                    | 1601 / 1602  | 0                                    | 0                                    | 0                                       | 1597 / 1598  | 0                                    | 0                                    | 1852 / 1852  | 0                                    | 0                                    | 0                                       | 1838 / 1838  | 0                                    | 0                                    | 1662 / 1664  | 0                                    | 0                                    | 0                                       | 1649 / 1651  | 0                                    | 0                                    |
| MSV016    | 1150 / 1154  | 0                                    | 0                                    | 1587 / 1588  | 0                                    | 0                                    | 0                                       | 1582 / 1583  | 0                                    | 0                                    | 1833 / 1833  | 0                                    | 0                                    | 0                                       | 1819 / 1819  | 0                                    | 0                                    | 1655 / 1657  | 0                                    | 0                                    | 0                                       | 1641 / 1643  | 0                                    | 0                                    |
| MSV017    | 1141 / 1145  | 0                                    | 0                                    | 1584 / 1585  | 0                                    | 0                                    | 0                                       | 1579 / 1580  | 0                                    | 0                                    | 1832 / 1832  | 0                                    | 0                                    | 0                                       | 1818 / 1818  | 0                                    | 0                                    | 1649 / 1651  | 2                                    | 2                                    | 2                                       | 1636 / 1638  | 2                                    | 2                                    |
| MSV018    | 1130 / 1134  | 0                                    | 0                                    | 1580 / 1582  | 4                                    | 4                                    | 4                                       | 1576 / 1577  | 4                                    | 4                                    | 1832 / 1832  | 6                                    | 6                                    | 6                                       | 1818 / 1818  | 5                                    | 5                                    | 1642 / 1645  | 11                                   | 11                                   | 11                                      | 1629 / 1631  | 9                                    | 9                                    |
| MSV019    | 1108 / 1112  | 14                                   | 14                                   | 1565 / 1566  | 14                                   | 14                                   | 14                                      | 1560 / 1561  | 14                                   | 14                                   | 1821 / 1822  | 10                                   | 10                                   | 10                                      | 1808 / 1808  | 9                                    | 9                                    | 1622 / 1624  | 8                                    | 8                                    | 8                                       | 1609 / 1611  | 8                                    | 8                                    |
| MSV023    | 1366 / 1370  | 0                                    | 0                                    | 1604 / 1606  | 0                                    | 0                                    | 0                                       | 1598 / 1601  | 0                                    | 0                                    | 1780 / 1781  | 0                                    | 0                                    | 0                                       | 1767 / 1768  | 0                                    | 0                                    | 1738 / 1741  | 0                                    | 0                                    | 0                                       | 1725 / 1728  | 0                                    | 0                                    |

**Table 3: Acoustic Assessment Summary - Overall Sound Levels - Normal Unmitigated Operations (Stationary Source)**

| POR ID  | POR Description             | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Verified by Acoustic Audit | Daytime Performance Limit (dBA) | Evening Performance Limit (dBA) | Night-time Performance Limit (dBA) | Compliance with Performance Limit (Yes/No) |
|---------|-----------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|----------------------------|---------------------------------|---------------------------------|------------------------------------|--------------------------------------------|
| POR003  | POR 003 Elmbrook RD #57     | 44                                         | 41                                         | 40                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR003 | OPOR 003 Elmbrook RD #57    | 42                                         | 37                                         | 37                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR006  | M_POR 006 Elmbrook RD #134  | 43                                         | 41                                         | 41                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR006 | M_OPOR 006 Elmbrook RD #134 | 43                                         | 41                                         | 41                                            | No                         | 45                              | 40                              | —                                  | No                                         |
| POR016  | M_POR 016                   | 47                                         | 47                                         | 47                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR016 | M_OPOR 016                  | 48                                         | 47                                         | 47                                            | No                         | 45                              | 40                              | —                                  | No                                         |
| POR020  | M_POR 020                   | 46                                         | 45                                         | 44                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR020 | M_OPOR 020                  | 44                                         | 44                                         | 43                                            | No                         | 45                              | 40                              | —                                  | No                                         |
| POR037  | M_POR 037                   | 47                                         | 47                                         | 46                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR037 | M_OPOR 037                  | 48                                         | 48                                         | 46                                            | No                         | 45                              | 40                              | —                                  | No                                         |
| POR044  | M_POR 044                   | 48                                         | 48                                         | 47                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR044 | M_OPOR 044                  | 48                                         | 47                                         | 47                                            | No                         | 45                              | 40                              | —                                  | No                                         |
| POR061  | M_POR 061                   | 48                                         | 47                                         | 46                                            | No                         | 45                              | 40                              | 40                                 | No                                         |
| OPOR061 | M_OPOR 061                  | 48                                         | 47                                         | 46                                            | No                         | 45                              | 40                              | —                                  | No                                         |

Table 4: Point of Reception Predicted Individual Source Sound Levels - Mitigated Normal Operations (Stationary Source)

| Source ID | POR003       |                                            |                                            |                                               | OPOR003      |                                            |                                            | POR006       |                                            |                                            |                                               | OPOR006      |                                            |                                            | POR016       |                                            |                                            |                                               | OPOR016      |                                            |                                            | POR020       |                                            |                                            |                                               |
|-----------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) |
| SP009     | 1605         | 18                                         | 18                                         | 18                                            | 1588         | 8                                          | 8                                          | 1451         | 12                                         | 12                                         | 12                                            | 1433         | 12                                         | 12                                         | 1350         | 21                                         | 21                                         | 21                                            | 1321         | 22                                         | 22                                         | 1393         | 6                                          | 6                                          | 6                                             |
| SP014     | 1474         | 21                                         | 21                                         | 21                                            | 1456         | 16                                         | 16                                         | 1368         | 18                                         | 18                                         | 18                                            | 1350         | 17                                         | 17                                         | 1574         | 16                                         | 16                                         | 16                                            | 1545         | 16                                         | 16                                         | 1182         | 19                                         | 19                                         | 19                                            |
| SP015     | 1488         | 22                                         | 22                                         | 22                                            | 1470         | 19                                         | 19                                         | 1382         | 21                                         | 21                                         | 21                                            | 1364         | 20                                         | 20                                         | 1570         | 20                                         | 20                                         | 20                                            | 1541         | 20                                         | 20                                         | 1182         | 21                                         | 21                                         | 21                                            |
| SP021     | 1544         | 0                                          | 0                                          | 0                                             | 1526         | 0                                          | 0                                          | 1450         | 0                                          | 0                                          | 0                                             | 1432         | 0                                          | 0                                          | 1594         | 0                                          | 0                                          | 0                                             | 1564         | 0                                          | 0                                          | 1142         | 6                                          | 6                                          | 6                                             |
| SP022     | 1515         | 3                                          | 3                                          | 3                                             | 1497         | 3                                          | 3                                          | 1419         | 3                                          | 3                                          | 3                                             | 1401         | 4                                          | 4                                          | 1597         | 0                                          | 0                                          | 0                                             | 1567         | 0                                          | 0                                          | 1145         | 0                                          | 0                                          | 0                                             |
| SP023     | 1598         | 11                                         | 11                                         | 11                                            | 1580         | 6                                          | 6                                          | 1506         | 8                                          | 8                                          | 8                                             | 1488         | 8                                          | 8                                          | 1589         | 7                                          | 7                                          | 7                                             | 1559         | 8                                          | 8                                          | 1139         | 10                                         | 10                                         | 10                                            |
| SP024     | 1597         | 22                                         | 22                                         | 22                                            | 1579         | 21                                         | 21                                         | 1505         | 6                                          | 6                                          | 6                                             | 1487         | 6                                          | 6                                          | 1587         | 21                                         | 21                                         | 21                                            | 1557         | 21                                         | 21                                         | 1142         | 6                                          | 6                                          | 6                                             |
| SP025     | 1653         | 20                                         | 20                                         | 20                                            | 1636         | 15                                         | 15                                         | 1561         | 16                                         | 16                                         | 16                                            | 1543         | 16                                         | 16                                         | 1575         | 16                                         | 16                                         | 16                                            | 1545         | 16                                         | 16                                         | 1151         | 19                                         | 19                                         | 19                                            |
| SP026     | 1656         | 23                                         | 23                                         | 23                                            | 1638         | 18                                         | 18                                         | 1565         | 18                                         | 18                                         | 18                                            | 1547         | 18                                         | 18                                         | 1578         | 18                                         | 18                                         | 18                                            | 1549         | 18                                         | 18                                         | 1147         | 23                                         | 23                                         | 23                                            |
| SP027     | 1617         | 13                                         | 13                                         | 13                                            | 1599         | 5                                          | 5                                          | 1505         | 14                                         | 14                                         | 14                                            | 1487         | 14                                         | 14                                         | 1504         | 0                                          | 0                                          | 0                                             | 1475         | 0                                          | 0                                          | 1225         | 16                                         | 16                                         | 16                                            |
| SP035     | 1799         | 0                                          | 0                                          | 0                                             | 1782         | 0                                          | 0                                          | 1698         | 0                                          | 0                                          | 0                                             | 1680         | 0                                          | 0                                          | 1507         | 0                                          | 0                                          | 0                                             | 1478         | 0                                          | 0                                          | 1229         | 10                                         | 10                                         | 10                                            |
| SP036     | 1802         | 0                                          | 0                                          | 0                                             | 1784         | 0                                          | 0                                          | 1699         | 0                                          | 0                                          | 0                                             | 1681         | 0                                          | 0                                          | 1502         | 10                                         | 10                                         | 10                                            | 1473         | 10                                         | 10                                         | 1235         | 0                                          | 0                                          | 0                                             |
| SP037     | 1801         | 0                                          | 0                                          | 0                                             | 1783         | 0                                          | 0                                          | 1697         | 5                                          | 5                                          | 5                                             | 1679         | 0                                          | 0                                          | 1500         | 8                                          | 8                                          | 8                                             | 1471         | 8                                          | 8                                          | 1236         | 0                                          | 0                                          | 0                                             |
| SP039     | 1675         | 5                                          | 5                                          | 5                                             | 1658         | 3                                          | 3                                          | 1529         | 9                                          | 9                                          | 9                                             | 1511         | 9                                          | 9                                          | 1348         | 0                                          | 0                                          | 0                                             | 1319         | 0                                          | 0                                          | 1381         | 2                                          | 2                                          | 2                                             |
| SP040     | 1690         | 9                                          | 9                                          | 9                                             | 1672         | 6                                          | 6                                          | 1544         | 12                                         | 12                                         | 12                                            | 1526         | 12                                         | 12                                         | 1345         | 21                                         | 21                                         | 21                                            | 1315         | 21                                         | 21                                         | 1383         | 10                                         | 10                                         | 10                                            |
| SP042     | 1684         | 0                                          | 0                                          | 0                                             | 1666         | 0                                          | 0                                          | 1539         | 0                                          | 0                                          | 0                                             | 1521         | 0                                          | 0                                          | 1352         | 0                                          | 0                                          | 0                                             | 1323         | 0                                          | 0                                          | 1376         | 14                                         | 14                                         | 14                                            |
| SP045     | 1635         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1516         | 0                                          | 0                                          | 0                                             | 1498         | 0                                          | 0                                          | 1472         | 0                                          | 0                                          | 0                                             | 1443         | 0                                          | 0                                          | 1256         | 0                                          | 0                                          | 0                                             |
| SP046     | 1635         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1516         | 0                                          | 0                                          | 0                                             | 1498         | 0                                          | 0                                          | 1472         | 0                                          | 0                                          | 0                                             | 1443         | 0                                          | 0                                          | 1256         | 0                                          | 0                                          | 0                                             |
| SP047     | 1635         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1516         | 0                                          | 0                                          | 0                                             | 1498         | 0                                          | 0                                          | 1472         | 0                                          | 0                                          | 0                                             | 1443         | 0                                          | 0                                          | 1256         | 0                                          | 0                                          | 0                                             |
| SP048     | 1635         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1516         | 0                                          | 0                                          | 0                                             | 1498         | 0                                          | 0                                          | 1472         | 0                                          | 0                                          | 0                                             | 1443         | 0                                          | 0                                          | 1256         | 4                                          | 4                                          | 4                                             |
| SP049     | 1635         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1516         | 0                                          | 0                                          | 0                                             | 1498         | 0                                          | 0                                          | 1472         | 0                                          | 0                                          | 0                                             | 1443         | 0                                          | 0                                          | 1256         | 4                                          | 4                                          | 4                                             |
| SP050     | 1640         | 0                                          | 0                                          | 0                                             | 1622         | 0                                          | 0                                          | 1522         | 0                                          | 0                                          | 0                                             | 1504         | 0                                          | 0                                          | 1475         | 13                                         | 13                                         | 13                                            | 1445         | 13                                         | 13                                         | 1253         | 21                                         | 21                                         | 21                                            |
| SP054     | 1651         | 8                                          | 8                                          | 8                                             | 1634         | 6                                          | 6                                          | 1509         | 9                                          | 9                                          | 9                                             | 1491         | 9                                          | 9                                          | 1375         | 28                                         | 28                                         | 28                                            | 1345         | 29                                         | 29                                         | 1357         | 7                                          | 7                                          | 7                                             |
| SP055     | 1659         | 10                                         | 10                                         | 10                                            | 1642         | 9                                          | 9                                          | 1517         | 12                                         | 12                                         | 12                                            | 1499         | 12                                         | 12                                         | 1372         | 25                                         | 25                                         | 25                                            | 1342         | 25                                         | 25                                         | 1359         | 9                                          | 9                                          | 9                                             |
| SP056     | 1660         | 10                                         | 10                                         | 10                                            | 1643         | 9                                          | 9                                          | 1517         | 12                                         | 12                                         | 12                                            | 1500         | 12                                         | 12                                         | 1368         | 24                                         | 24                                         | 24                                            | 1339         | 25                                         | 25                                         | 1362         | 9                                          | 9                                          | 9                                             |
| SP057     | 1653         | 5                                          | 5                                          | 5                                             | 1636         | 4                                          | 4                                          | 1510         | 8                                          | 8                                          | 8                                             | 1492         | 8                                          | 8                                          | 1369         | 26                                         | 26                                         | 26                                            | 1340         | 26                                         | 26                                         | 1362         | 4                                          | 4                                          | 4                                             |
| SP058     | 1661         | 4                                          | 4                                          | 4                                             | 1644         | 3                                          | 3                                          | 1518         | 6                                          | 6                                          | 6                                             | 1500         | 6                                          | 6                                          | 1366         | 14                                         | 14                                         | 14                                            | 1336         | 14                                         | 14                                         | 1365         | 3                                          | 3                                          | 3                                             |
| SP059     | 1645         | 8                                          | 8                                          | 8                                             | 1628         | 2                                          | 2                                          | 1512         | 6                                          | 6                                          | 6                                             | 1494         | 3                                          | 3                                          | 1413         | 23                                         | 23                                         | 23                                            | 1384         | 23                                         | 23                                         | 1317         | 6                                          | 6                                          | 6                                             |
| SP062     | 1646         | 0                                          | 0                                          | 0                                             | 1629         | 0                                          | 0                                          | 1507         | 0                                          | 0                                          | 0                                             | 1489         | 0                                          | 0                                          | 1388         | 15                                         | 15                                         | 15                                            | 1359         | 15                                         | 15                                         | 1343         | 0                                          | 0                                          | 0                                             |
| SP063     | 1646         | 0                                          | 0                                          | 0                                             | 1629         | 0                                          | 0                                          | 1507         | 0                                          | 0                                          | 0                                             | 1489         | 0                                          | 0                                          | 1390         | 15                                         | 15                                         | 15                                            | 1360         | 15                                         | 15                                         | 1342         | 0                                          | 0                                          | 0                                             |
| SP064     | 1646         | 0                                          | 0                                          | 0                                             | 1628         | 0                                          | 0                                          | 1507         | 0                                          | 0                                          | 0                                             | 1489         | 0                                          | 0                                          | 1391         | 15                                         | 15                                         | 15                                            | 1361         | 15                                         | 15                                         | 1340         | 0                                          | 0                                          | 0                                             |
| SP065     | 1645         | 0                                          | 0                                          | 0                                             | 1628         | 0                                          | 0                                          | 1507         | 0                                          | 0                                          | 0                                             | 1489         | 0                                          | 0                                          | 1392         | 15                                         | 15                                         | 15                                            | 1363         | 15                                         | 15                                         | 1339         | 0                                          | 0                                          | 0                                             |
| SP066     | 1644         | 0                                          | 0                                          | 0                                             | 1627         | 0                                          | 0                                          | 1506         | 0                                          | 0                                          | 0                                             | 1489         | 0                                          | 0                                          | 1394         | 15                                         | 15                                         | 15                                            | 1364         | 15                                         | 15                                         | 1337         | 0                                          | 0                                          | 0                                             |
| SP067     | 1644         | 0                                          | 0                                          | 0                                             | 1627         | 0                                          | 0                                          | 1506         | 0                                          | 0                                          | 0                                             | 1489         | 0                                          | 0                                          | 1395         | 15                                         | 15                                         | 15                                            | 1366         | 15                                         | 15                                         | 1336         | 0                                          | 0                                          | 0                                             |
| SP068     | 1643         | 0                                          | 0                                          | 0                                             | 1626         | 0                                          | 0                                          | 1506         | 0                                          | 0                                          | 0                                             | 1488         | 0                                          | 0                                          | 1397         | 15                                         | 15                                         | 15                                            | 1367         | 15                                         | 15                                         | 1335         | 0                                          | 0                                          | 0                                             |
| SP069     | 1643         | 0                                          | 0                                          | 0                                             | 1625         | 0                                          | 0                                          | 1506         | 0                                          | 0                                          | 0                                             | 1488         | 0                                          | 0                                          | 1398         | 15                                         | 15                                         | 15                                            | 1369         | 14                                         | 14                                         | 1333         | 0                                          | 0                                          | 0                                             |
| SP070     | 1642         | 0                                          | 0                                          | 0                                             | 1625         | 0                                          | 0                                          | 1505         | 0                                          | 0                                          | 0                                             | 1488         | 0                                          | 0                                          | 1400         | 14                                         | 14                                         | 14                                            | 1370         | 14                                         | 14                                         | 1332         | 0                                          | 0                                          | 0                                             |
| SP071     | 1642         | 0                                          | 0                                          | 0                                             | 1624         | 0                                          | 0                                          | 1505         | 0                                          | 0                                          | 0                                             | 1488         | 0                                          | 0                                          | 1401         | 14                                         | 14                                         | 14                                            | 1372         | 14                                         | 14                                         | 1330         | 0                                          | 0                                          | 0                                             |
| SP072     | 1641         | 0                                          | 0                                          | 0                                             | 1624         | 0                                          | 0                                          | 1505         | 0                                          | 0                                          | 0                                             | 1488         | 0                                          | 0                                          | 1403         | 14                                         | 14                                         | 14                                            | 1373         | 14                                         | 14                                         | 1329         | 0                                          | 0                                          | 0                                             |
| SP073     | 1641         | 0                                          | 0                                          | 0                                             | 1623         | 0                                          | 0                                          | 1505         | 0                                          | 0                                          | 0                                             | 1487         | 0                                          | 0                                          | 1404         | 14                                         | 14                                         | 14                                            | 1374         | 14                                         | 14                                         | 1327         | 0                                          | 0                                          | 0                                             |
| SP074     | 1640         | 0                                          | 0                                          | 0                                             | 1623         | 0                                          | 0                                          | 1505         | 0                                          | 0                                          | 0                                             | 1487         | 0                                          | 0                                          | 1405         | 14                                         | 14                                         | 14                                            | 1376         | 14                                         | 14                                         | 1326         | 0                                          | 0                                          | 0                                             |
| SP075     | 1640         | 0                                          | 0                                          | 0                                             | 1622         | 0                                          | 0                                          | 1505         | 0                                          | 0                                          | 0                                             | 1487         | 0                                          | 0                                          | 1407         | 14                                         | 14                                         | 14                                            | 1377         | 14                                         | 14                                         | 1324         | 0                                          | 0                                          | 0                                             |
| SP076     | 1639         | 0                                          | 0                                          | 0                                             | 1622         | 0                                          | 0                                          | 1504         | 0                                          | 0                                          | 0                                             | 1487         | 0                                          | 0                                          | 1408         | 14                                         | 14                                         | 14                                            | 1379         | 14                                         | 14                                         | 1323         | 0                                          | 0                                          | 0                                             |
| SP077     | 1639         | 0                                          | 0                                          | 0                                             | 1621         | 0                                          | 0                                          | 1504         | 0                                          | 0                                          | 0                                             | 1486         | 0                                          | 0                                          | 1410         | 14                                         | 14                                         | 14                                            | 1380         | 14                                         | 14                                         | 1322         | 0                                          | 0                                          | 0                                             |
| SP078     | 1636         | 0                                          | 0                                          | 0                                             | 1618         | 0                                          | 0                                          | 1503         | 0                                          | 0                                          | 0                                             | 1486         | 0                                          | 0                                          | 1419         | 14                                         | 14                                         | 14                                            | 1389         | 14                                         | 14                                         | 1312         | 0                                          | 0                                          | 0                                             |
| SP079     | 1635         | 0                                          | 0                                          | 0                                             | 1618         | 0                                          | 0                                          | 1503         | 0                                          | 0                                          | 0                                             | 1485         | 0                                          | 0                                          | 1420         | 14                                         | 14                                         | 14                                            | 1390         | 14                                         | 14                                         | 1311         | 0                                          | 0                                          | 0                                             |
| SP080     | 1635         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1503         | 0                                          | 0                                          | 0                                             | 1485         | 0                                          | 0                                          | 1422         | 14                                         | 14                                         | 14                                            | 1392         | 14                                         | 14                                         | 1309         | 0                                          | 0                                          | 0                                             |
| SP081     | 1634         | 0                                          | 0                                          | 0                                             | 1617         | 0                                          | 0                                          | 1503         | 0                                          | 0                                          | 0                                             | 1485         | 0                                          | 0                                          | 1424         | 14                                         | 14                                         | 14                                            | 1394         | 14                                         | 14                                         | 1307         | 0                                          | 0                                          | 0                                             |
| SP082     | 1687         | 0                                          | 0                                          | 0                                             | 1670         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1369         | 6                                          | 6                                          | 6                                             | 1339         | 6                                          | 6                                          | 1359         | 0                                          | 0                                          | 0                                             |
| SP083     | 1688         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1366         | 6                                          | 6                                          | 6                                             | 1337         | 6                                          | 6                                          | 1361         | 0                                          | 0                                          | 0                                             |
| SP084     | 1689         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1364         | 6                                          | 6                                          | 6                                             | 1335         | 6                                          | 6                                          | 1363         | 0                                          | 0                                          | 0                                             |
| SP085     | 1689         | 0                                          | 0                                          | 0                                             | 1672         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1362         | 6                                          | 6                                          | 6                                             | 1333         | 6                                          | 6                                          | 1365         | 0                                          | 0                                          | 0                                             |
| SP086     | 1687         | 0                                          | 0                                          | 0                                             | 1670         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1369         | 6                                          | 6                                          | 6                                             | 1339         | 6                                          | 6                                          | 1359         | 0                                          | 0                                          | 0                                             |
| SP087     | 1688         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1366         | 6                                          | 6                                          | 6                                             | 1337         | 6                                          | 6                                          | 1361         | 0                                          | 0                                          | 0                                             |
| SP088     | 1689         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1364         | 6                                          | 6                                          | 6                                             | 1335         | 6                                          | 6                                          | 1363         | 0                                          | 0                                          | 0                                             |
| SP089     | 1689         | 0                                          | 0                                          | 0                                             | 1672         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1362         | 6                                          | 6                                          | 6                                             | 1333         | 6                                          | 6                                          | 1365         | 0                                          | 0                                          | 0                                             |
| SP090     | 1687         | 1                                          | 1                                          | 1                                             | 1670         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1369         | 6                                          | 6                                          | 6                                             | 1339         | 6                                          | 6                                          | 1359         | 0                                          | 0                                          | 0                                             |
| SP091     | 1688         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1366         | 6                                          | 6                                          | 6                                             | 1337         | 6                                          | 6                                          | 1361         | 0                                          | 0                                          | 0                                             |
| SP092     | 1689         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1364         | 6                                          | 6                                          | 6                                             | 1335         | 6                                          | 6                                          | 1363         | 0                                          | 0                                          | 0                                             |
| SP093     | 1689         | 0                                          | 0                                          | 0                                             | 1672         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1362         | 6                                          | 6                                          | 6                                             | 1333         | 6                                          | 6                                          | 1365         | 0                                          | 0                                          | 0                                             |
| SP094     | 1687         | 0                                          | 0                                          | 0                                             | 1670         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1369         | 6                                          | 6                                          | 6                                             | 1339         | 6                                          | 6                                          | 1359         | 0                                          | 0                                          | 0                                             |

Table 4: Point of Reception Predicted Individual Source Sound Levels - Mitigated Normal Operations (Stationary Source)

| Source ID  | POR003       |                                            |                                            |                                               | OPOR003      |                                            |                                            | POR006       |                                            |                                            |                                               | OPOR006      |                                            |                                            | POR016       |                                            |                                            |                                               | OPOR016      |                                            |                                            | POR020       |                                            |                                            |                                               |
|------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|
|            | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) |
| SP095      | 1688         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1529         | 0                                          | 0                                          | 1366         | 6                                          | 6                                          | 6                                             | 1337         | 6                                          | 6                                          | 1361         | 0                                          | 0                                          | 0                                             |
| SP096      | 1689         | 0                                          | 0                                          | 0                                             | 1671         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1364         | 6                                          | 6                                          | 6                                             | 1335         | 6                                          | 6                                          | 1363         | 0                                          | 0                                          | 0                                             |
| SP097      | 1689         | 0                                          | 0                                          | 0                                             | 1672         | 0                                          | 0                                          | 1547         | 0                                          | 0                                          | 0                                             | 1530         | 0                                          | 0                                          | 1362         | 6                                          | 6                                          | 6                                             | 1333         | 6                                          | 6                                          | 1365         | 0                                          | 0                                          | 0                                             |
| SP098      | 1818         | 12                                         | 12                                         | 12                                            | 1800         | 9                                          | 9                                          | 1708         | 10                                         | 10                                         | 10                                            | 1690         | 2                                          | 2                                          | 1469         | 17                                         | 17                                         | 17                                            | 1440         | 20                                         | 20                                         | 1268         | 3                                          | 3                                          | 3                                             |
| SP101      | 1846         | 0                                          | 0                                          | 0                                             | 1829         | 0                                          | 0                                          | 1754         | 0                                          | 0                                          | 0                                             | 1737         | 0                                          | 0                                          | 1548         | 9                                          | 9                                          | 9                                             | 1519         | 9                                          | 9                                          | 1202         | 18                                         | 18                                         | 18                                            |
| SP103      | 514          | 38                                         | —                                          | —                                             | 501          | 38                                         | —                                          | 292          | 36                                         | —                                          | —                                             | 274          | 36                                         | —                                          | 2104         | 25                                         | —                                          | —                                             | 2078         | 25                                         | —                                          | 1651         | 29                                         | —                                          | —                                             |
| MSP007     | 1590         | 10                                         | 10                                         | 10                                            | 1573         | 8                                          | 8                                          | 1441         | 19                                         | 19                                         | 19                                            | 1423         | 19                                         | 19                                         | 1376         | 31                                         | 31                                         | 31                                            | 1347         | 31                                         | 31                                         | 1368         | 7                                          | 7                                          | 7                                             |
| MSP008     | 1680         | 9                                          | 9                                          | 9                                             | 1663         | 7                                          | 7                                          | 1514         | 10                                         | 10                                         | 10                                            | 1497         | 10                                         | 10                                         | 1273         | 16                                         | 16                                         | 16                                            | 1243         | 16                                         | 16                                         | 1462         | 12                                         | 12                                         | 12                                            |
| MSP011     | 1492         | 13                                         | 13                                         | 13                                            | 1475         | 8                                          | 8                                          | 1380         | 10                                         | 10                                         | 10                                            | 1362         | 9                                          | 9                                          | 1543         | 8                                          | 8                                          | 8                                             | 1513         | 9                                          | 9                                          | 1211         | 10                                         | 10                                         | 10                                            |
| MSP013     | 1481         | 12                                         | 12                                         | 12                                            | 1463         | 8                                          | 8                                          | 1367         | 11                                         | 11                                         | 11                                            | 1349         | 8                                          | 8                                          | 1545         | 9                                          | 9                                          | 9                                             | 1516         | 9                                          | 9                                          | 1212         | 10                                         | 10                                         | 10                                            |
| MSP020     | 1544         | 0                                          | 0                                          | 0                                             | 1527         | 0                                          | 0                                          | 1450         | 0                                          | 0                                          | 0                                             | 1432         | 0                                          | 0                                          | 1592         | 2                                          | 2                                          | 2                                             | 1562         | 2                                          | 2                                          | 1144         | 16                                         | 16                                         | 16                                            |
| MSP028     | 1679         | 12                                         | 12                                         | 12                                            | 1661         | 9                                          | 9                                          | 1589         | 0                                          | 0                                          | 0                                             | 1572         | 0                                          | 0                                          | 1582         | 12                                         | 12                                         | 12                                            | 1553         | 12                                         | 12                                         | 1143         | 18                                         | 18                                         | 18                                            |
| MSP030     | 1686         | 12                                         | 12                                         | 12                                            | 1668         | 10                                         | 10                                         | 1581         | 14                                         | 14                                         | 14                                            | 1563         | 7                                          | 7                                          | 1515         | 10                                         | 10                                         | 10                                            | 1486         | 10                                         | 10                                         | 1210         | 23                                         | 23                                         | 23                                            |
| MSP043     | 1599         | 0                                          | 0                                          | 0                                             | 1582         | 0                                          | 0                                          | 1480         | 1                                          | 1                                          | 1                                             | 1462         | 1                                          | 1                                          | 1481         | 15                                         | 15                                         | 15                                            | 1452         | 15                                         | 15                                         | 1252         | 17                                         | 17                                         | 17                                            |
| MSP051     | 1657         | 5                                          | 5                                          | 5                                             | 1640         | 4                                          | 4                                          | 1516         | 6                                          | 6                                          | 6                                             | 1498         | 6                                          | 6                                          | 1377         | 18                                         | 18                                         | 18                                            | 1348         | 18                                         | 18                                         | 1353         | 4                                          | 4                                          | 4                                             |
| MSP052     | 1650         | 0                                          | 0                                          | 0                                             | 1633         | 0                                          | 0                                          | 1509         | 6                                          | 6                                          | 6                                             | 1491         | 6                                          | 6                                          | 1377         | 24                                         | 24                                         | 24                                            | 1348         | 24                                         | 24                                         | 1354         | 3                                          | 3                                          | 3                                             |
| MSP053     | 1658         | 7                                          | 7                                          | 7                                             | 1641         | 5                                          | 5                                          | 1516         | 8                                          | 8                                          | 8                                             | 1499         | 8                                          | 8                                          | 1375         | 18                                         | 18                                         | 18                                            | 1345         | 20                                         | 20                                         | 1356         | 5                                          | 5                                          | 5                                             |
| MSP060upd  | 1642         | 7                                          | 7                                          | 7                                             | 1624         | 1                                          | 1                                          | 1511         | 6                                          | 6                                          | 6                                             | 1493         | 2                                          | 2                                          | 1422         | 20                                         | 20                                         | 20                                            | 1392         | 20                                         | 20                                         | 1309         | 3                                          | 3                                          | 3                                             |
| MSP061upd  | 1643         | 7                                          | 7                                          | 7                                             | 1626         | 1                                          | 1                                          | 1511         | 6                                          | 6                                          | 6                                             | 1493         | 2                                          | 2                                          | 1417         | 20                                         | 20                                         | 20                                            | 1387         | 22                                         | 22                                         | 1313         | 3                                          | 3                                          | 3                                             |
| MSP105     | 1804         | 19                                         | 19                                         | —                                             | 1786         | 18                                         | 18                                         | 1810         | 12                                         | 12                                         | —                                             | 1792         | 11                                         | 11                                         | 2006         | 16                                         | 16                                         | —                                             | 1977         | 16                                         | 16                                         | 764          | 28                                         | 28                                         | —                                             |
| MSP001     | 1557         | 19                                         | 19                                         | 19                                            | 1539         | 15                                         | 15                                         | 1421         | 20                                         | 20                                         | 20                                            | 1404         | 20                                         | 20                                         | 1439         | 20                                         | 20                                         | 20                                            | 1409         | 20                                         | 20                                         | 1307         | 21                                         | 21                                         | 21                                            |
| MSP002     | 1561         | 19                                         | 19                                         | 19                                            | 1543         | 15                                         | 15                                         | 1423         | 20                                         | 20                                         | 20                                            | 1405         | 20                                         | 20                                         | 1428         | 20                                         | 20                                         | 20                                            | 1399         | 20                                         | 20                                         | 1318         | 16                                         | 16                                         | 16                                            |
| MSP003     | 1565         | 19                                         | 19                                         | 19                                            | 1548         | 14                                         | 14                                         | 1425         | 20                                         | 20                                         | 20                                            | 1407         | 20                                         | 20                                         | 1417         | 20                                         | 20                                         | 20                                            | 1387         | 20                                         | 20                                         | 1330         | 21                                         | 21                                         | 21                                            |
| MSP004     | 1571         | 19                                         | 19                                         | 19                                            | 1553         | 14                                         | 14                                         | 1427         | 20                                         | 20                                         | 20                                            | 1409         | 20                                         | 20                                         | 1405         | 20                                         | 20                                         | 20                                            | 1375         | 20                                         | 20                                         | 1342         | 21                                         | 21                                         | 21                                            |
| MSP005     | 1569         | 19                                         | 19                                         | 19                                            | 1552         | 15                                         | 15                                         | 1423         | 20                                         | 20                                         | 20                                            | 1405         | 20                                         | 20                                         | 1394         | 20                                         | 20                                         | 20                                            | 1364         | 20                                         | 20                                         | 1355         | 20                                         | 20                                         | 20                                            |
| MSP006     | 1577         | 19                                         | 19                                         | 19                                            | 1560         | 15                                         | 15                                         | 1430         | 20                                         | 20                                         | 20                                            | 1412         | 20                                         | 20                                         | 1387         | 20                                         | 20                                         | 20                                            | 1357         | 20                                         | 20                                         | 1360         | 20                                         | 20                                         | 20                                            |
| MSP034upd  | 1799         | 12                                         | 12                                         | 12                                            | 1781         | 0                                          | 0                                          | 1702         | 16                                         | 16                                         | 16                                            | 1684         | 14                                         | 14                                         | 1529         | 17                                         | 17                                         | 17                                            | 1500         | 17                                         | 17                                         | 1208         | 18                                         | 18                                         | 18                                            |
| MSP041     | 1675         | 2                                          | 2                                          | 2                                             | 1657         | 2                                          | 2                                          | 1529         | 1                                          | 1                                          | 1                                             | 1512         | 1                                          | 1                                          | 1354         | 8                                          | 8                                          | 8                                             | 1325         | 8                                          | 8                                          | 1375         | 6                                          | 6                                          | 6                                             |
| MSP008b    | 1675         | 15                                         | 15                                         | 15                                            | 1658         | 15                                         | 15                                         | 1509         | 16                                         | 16                                         | 16                                            | 1492         | 16                                         | 16                                         | 1274         | 22                                         | 22                                         | 22                                            | 1245         | 22                                         | 22                                         | 1461         | 16                                         | 16                                         | 16                                            |
| MSP016_upd | 1504         | 2                                          | 2                                          | 2                                             | 1486         | 0                                          | 0                                          | 1398         | 0                                          | 0                                          | 0                                             | 1380         | 0                                          | 0                                          | 1565         | 4                                          | 4                                          | 4                                             | 1535         | 4                                          | 4                                          | 1183         | 11                                         | 11                                         | 11                                            |
| MSP017upd  | 1504         | 2                                          | 2                                          | 2                                             | 1486         | 0                                          | 0                                          | 1398         | 0                                          | 0                                          | 0                                             | 1381         | 0                                          | 0                                          | 1564         | 4                                          | 4                                          | 4                                             | 1534         | 4                                          | 4                                          | 1184         | 11                                         | 11                                         | 11                                            |
| SP018upd   | 1506         | 3                                          | 3                                          | 3                                             | 1488         | 1                                          | 1                                          | 1398         | 0                                          | 0                                          | 0                                             | 1381         | 0                                          | 0                                          | 1558         | 3                                          | 3                                          | 3                                             | 1529         | 3                                          | 3                                          | 1189         | 11                                         | 11                                         | 11                                            |
| SP019upd   | 1506         | 3                                          | 3                                          | 3                                             | 1488         | 1                                          | 1                                          | 1399         | 6                                          | 6                                          | 6                                             | 1381         | 6                                          | 6                                          | 1557         | 3                                          | 3                                          | 3                                             | 1527         | 3                                          | 3                                          | 1191         | 11                                         | 11                                         | 11                                            |
| MSP010upd  | 1465         | 15                                         | 15                                         | 15                                            | 1448         | 11                                         | 11                                         | 1316         | 13                                         | 13                                         | 13                                            | 1298         | 13                                         | 13                                         | 1436         | 12                                         | 12                                         | 12                                            | 1406         | 12                                         | 12                                         | 1347         | 12                                         | 12                                         | 12                                            |
| MSP029upd  | 1766         | 12                                         | 12                                         | 12                                            | 1748         | 11                                         | 11                                         | 1684         | 11                                         | 11                                         | 11                                            | 1666         | 11                                         | 11                                         | 1602         | 15                                         | 15                                         | 15                                            | 1573         | 15                                         | 15                                         | 1134         | 22                                         | 22                                         | 22                                            |
| MSP031upd  | 1789         | 5                                          | 5                                          | 5                                             | 1771         | 1                                          | 1                                          | 1700         | 4                                          | 4                                          | 4                                             | 1682         | 2                                          | 2                                          | 1567         | 4                                          | 4                                          | 4                                             | 1537         | 5                                          | 5                                          | 1172         | 10                                         | 10                                         | 10                                            |
| MSP032upd  | 1792         | 11                                         | 11                                         | 11                                            | 1774         | 6                                          | 6                                          | 1700         | 9                                          | 9                                          | 9                                             | 1682         | 6                                          | 6                                          | 1555         | 10                                         | 10                                         | 10                                            | 1526         | 10                                         | 10                                         | 1183         | 16                                         | 16                                         | 16                                            |
| MSP033upd  | 1797         | 22                                         | 22                                         | 22                                            | 1779         | 16                                         | 16                                         | 1703         | 19                                         | 19                                         | 19                                            | 1685         | 17                                         | 17                                         | 1542         | 20                                         | 20                                         | 20                                            | 1513         | 20                                         | 20                                         | 1196         | 26                                         | 26                                         | 26                                            |
| MSP012upd  | 1476         | 10                                         | 10                                         | 10                                            | 1458         | 6                                          | 6                                          | 1366         | 8                                          | 8                                          | 8                                             | 1348         | 6                                          | 6                                          | 1557         | 7                                          | 7                                          | 7                                             | 1527         | 7                                          | 7                                          | 1200         | 8                                          | 8                                          | 8                                             |
| LCFP_B     | 1646         | 5                                          | 5                                          | 5                                             | 1629         | 4                                          | 4                                          |              |                                            |                                            |                                               |              |                                            |                                            |              |                                            |                                            |                                               |              |                                            |                                            |              |                                            |                                            |                                               |

Table 4: Point of Reception Predicted Individual Source Sound Levels - Mitigated Normal Operations (Stationary Source)

| Source ID | POR003       |                                            |                                            |                                               | OPOR003      |                                            |                                            | POR006       |                                            |                                            |                                               | OPOR006      |                                            |                                            | POR016       |                                            |                                            |                                               | OPOR016      |                                            |                                            | POR020       |                                            |                                            |                                               |
|-----------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) |
| MSV004    | 1553 / 1554  | 0                                          | 0                                          | 0                                             | 1536 / 1537  | 0                                          | 0                                          | 1418 / 1419  | 0                                          | 0                                          | 0                                             | 1401 / 1401  | 0                                          | 0                                          | 1441 / 1443  | 0                                          | 0                                          | 0                                             | 1411 / 1413  | 0                                          | 0                                          | 1304 / 1306  | 0                                          | 0                                          | 0                                             |
| MSV005    | 1561 / 1563  | 0                                          | 0                                          | 0                                             | 1544 / 1545  | 0                                          | 0                                          | 1417 / 1417  | 0                                          | 0                                          | 0                                             | 1399 / 1400  | 0                                          | 0                                          | 1402 / 1406  | 0                                          | 0                                          | 0                                             | 1373 / 1377  | 0                                          | 0                                          | 1343 / 1347  | 0                                          | 0                                          | 0                                             |
| MSV006    | 1566 / 1568  | 0                                          | 0                                          | 0                                             | 1549 / 1551  | 0                                          | 0                                          | 1419 / 1420  | 0                                          | 0                                          | 0                                             | 1401 / 1402  | 0                                          | 0                                          | 1389 / 1393  | 0                                          | 0                                          | 0                                             | 1360 / 1363  | 0                                          | 0                                          | 1357 / 1360  | 0                                          | 0                                          | 0                                             |
| MSV007    | 1489 / 1491  | 0                                          | 0                                          | 0                                             | 1471 / 1473  | 0                                          | 0                                          | 1385 / 1387  | 1                                          | 1                                          | 1                                             | 1368 / 1369  | 1                                          | 1                                          | 1574 / 1576  | 0                                          | 0                                          | 0                                             | 1544 / 1546  | 0                                          | 0                                          | 1175 / 1177  | 0                                          | 0                                          | 0                                             |
| MSV008    | 1474 / 1476  | 0                                          | 0                                          | 0                                             | 1457 / 1459  | 0                                          | 0                                          | 1370 / 1372  | 0                                          | 0                                          | 0                                             | 1352 / 1354  | 0                                          | 0                                          | 1577 / 1579  | 0                                          | 0                                          | 0                                             | 1547 / 1549  | 0                                          | 0                                          | 1177 / 1178  | 0                                          | 0                                          | 0                                             |
| MSV009    | 1502 / 1503  | 6                                          | 6                                          | 6                                             | 1485 / 1486  | 3                                          | 3                                          | 1398 / 1398  | 0                                          | 0                                          | 0                                             | 1380 / 1380  | 0                                          | 0                                          | 1566 / 1569  | 7                                          | 7                                          | 7                                             | 1536 / 1540  | 7                                          | 7                                          | 1179 / 1182  | 18                                         | 18                                         | 18                                            |
| MSV010    | 1505 / 1505  | 4                                          | 4                                          | 4                                             | 1487 / 1487  | 0                                          | 0                                          | 1398 / 1398  | 0                                          | 0                                          | 0                                             | 1381 / 1381  | 0                                          | 0                                          | 1560 / 1562  | 4                                          | 4                                          | 4                                             | 1530 / 1532  | 4                                          | 4                                          | 1186 / 1188  | 15                                         | 15                                         | 15                                            |
| MSV011    | 1507 / 1508  | 0                                          | 0                                          | 0                                             | 1489 / 1490  | 0                                          | 0                                          | 1399 / 1399  | 0                                          | 0                                          | 0                                             | 1381 / 1381  | 0                                          | 0                                          | 1550 / 1554  | 8                                          | 8                                          | 8                                             | 1521 / 1524  | 8                                          | 8                                          | 1194 / 1198  | 21                                         | 21                                         | 21                                            |
| MSV012    | 1469 / 1470  | 0                                          | 0                                          | 0                                             | 1452 / 1452  | 0                                          | 0                                          | 1359 / 1359  | 0                                          | 0                                          | 0                                             | 1341 / 1341  | 0                                          | 0                                          | 1558 / 1560  | 0                                          | 0                                          | 0                                             | 1528 / 1530  | 0                                          | 0                                          | 1200 / 1202  | 0                                          | 0                                          | 0                                             |
| MSV013    | 1473 / 1474  | 0                                          | 0                                          | 0                                             | 1455 / 1456  | 0                                          | 0                                          | 1360 / 1360  | 0                                          | 0                                          | 0                                             | 1342 / 1342  | 0                                          | 0                                          | 1547 / 1549  | 0                                          | 0                                          | 0                                             | 1517 / 1519  | 0                                          | 0                                          | 1211 / 1213  | 0                                          | 0                                          | 0                                             |
| MSV014    | 1526 / 1527  | 0                                          | 0                                          | 0                                             | 1508 / 1510  | 0                                          | 0                                          | 1421 / 1421  | 0                                          | 0                                          | 0                                             | 1403 / 1404  | 0                                          | 0                                          | 1555 / 1559  | 0                                          | 0                                          | 0                                             | 1526 / 1529  | 0                                          | 0                                          | 1183 / 1187  | 0                                          | 0                                          | 0                                             |
| MSV015    | 1521 / 1522  | 0                                          | 0                                          | 0                                             | 1503 / 1505  | 0                                          | 0                                          | 1420 / 1421  | 0                                          | 0                                          | 0                                             | 1403 / 1403  | 0                                          | 0                                          | 1572 / 1575  | 0                                          | 0                                          | 0                                             | 1542 / 1546  | 0                                          | 0                                          | 1167 / 1170  | 0                                          | 0                                          | 0                                             |
| MSV016    | 1545 / 1546  | 0                                          | 0                                          | 0                                             | 1527 / 1528  | 0                                          | 0                                          | 1441 / 1442  | 0                                          | 0                                          | 0                                             | 1423 / 1424  | 0                                          | 0                                          | 1554 / 1558  | 0                                          | 0                                          | 0                                             | 1525 / 1528  | 0                                          | 0                                          | 1180 / 1184  | 0                                          | 0                                          | 0                                             |
| MSV017    | 1542 / 1543  | 0                                          | 0                                          | 0                                             | 1524 / 1525  | 0                                          | 0                                          | 1441 / 1441  | 0                                          | 0                                          | 0                                             | 1423 / 1423  | 0                                          | 0                                          | 1564 / 1567  | 0                                          | 0                                          | 0                                             | 1534 / 1538  | 0                                          | 0                                          | 1171 / 1175  | 0                                          | 0                                          | 0                                             |
| MSV018    | 1539 / 1540  | 0                                          | 0                                          | 0                                             | 1521 / 1522  | 0                                          | 0                                          | 1440 / 1440  | 0                                          | 0                                          | 0                                             | 1422 / 1423  | 0                                          | 0                                          | 1575 / 1578  | 0                                          | 0                                          | 0                                             | 1545 / 1549  | 0                                          | 0                                          | 1160 / 1163  | 0                                          | 0                                          | 0                                             |
| MSV019    | 1542 / 1543  | 0                                          | 0                                          | 0                                             | 1524 / 1526  | 0                                          | 0                                          | 1449 / 1449  | 0                                          | 0                                          | 0                                             | 1432 / 1432  | 0                                          | 0                                          | 1594 / 1598  | 0                                          | 0                                          | 0                                             | 1565 / 1568  | 0                                          | 0                                          | 1138 / 1142  | 14                                         | 14                                         | 14                                            |
| MSV022    | 1695 / 1697  | 0                                          | 0                                          | 0                                             | 1678 / 1679  | 0                                          | 0                                          | 1584 / 1584  | 0                                          | 0                                          | 0                                             | 1566 / 1566  | 0                                          | 0                                          | 1478 / 1484  | 1                                          | 1                                          | 1                                             | 1448 / 1454  | 1                                          | 1                                          | 1242 / 1247  | 0                                          | 0                                          | 0                                             |
| MSV023    | 1693 / 1694  | 0                                          | 0                                          | 0                                             | 1675 / 1677  | 0                                          | 0                                          | 1544 / 1544  | 0                                          | 0                                          | 0                                             | 1526 / 1527  | 0                                          | 0                                          | 1329 / 1333  | 2                                          | 2                                          | 2                                             | 1299 / 1303  | 2                                          | 2                                          | 1396 / 1400  | 0                                          | 0                                          | 0                                             |
| MSV024    | 1551 / 1602  | 13                                         | 13                                         | 13                                            | 1533 / 1585  | 6                                          | 6                                          | 1445 / 1486  | 14                                         | 14                                         | 14                                            | 1427 / 1468  | 12                                         | 12                                         | 1492 / 1548  | 14                                         | 14                                         | 14                                            | 1462 / 1518  | 14                                         | 14                                         | 1189 / 1240  | 19                                         | 19                                         | 19                                            |
| MSV025    | 1548 / 1596  | 12                                         | 12                                         | 12                                            | 1530 / 1578  | 5                                          | 5                                          | 1442 / 1479  | 13                                         | 13                                         | 13                                            | 1424 / 1461  | 10                                         | 10                                         | 1493 / 1547  | 12                                         | 12                                         | 12                                            | 1464 / 1517  | 12                                         | 12                                         | 1192 / 1239  | 18                                         | 18                                         | 18                                            |
| MSV027    | 1599 / 1600  | 0                                          | 0                                          | 0                                             | 1582 / 1583  | 0                                          | 0                                          | 1481 / 1482  | 0                                          | 0                                          | 0                                             | 1463 / 1464  | 0                                          | 0                                          | 1485 / 1485  | 0                                          | 0                                          | 0                                             | 1456 / 1456  | 0                                          | 0                                          | 1247 / 1247  | 2                                          | 2                                          | 2                                             |
| MSV028    | 1599 / 1600  | 0                                          | 0                                          | 0                                             | 1582 / 1582  | 0                                          | 0                                          | 1481 / 1481  | 0                                          | 0                                          | 0                                             | 1463 / 1463  | 0                                          | 0                                          | 1483 / 1485  | 0                                          | 0                                          | 0                                             | 1454 / 1455  | 0                                          | 0                                          | 1248 / 1249  | 0                                          | 0                                          | 0                                             |
| MSV029    | 1600 / 1601  | 0                                          | 0                                          | 0                                             | 1582 / 1583  | 0                                          | 0                                          | 1481 / 1482  | 0                                          | 0                                          | 0                                             | 1463 / 1465  | 0                                          | 0                                          | 1484 / 1484  | 0                                          | 0                                          | 0                                             | 1454 / 1454  | 0                                          | 0                                          | 1249 / 1249  | 0                                          | 0                                          | 0                                             |
| MSV030    | 1600 / 1602  | 0                                          | 0                                          | 0                                             | 1583 / 1584  | 0                                          | 0                                          | 1482 / 1483  | 0                                          | 0                                          | 0                                             | 1464 / 1466  | 0                                          | 0                                          | 1485 / 1485  | 0                                          | 0                                          | 0                                             | 1455 / 1456  | 0                                          | 0                                          | 1247 / 1247  | 6                                          | 6                                          | 6                                             |
| MSV031    | 1601 / 1602  | 0                                          | 0                                          | 0                                             | 1583 / 1585  | 0                                          | 0                                          | 1482 / 1484  | 0                                          | 0                                          | 0                                             | 1465 / 1466  | 0                                          | 0                                          | 1484 / 1484  | 4                                          | 4                                          | 4                                             | 1454 / 1454  | 4                                          | 4                                          | 1249 / 1249  | 0                                          | 0                                          | 0                                             |
| MSV032    | 1602 / 1603  | 0                                          | 0                                          | 0                                             | 1584 / 1585  | 0                                          | 0                                          | 1483 / 1485  | 0                                          | 0                                          | 0                                             | 1466 / 1467  | 0                                          | 0                                          | 1485 / 1485  | 2                                          | 2                                          | 2                                             | 1456 / 1456  | 2                                          | 2                                          | 1247 / 1247  | 17                                         | 17                                         | 17                                            |
| MSV033    | 1602 / 1603  | 0                                          | 0                                          | 0                                             | 1585 / 1586  | 0                                          | 0                                          | 1484 / 1485  | 0                                          | 0                                          | 0                                             | 1466 / 1467  | 0                                          | 0                                          | 1483 / 1483  | 14                                         | 14                                         | 14                                            | 1454 / 1454  | 15                                         | 15                                         | 1249 / 1249  | 2                                          | 2                                          | 2                                             |
| MSV034    | 1601 / 1602  | 0                                          | 0                                          | 0                                             | 1584 / 1585  | 0                                          | 0                                          | 1483 / 1483  | 0                                          | 0                                          | 0                                             | 1465 / 1466  | 0                                          | 0                                          | 1483 / 1485  | 15                                         | 15                                         | 15                                            | 1454 / 1455  | 15                                         | 15                                         | 1247 / 1249  | 9                                          | 9                                          | 9                                             |
| MSV035    | 1603 / 1603  | 0                                          | 0                                          | 0                                             | 1585 / 1586  | 0                                          | 0                                          | 1485 / 1485  | 0                                          | 0                                          | 0                                             | 1467 / 1467  | 0                                          | 0                                          | 1484 / 1485  | 14                                         | 14                                         | 14                                            | 1454 / 1456  | 15                                         | 15                                         | 1247 / 1248  | 17                                         | 17                                         | 17                                            |
| MSV036    | 1604 / 1604  | 0                                          | 0                                          | 0                                             | 1586 / 1586  | 0                                          | 0                                          | 1485 / 1485  | 0                                          | 0                                          | 0                                             | 1467 / 1467  | 0                                          | 0                                          | 1484 / 1484  | 0                                          | 0                                          | 0                                             | 1454 / 1454  | 0                                          | 0                                          | 1248 / 1248  | 6                                          | 6                                          | 6                                             |

Table 4: Point of Reception Predicted Individual Source Sound Levels - Mitigated Normal Operations (Stationary Source)

| Source ID | OPOR020      |                                            |                                            | POR037       |                                            |                                            |                                               | OPOR037      |                                            |                                            | POR044       |                                            |                                            |                                               | OPOR044      |                                            |                                            | POR061       |                                            |                                            |                                               | OPOR061      |                                            |                                            |
|-----------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) |
| SP009     | 1364         | 6                                          | 6                                          | 1685         | 3                                          | 3                                          | 3                                             | 1680         | 3                                          | 3                                          | 1872         | 2                                          | 2                                          | 2                                             | 1858         | 2                                          | 2                                          | 1803         | 3                                          | 3                                          | 3                                             | 1790         | 3                                          | 3                                          |
| SP014     | 1152         | 19                                         | 19                                         | 1655         | 22                                         | 22                                         | 22                                            | 1650         | 22                                         | 22                                         | 1906         | 17                                         | 17                                         | 17                                            | 1892         | 16                                         | 16                                         | 1711         | 23                                         | 23                                         | 23                                            | 1698         | 22                                         | 22                                         |
| SP015     | 1152         | 21                                         | 21                                         | 1642         | 25                                         | 25                                         | 25                                            | 1637         | 26                                         | 26                                         | 1891         | 20                                         | 20                                         | 20                                            | 1877         | 20                                         | 20                                         | 1700         | 25                                         | 25                                         | 25                                            | 1687         | 25                                         | 25                                         |
| SP021     | 1112         | 6                                          | 6                                          | 1566         | 10                                         | 10                                         | 10                                            | 1561         | 10                                         | 10                                         | 1821         | 0                                          | 0                                          | 0                                             | 1807         | 0                                          | 0                                          | 1624         | 10                                         | 10                                         | 10                                            | 1611         | 10                                         | 10                                         |
| SP022     | 1116         | 0                                          | 0                                          | 1595         | 0                                          | 0                                          | 0                                             | 1590         | 0                                          | 0                                          | 1852         | 0                                          | 0                                          | 0                                             | 1838         | 0                                          | 0                                          | 1650         | 0                                          | 0                                          | 0                                             | 1636         | 0                                          | 0                                          |
| SP023     | 1110         | 9                                          | 9                                          | 1512         | 7                                          | 7                                          | 7                                             | 1507         | 8                                          | 8                                          | 1765         | 7                                          | 7                                          | 7                                             | 1751         | 6                                          | 6                                          | 1578         | 8                                          | 8                                          | 8                                             | 1565         | 7                                          | 7                                          |
| SP024     | 1112         | 6                                          | 6                                          | 1514         | 4                                          | 4                                          | 4                                             | 1509         | 5                                          | 5                                          | 1767         | 27                                         | 27                                         | 27                                            | 1753         | 27                                         | 27                                         | 1581         | 11                                         | 11                                         | 11                                            | 1568         | 11                                         | 11                                         |
| SP025     | 1121         | 19                                         | 19                                         | 1463         | 23                                         | 23                                         | 23                                            | 1458         | 24                                         | 24                                         | 1710         | 23                                         | 23                                         | 23                                            | 1696         | 23                                         | 23                                         | 1541         | 24                                         | 24                                         | 24                                            | 1528         | 23                                         | 23                                         |
| SP026     | 1117         | 22                                         | 22                                         | 1458         | 26                                         | 26                                         | 26                                            | 1453         | 27                                         | 27                                         | 1706         | 25                                         | 25                                         | 25                                            | 1692         | 25                                         | 25                                         | 1536         | 26                                         | 26                                         | 26                                            | 1523         | 26                                         | 26                                         |
| SP027     | 1195         | 16                                         | 16                                         | 1547         | 22                                         | 22                                         | 22                                            | 1542         | 22                                         | 22                                         | 1775         | 21                                         | 21                                         | 21                                            | 1761         | 21                                         | 21                                         | 1636         | 22                                         | 22                                         | 22                                            | 1623         | 22                                         | 22                                         |
| SP035     | 1200         | 9                                          | 9                                          | 1364         | 14                                         | 14                                         | 14                                            | 1359         | 14                                         | 14                                         | 1581         | 12                                         | 12                                         | 12                                            | 1567         | 12                                         | 12                                         | 1485         | 14                                         | 14                                         | 14                                            | 1472         | 14                                         | 14                                         |
| SP036     | 1205         | 0                                          | 0                                          | 1365         | 15                                         | 15                                         | 15                                            | 1360         | 16                                         | 16                                         | 1580         | 14                                         | 14                                         | 14                                            | 1566         | 14                                         | 14                                         | 1488         | 15                                         | 15                                         | 15                                            | 1475         | 15                                         | 15                                         |
| SP037     | 1207         | 0                                          | 0                                          | 1368         | 0                                          | 0                                          | 0                                             | 1363         | 0                                          | 0                                          | 1582         | 0                                          | 0                                          | 0                                             | 1568         | 0                                          | 0                                          | 1490         | 0                                          | 0                                          | 0                                             | 1478         | 0                                          | 0                                          |
| SP039     | 1352         | 1                                          | 1                                          | 1608         | 19                                         | 19                                         | 19                                            | 1603         | 20                                         | 20                                         | 1791         | 24                                         | 24                                         | 24                                            | 1777         | 23                                         | 23                                         | 1737         | 18                                         | 18                                         | 18                                            | 1725         | 15                                         | 15                                         |
| SP040     | 1353         | 8                                          | 8                                          | 1596         | 23                                         | 23                                         | 23                                            | 1591         | 24                                         | 24                                         | 1776         | 25                                         | 25                                         | 25                                            | 1762         | 24                                         | 24                                         | 1728         | 20                                         | 20                                         | 20                                            | 1715         | 19                                         | 19                                         |
| SP042     | 1347         | 11                                         | 11                                         | 1596         | 4                                          | 4                                          | 4                                             | 1591         | 5                                          | 5                                          | 1779         | 20                                         | 20                                         | 20                                            | 1765         | 19                                         | 19                                         | 1726         | 0                                          | 0                                          | 0                                             | 1713         | 0                                          | 0                                          |
| SP045     | 1227         | 0                                          | 0                                          | 1551         | 0                                          | 0                                          | 0                                             | 1546         | 0                                          | 0                                          | 1769         | 3                                          | 3                                          | 3                                             | 1755         | 3                                          | 3                                          | 1650         | 4                                          | 4                                          | 4                                             | 1637         | 3                                          | 3                                          |
| SP046     | 1227         | 0                                          | 0                                          | 1551         | 0                                          | 0                                          | 0                                             | 1546         | 0                                          | 0                                          | 1769         | 4                                          | 4                                          | 4                                             | 1755         | 0                                          | 0                                          | 1650         | 5                                          | 5                                          | 5                                             | 1637         | 4                                          | 4                                          |
| SP047     | 1227         | 0                                          | 0                                          | 1551         | 0                                          | 0                                          | 0                                             | 1546         | 0                                          | 0                                          | 1769         | 4                                          | 4                                          | 4                                             | 1755         | 3                                          | 3                                          | 1650         | 4                                          | 4                                          | 4                                             | 1637         | 3                                          | 3                                          |
| SP048     | 1227         | 2                                          | 2                                          | 1551         | 3                                          | 3                                          | 3                                             | 1546         | 4                                          | 4                                          | 1769         | 2                                          | 2                                          | 2                                             | 1755         | 2                                          | 2                                          | 1650         | 3                                          | 3                                          | 3                                             | 1637         | 2                                          | 2                                          |
| SP049     | 1227         | 0                                          | 0                                          | 1551         | 0                                          | 0                                          | 0                                             | 1546         | 0                                          | 0                                          | 1769         | 3                                          | 3                                          | 3                                             | 1755         | 2                                          | 2                                          | 1650         | 3                                          | 3                                          | 3                                             | 1637         | 3                                          | 3                                          |
| SP050     | 1224         | 20                                         | 20                                         | 1544         | 17                                         | 17                                         | 17                                            | 1539         | 17                                         | 17                                         | 1763         | 14                                         | 14                                         | 14                                            | 1749         | 13                                         | 13                                         | 1643         | 25                                         | 25                                         | 25                                            | 1630         | 25                                         | 25                                         |
| SP054     | 1327         | 6                                          | 6                                          | 1611         | 23                                         | 23                                         | 23                                            | 1606         | 24                                         | 24                                         | 1802         | 20                                         | 20                                         | 20                                            | 1789         | 20                                         | 20                                         | 1732         | 25                                         | 25                                         | 25                                            | 1719         | 24                                         | 24                                         |
| SP055     | 1329         | 8                                          | 8                                          | 1605         | 24                                         | 24                                         | 24                                            | 1600         | 25                                         | 25                                         | 1795         | 23                                         | 23                                         | 23                                            | 1781         | 22                                         | 22                                         | 1728         | 24                                         | 24                                         | 24                                            | 1715         | 24                                         | 24                                         |
| SP056     | 1332         | 8                                          | 8                                          | 1607         | 24                                         | 24                                         | 24                                            | 1602         | 24                                         | 24                                         | 1796         | 21                                         | 21                                         | 21                                            | 1782         | 21                                         | 21                                         | 1730         | 26                                         | 26                                         | 26                                            | 1717         | 25                                         | 25                                         |
| SP057     | 1332         | 3                                          | 3                                          | 1614         | 20                                         | 20                                         | 20                                            | 1609         | 21                                         | 21                                         | 1803         | 16                                         | 16                                         | 16                                            | 1790         | 16                                         | 16                                         | 1736         | 22                                         | 22                                         | 22                                            | 1723         | 21                                         | 21                                         |
| SP058     | 1335         | 2                                          | 2                                          | 1608         | 19                                         | 19                                         | 19                                            | 1603         | 19                                         | 19                                         | 1796         | 15                                         | 15                                         | 15                                            | 1782         | 14                                         | 14                                         | 1732         | 19                                         | 19                                         | 19                                            | 1719         | 18                                         | 18                                         |
| SP059     | 1287         | 5                                          | 5                                          | 1586         | 29                                         | 29                                         | 29                                            | 1581         | 29                                         | 29                                         | 1787         | 21                                         | 21                                         | 21                                            | 1774         | 20                                         | 20                                         | 1698         | 24                                         | 24                                         | 24                                            | 1685         | 23                                         | 23                                         |
| SP062     | 1313         | 0                                          | 0                                          | 1605         | 16                                         | 16                                         | 16                                            | 1600         | 16                                         | 16                                         | 1800         | 17                                         | 17                                         | 17                                            | 1786         | 17                                         | 17                                         | 1722         | 18                                         | 18                                         | 18                                            | 1709         | 17                                         | 17                                         |
| SP063     | 1312         | 0                                          | 0                                          | 1604         | 15                                         | 15                                         | 15                                            | 1599         | 16                                         | 16                                         | 1800         | 17                                         | 17                                         | 17                                            | 1786         | 17                                         | 17                                         | 1722         | 18                                         | 18                                         | 18                                            | 1709         | 17                                         | 17                                         |
| SP064     | 1311         | 0                                          | 0                                          | 1604         | 16                                         | 16                                         | 16                                            | 1599         | 16                                         | 16                                         | 1799         | 17                                         | 17                                         | 17                                            | 1786         | 17                                         | 17                                         | 1721         | 18                                         | 18                                         | 18                                            | 1708         | 17                                         | 17                                         |
| SP065     | 1309         | 0                                          | 0                                          | 1603         | 16                                         | 16                                         | 16                                            | 1598         | 16                                         | 16                                         | 1799         | 17                                         | 17                                         | 17                                            | 1785         | 17                                         | 17                                         | 1720         | 17                                         | 17                                         | 17                                            | 1706         | 16                                         | 16                                         |
| SP066     | 1308         | 0                                          | 0                                          | 1602         | 15                                         | 15                                         | 15                                            | 1597         | 16                                         | 16                                         | 1799         | 17                                         | 17                                         | 17                                            | 1785         | 17                                         | 17                                         | 1719         | 18                                         | 18                                         | 18                                            | 1705         | 20                                         | 20                                         |
| SP067     | 1306         | 0                                          | 0                                          | 1602         | 16                                         | 16                                         | 16                                            | 1597         | 16                                         | 16                                         | 1799         | 17                                         | 17                                         | 17                                            | 1785         | 16                                         | 16                                         | 1717         | 22                                         | 22                                         | 22                                            | 1704         | 21                                         | 21                                         |
| SP068     | 1305         | 0                                          | 0                                          | 1601         | 16                                         | 16                                         | 16                                            | 1596         | 16                                         | 16                                         | 1798         | 16                                         | 16                                         | 16                                            | 1785         | 16                                         | 16                                         | 1716         | 22                                         | 22                                         | 22                                            | 1703         | 21                                         | 21                                         |
| SP069     | 1303         | 0                                          | 0                                          | 1600         | 16                                         | 16                                         | 16                                            | 1595         | 16                                         | 16                                         | 1798         | 16                                         | 16                                         | 16                                            | 1784         | 16                                         | 16                                         | 1715         | 22                                         | 22                                         | 22                                            | 1702         | 18                                         | 18                                         |
| SP070     | 1302         | 0                                          | 0                                          | 1600         | 19                                         | 19                                         | 19                                            | 1595         | 20                                         | 20                                         | 1798         | 16                                         | 16                                         | 16                                            | 1784         | 15                                         | 15                                         | 1714         | 18                                         | 18                                         | 18                                            | 1701         | 18                                         | 18                                         |
| SP071     | 1300         | 0                                          | 0                                          | 1599         | 20                                         | 20                                         | 20                                            | 1594         | 20                                         | 20                                         | 1798         | 16                                         | 16                                         | 16                                            | 1784         | 15                                         | 15                                         | 1713         | 18                                         | 18                                         | 18                                            | 1700         | 18                                         | 18                                         |
| SP072     | 1299         | 0                                          | 0                                          | 1598         | 20                                         | 20                                         | 20                                            | 1593         | 20                                         | 20                                         | 1797         | 15                                         | 15                                         | 15                                            | 1784         | 15                                         | 15                                         | 1712         | 18                                         | 18                                         | 18                                            | 1699         | 17                                         | 17                                         |
| SP073     | 1297         | 0                                          | 0                                          | 1598         | 20                                         | 20                                         | 20                                            | 1593         | 20                                         | 20                                         | 1797         | 15                                         | 15                                         | 15                                            | 1783         | 14                                         | 14                                         | 1711         | 18                                         | 18                                         | 18                                            | 1698         | 17                                         | 17                                         |
| SP074     | 1296         | 0                                          | 0                                          | 1597         | 20                                         | 20                                         | 20                                            | 1592         | 20                                         | 20                                         | 1797         | 14                                         | 14                                         | 14                                            | 1783         | 14                                         | 14                                         | 1710         | 18                                         | 18                                         | 18                                            | 1697         | 17                                         | 17                                         |
| SP075     | 1295         | 0                                          | 0                                          | 1597         | 20                                         | 20                                         | 20                                            | 1592         | 20                                         | 20                                         | 1797         | 14                                         | 14                                         | 14                                            | 1783         | 13                                         | 13                                         | 1710         | 18                                         | 18                                         | 18                                            | 1696         | 17                                         | 17                                         |
| SP076     | 1293         | 0                                          | 0                                          | 1596         | 20                                         | 20                                         | 20                                            | 1591         | 21                                         | 21                                         | 1797         | 14                                         | 14                                         | 14                                            | 1783         | 13                                         | 13                                         | 1709         | 18                                         | 18                                         | 18                                            | 1695         | 17                                         | 17                                         |
| SP077     | 1292         | 0                                          | 0                                          | 1596         | 20                                         | 20                                         | 20                                            | 1591         | 21                                         | 21                                         | 1797         | 13                                         | 13                                         | 13                                            | 1783         | 13                                         | 13                                         | 1708         | 18                                         | 18                                         | 18                                            | 1695         | 17                                         | 17                                         |
| SP078     | 1283         | 0                                          | 0                                          | 1591         | 20                                         | 20                                         | 20                                            | 1586         | 21                                         | 21                                         | 1795         | 12                                         | 12                                         | 12                                            | 1781         | 12                                         | 12                                         | 1701         | 15                                         | 15                                         | 15                                            | 1688         | 15                                         | 15                                         |
| SP079     | 1281         | 0                                          | 0                                          | 1591         | 23                                         | 23                                         | 23                                            | 1586         | 23                                         | 23                                         | 1795         | 13                                         | 13                                         | 13                                            | 1781         | 12                                         | 12                                         | 1700         | 17                                         | 17                                         | 17                                            | 1687         | 16                                         | 16                                         |
| SP080     | 1279         | 0                                          | 0                                          | 1590         | 21                                         | 21                                         | 21                                            | 1585         | 22                                         | 22                                         | 1795         | 13                                         | 13                                         | 13                                            | 1781         | 12                                         | 12                                         | 1699         | 17                                         | 17                                         | 17                                            | 1686         | 16                                         | 16                                         |
| SP081     | 1278         | 0                                          | 0                                          | 1589         | 22                                         | 22                                         | 22                                            | 1584         | 22                                         | 22                                         | 1794         | 14                                         | 14                                         | 14                                            | 1781         | 13                                         | 13                                         | 1698         | 17                                         | 17                                         | 17                                            | 1685         | 16                                         | 16                                         |
| SP082     | 1329         | 0                                          | 0                                          | 1578         | 10                                         | 10                                         | 10                                            | 1573         | 10                                         | 10                                         | 1765         | 10                                         | 10                                         | 10                                            | 1751         | 9                                          | 9                                          | 1706         | 4                                          | 4                                          | 4                                             | 1693         | 3                                          | 3                                          |
| SP083     | 1331         | 0                                          | 0                                          | 1579         | 10                                         | 10                                         | 10                                            | 1574         | 10                                         | 10                                         | 1765         | 10                                         | 10                                         | 10                                            | 1752         | 9                                          | 9                                          | 1707         | 4                                          | 4                                          | 4                                             | 1694         | 3                                          | 3                                          |
| SP084     | 1334         | 0                                          | 0                                          | 1580         | 10                                         | 10                                         | 10                                            | 1575         | 10                                         | 10                                         | 1766         | 10                                         | 10                                         | 10                                            | 1752         | 9                                          | 9                                          | 1709         | 4                                          | 4                                          | 4                                             | 1696         | 3                                          | 3                                          |
| SP085     | 1335         | 0                                          | 0                                          | 1581         | 10                                         | 10                                         | 10                                            | 1576         | 10                                         | 10                                         | 1766         | 10                                         | 10                                         | 10                                            | 1753         | 9                                          | 9                                          | 1710         | 5                                          | 5                                          | 5                                             | 1697         | 3                                          | 3                                          |
| SP086     | 1329         | 0                                          | 0                                          | 1578         | 5                                          | 5                                          | 5                                             | 1573         | 6                                          | 6                                          | 1765         | 10                                         | 10                                         | 10                                            | 1751         | 9                                          | 9                                          | 1706         | 1                                          | 1                                          | 1                                             | 1693         | 0                                          | 0                                          |
| SP087     | 1331         | 0                                          | 0                                          | 1579         | 5                                          | 5                                          | 5                                             | 1574         | 6                                          | 6                                          | 1765         | 10                                         | 10                                         | 10                                            | 1752         | 9                                          | 9                                          | 1707         | 2                                          | 2                                          | 2                                             | 1694         | 1                                          | 1                                          |
| SP088     | 1334         | 0                                          | 0                                          | 1580         | 5                                          | 5                                          | 5                                             | 1575         | 6                                          | 6                                          | 1766         | 10                                         | 10                                         | 10                                            | 1752         | 9                                          | 9                                          | 1709         | 2                                          | 2                                          | 2                                             | 1696         | 1                                          | 1                                          |
| SP089     | 1335         | 0                                          | 0                                          | 1581         | 5                                          | 5                                          | 5                                             | 1576         | 6                                          | 6                                          | 1766         | 10                                         | 10                                         | 10                                            | 1753         | 9                                          | 9                                          | 1710         | 5                                          | 5                                          | 5                                             | 1697         | 2                                          | 2                                          |
| SP090     | 1329         | 0                                          | 0                                          | 1578         | 5                                          | 5                                          | 5                                             | 1573         | 6                                          | 6                                          | 1765         | 3                                          | 3                                          | 3                                             | 1751         | 3                                          | 3                                          | 1706         | 0                                          | 0                                          | 0                                             | 1693         | 0                                          | 0                                          |
| SP091     | 1331         | 0                                          | 0                                          | 1579         | 4                                          | 4                                          | 4                                             | 1574         | 4                                          | 4                                          | 1765         | 6                                          | 6                                          | 6                                             | 1752         | 5                                          | 5                                          | 1707         | 7                                          | 7                                          | 7                                             | 1694         | 6                                          | 6                                          |
| SP092     | 1334         | 0                                          | 0                                          | 1580         | 5                                          | 5                                          | 5                                             | 1575         | 6                                          | 6                                          | 1766         | 6                                          | 6                                          | 6                                             | 1752         | 5                                          | 5                                          | 1709         | 6                                          | 6                                          | 6                                             | 1696         | 6                                          | 6                                          |
| SP093     | 1335         | 0                                          | 0                                          | 1581         | 5                                          | 5                                          | 5                                             | 1576         | 6                                          | 6                                          | 1766         | 6                                          | 6                                          | 6                                             | 1753         | 5                                          | 5                                          | 1710         | 0                                          | 0                                          | 0                                             | 1697         | 0                                          | 0                                          |
| SP094     | 1329         | 0                                          | 0                                          | 1578         | 5                                          | 5                                          | 5                                             | 1573         | 6                                          | 6                                          | 1765         | 0                                          | 0                                          | 0                                             | 1751         | 0                                          | 0                                          | 1706         | 0                                          | 0                                          | 0                                             | 1693         | 0                                          | 0                                          |

Table 4: Point of Reception Predicted Individual Source Sound Levels - Mitigated Normal Operations (Stationary Source)

| Source ID  | OPOR020      |                                            |                                            | POR037       |                                            |                                            |                                               | OPOR037      |                                            |                                            | POR044       |                                            |                                            |                                               | OPOR044      |                                            |                                            | POR061       |                                            |                                            |                                               | OPOR061      |                                            |                                            |
|------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|
|            | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) |
| SP095      | 1331         | 0                                          | 0                                          | 1579         | 0                                          | 0                                          | 0                                             | 1574         | 1                                          | 1                                          | 1765         | 1                                          | 1                                          | 1                                             | 1752         | 0                                          | 0                                          | 1707         | 3                                          | 3                                          | 3                                             | 1694         | 2                                          | 2                                          |
| SP096      | 1334         | 0                                          | 0                                          | 1580         | 4                                          | 4                                          | 4                                             | 1575         | 4                                          | 4                                          | 1766         | 0                                          | 0                                          | 0                                             | 1752         | 0                                          | 0                                          | 1709         | 2                                          | 2                                          | 2                                             | 1696         | 1                                          | 1                                          |
| SP097      | 1335         | 0                                          | 0                                          | 1581         | 0                                          | 0                                          | 0                                             | 1576         | 0                                          | 0                                          | 1766         | 0                                          | 0                                          | 0                                             | 1753         | 0                                          | 0                                          | 1710         | 0                                          | 0                                          | 0                                             | 1697         | 0                                          | 0                                          |
| SP098      | 1239         | 2                                          | 2                                          | 1374         | 25                                         | 25                                         | 25                                            | 1369         | 26                                         | 26                                         | 1577         | 25                                         | 25                                         | 25                                            | 1563         | 24                                         | 24                                         | 1506         | 24                                         | 24                                         | 24                                            | 1494         | 24                                         | 24                                         |
| SP101      | 1173         | 15                                         | 15                                         | 1295         | 19                                         | 19                                         | 19                                            | 1290         | 19                                         | 19                                         | 1519         | 18                                         | 18                                         | 18                                            | 1506         | 18                                         | 18                                         | 1416         | 19                                         | 19                                         | 19                                            | 1403         | 18                                         | 18                                         |
| SP103      | 1631         | 28                                         | —                                          | 2685         | 24                                         | —                                          | —                                             | 2680         | 25                                         | —                                          | 2978         | 24                                         | —                                          | —                                             | 2964         | 23                                         | —                                          | 2640         | 25                                         | —                                          | —                                             | 2626         | 25                                         | —                                          |
| MSP007     | 1339         | 6                                          | 6                                          | 1679         | 7                                          | 7                                          | 7                                             | 1674         | 7                                          | 7                                          | 1873         | 8                                          | 8                                          | 8                                             | 1859         | 8                                          | 8                                          | 1790         | 7                                          | 7                                          | 7                                             | 1777         | 7                                          | 7                                          |
| MSP008     | 1432         | 11                                         | 11                                         | 1674         | 16                                         | 16                                         | 16                                            | 1669         | 17                                         | 17                                         | 1837         | 16                                         | 16                                         | 16                                            | 1823         | 16                                         | 16                                         | 1816         | 16                                         | 16                                         | 16                                            | 1803         | 16                                         | 16                                         |
| MSP011     | 1181         | 10                                         | 10                                         | 1655         | 14                                         | 14                                         | 14                                            | 1650         | 14                                         | 14                                         | 1897         | 9                                          | 9                                          | 9                                             | 1883         | 8                                          | 8                                          | 1721         | 14                                         | 14                                         | 14                                            | 1707         | 14                                         | 14                                         |
| MSP013     | 1182         | 10                                         | 10                                         | 1667         | 13                                         | 13                                         | 13                                            | 1662         | 14                                         | 14                                         | 1910         | 8                                          | 8                                          | 8                                             | 1896         | 7                                          | 7                                          | 1731         | 13                                         | 13                                         | 13                                            | 1717         | 13                                         | 13                                         |
| MSP020     | 1115         | 16                                         | 16                                         | 1566         | 20                                         | 20                                         | 20                                            | 1561         | 20                                         | 20                                         | 1821         | 0                                          | 0                                          | 0                                             | 1807         | 0                                          | 0                                          | 1626         | 15                                         | 15                                         | 15                                            | 1612         | 14                                         | 14                                         |
| MSP028     | 1114         | 17                                         | 17                                         | 1433         | 21                                         | 21                                         | 21                                            | 1429         | 22                                         | 22                                         | 1682         | 20                                         | 20                                         | 20                                            | 1668         | 20                                         | 20                                         | 1514         | 21                                         | 21                                         | 21                                            | 1500         | 21                                         | 21                                         |
| MSP030     | 1181         | 22                                         | 22                                         | 1469         | 11                                         | 11                                         | 11                                            | 1464         | 11                                         | 11                                         | 1697         | 23                                         | 23                                         | 23                                            | 1683         | 23                                         | 23                                         | 1566         | 20                                         | 20                                         | 20                                            | 1553         | 19                                         | 19                                         |
| MSP043     | 1222         | 16                                         | 16                                         | 1582         | 0                                          | 0                                          | 0                                             | 1577         | 1                                          | 1                                          | 1805         | 0                                          | 0                                          | 0                                             | 1791         | 0                                          | 0                                          | 1674         | 20                                         | 20                                         | 20                                            | 1661         | 19                                         | 19                                         |
| MSP051     | 1323         | 4                                          | 4                                          | 1603         | 21                                         | 21                                         | 21                                            | 1598         | 21                                         | 21                                         | 1794         | 20                                         | 20                                         | 20                                            | 1780         | 19                                         | 19                                         | 1724         | 20                                         | 20                                         | 20                                            | 1711         | 19                                         | 19                                         |
| MSP052     | 1324         | 3                                          | 3                                          | 1610         | 19                                         | 19                                         | 19                                            | 1605         | 20                                         | 20                                         | 1802         | 19                                         | 19                                         | 19                                            | 1788         | 19                                         | 19                                         | 1730         | 20                                         | 20                                         | 20                                            | 1717         | 21                                         | 21                                         |
| MSP053     | 1326         | 4                                          | 4                                          | 1604         | 19                                         | 19                                         | 19                                            | 1599         | 20                                         | 20                                         | 1794         | 20                                         | 20                                         | 20                                            | 1781         | 20                                         | 20                                         | 1726         | 19                                         | 19                                         | 19                                            | 1713         | 18                                         | 18                                         |
| MSP060upd  | 1279         | 2                                          | 2                                          | 1583         | 23                                         | 23                                         | 23                                            | 1578         | 24                                         | 24                                         | 1787         | 20                                         | 20                                         | 20                                            | 1773         | 20                                         | 20                                         | 1693         | 22                                         | 22                                         | 22                                            | 1680         | 21                                         | 21                                         |
| MSP061upd  | 1283         | 2                                          | 2                                          | 1584         | 23                                         | 23                                         | 23                                            | 1580         | 23                                         | 23                                         | 1787         | 20                                         | 20                                         | 20                                            | 1774         | 19                                         | 19                                         | 1696         | 22                                         | 22                                         | 22                                            | 1683         | 21                                         | 21                                         |
| MSP105     | 737          | 27                                         | 27                                         | 1170         | 16                                         | 16                                         | —                                             | 1166         | 16                                         | 16                                         | 1546         | 15                                         | 15                                         | —                                             | 1533         | 14                                         | 14                                         | 1129         | 17                                         | 17                                         | —                                             | 1115         | 17                                         | 17                                         |
| MSP001     | 1278         | 16                                         | 16                                         | 1662         | 12                                         | 12                                         | 12                                            | 1657         | 12                                         | 12                                         | 1875         | 18                                         | 18                                         | 18                                            | 1861         | 18                                         | 18                                         | 1757         | 18                                         | 18                                         | 18                                            | 1744         | 19                                         | 19                                         |
| MSP002     | 1288         | 16                                         | 16                                         | 1667         | 14                                         | 14                                         | 14                                            | 1662         | 14                                         | 14                                         | 1876         | 18                                         | 18                                         | 18                                            | 1863         | 18                                         | 18                                         | 1765         | 12                                         | 12                                         | 12                                            | 1751         | 12                                         | 12                                         |
| MSP003     | 1300         | 16                                         | 16                                         | 1671         | 14                                         | 14                                         | 14                                            | 1666         | 14                                         | 14                                         | 1877         | 18                                         | 18                                         | 18                                            | 1864         | 18                                         | 18                                         | 1772         | 11                                         | 11                                         | 11                                            | 1759         | 12                                         | 12                                         |
| MSP004     | 1312         | 16                                         | 16                                         | 1676         | 19                                         | 19                                         | 19                                            | 1671         | 19                                         | 19                                         | 1879         | 18                                         | 18                                         | 18                                            | 1865         | 18                                         | 18                                         | 1779         | 12                                         | 12                                         | 12                                            | 1766         | 12                                         | 12                                         |
| MSP005     | 1325         | 16                                         | 16                                         | 1687         | 19                                         | 19                                         | 19                                            | 1682         | 19                                         | 19                                         | 1887         | 18                                         | 18                                         | 18                                            | 1873         | 18                                         | 18                                         | 1793         | 12                                         | 12                                         | 12                                            | 1779         | 12                                         | 12                                         |
| MSP006     | 1330         | 16                                         | 16                                         | 1684         | 19                                         | 19                                         | 19                                            | 1679         | 19                                         | 19                                         | 1881         | 18                                         | 18                                         | 18                                            | 1868         | 18                                         | 18                                         | 1792         | 19                                         | 19                                         | 19                                            | 1778         | 19                                         | 19                                         |
| MSP034upd  | 1179         | 18                                         | 18                                         | 1350         | 22                                         | 22                                         | 22                                            | 1345         | 23                                         | 23                                         | 1574         | 22                                         | 22                                         | 22                                            | 1560         | 21                                         | 21                                         | 1466         | 22                                         | 22                                         | 22                                            | 1453         | 22                                         | 22                                         |
| MSP041     | 1346         | 6                                          | 6                                          | 1604         | 12                                         | 12                                         | 12                                            | 1599         | 13                                         | 13                                         | 1788         | 28                                         | 28                                         | 28                                            | 1774         | 28                                         | 28                                         | 1732         | 10                                         | 10                                         | 10                                            | 1719         | 10                                         | 10                                         |
| MSP008b    | 1432         | 16                                         | 16                                         | 1678         | 20                                         | 20                                         | 20                                            | 1673         | 20                                         | 20                                         | 1841         | 19                                         | 19                                         | 19                                            | 1827         | 20                                         | 20                                         | 1819         | 19                                         | 19                                         | 19                                            | 1806         | 20                                         | 20                                         |
| MSP016_upd | 1153         | 11                                         | 11                                         | 1627         | 0                                          | 0                                          | 0                                             | 1623         | 0                                          | 0                                          | 1876         | 0                                          | 0                                          | 0                                             | 1862         | 0                                          | 0                                          | 1689         | 2                                          | 2                                          | 2                                             | 1675         | 2                                          | 2                                          |
| MSP017upd  | 1154         | 11                                         | 11                                         | 1628         | 0                                          | 0                                          | 0                                             | 1623         | 0                                          | 0                                          | 1876         | 0                                          | 0                                          | 0                                             | 1862         | 0                                          | 0                                          | 1690         | 2                                          | 2                                          | 2                                             | 1676         | 2                                          | 2                                          |
| SP018upd   | 1160         | 11                                         | 11                                         | 1630         | 0                                          | 0                                          | 0                                             | 1625         | 0                                          | 0                                          | 1876         | 0                                          | 0                                          | 0                                             | 1862         | 0                                          | 0                                          | 1693         | 6                                          | 6                                          | 6                                             | 1680         | 6                                          | 6                                          |
| SP019upd   | 1161         | 11                                         | 11                                         | 1630         | 0                                          | 0                                          | 0                                             | 1625         | 0                                          | 0                                          | 1876         | 0                                          | 0                                          | 0                                             | 1862         | 0                                          | 0                                          | 1694         | 6                                          | 6                                          | 6                                             | 1680         | 6                                          | 6                                          |
| MSP010upd  | 1318         | 12                                         | 12                                         | 1775         | 7                                          | 7                                          | 7                                             | 1770         | 7                                          | 7                                          | 1988         | 11                                         | 11                                         | 11                                            | 1975         | 10                                         | 10                                         | 1861         | 16                                         | 16                                         | 16                                            | 1848         | 16                                         | 16                                         |
| MSP029upd  | 1104         | 16                                         | 16                                         | 1338         | 22                                         | 22                                         | 22                                            | 1333         | 22                                         | 22                                         | 1587         | 21                                         | 21                                         | 21                                            | 1573         | 20                                         | 20                                         | 1428         | 22                                         | 22                                         | 22                                            | 1415         | 21                                         | 21                                         |
| MSP031upd  | 1142         | 8                                          | 8                                          | 1336         | 10                                         | 10                                         | 10                                            | 1331         | 11                                         | 11                                         | 1572         | 9                                          | 9                                          | 9                                             | 1558         | 9                                          | 9                                          | 1440         | 10                                         | 10                                         | 10                                            | 1427         | 10                                         | 10                                         |
| MSP032upd  | 1154         | 14                                         | 14                                         | 1341         | 16                                         | 16                                         | 16                                            | 1336         | 16                                         | 16                                         | 1573         | 14                                         | 14                                         | 14                                            | 1559         | 14                                         | 14                                         | 1449         | 15                                         | 15                                         | 15                                            | 1436         | 15                                         | 15                                         |
| MSP033upd  | 1167         | 24                                         | 24                                         | 1344         | 26                                         | 26                                         | 26                                            | 1339         | 26                                         | 26                                         | 1572         | 25                                         | 25                                         | 25                                            | 1558         | 25                                         | 25                                         | 1456         | 26                                         | 26                                         | 26                                            | 1443         | 25                                         | 25                                         |
| MSP012upd  | 1171         | 8                                          | 8                                          | 1664         | 11                                         | 11                                         | 11                                            | 1659         | 12                                         | 12                                         | 1910         | 11                                         | 11                                         | 11                                            | 1896         | 6                                          | 6                                          | 1724         | 12                                         | 12                                         | 12                                            | 1711         | 11                                         | 11                                         |
| LCFP_B     | 1332         | 23                                         | 23                                         | 1620         | 22                                         | 22                                         | 22                                            | 1615         | 23                                         | 23                                         | 1810         | 22                                         | 22                                         | 22                                            | 1797         | 21                                         | 21                                         | 1740         | 24                                         | 24                                         | 24                                            | 1727         | 24                                         | 24                                         |
| LCFP_L     | 1505         | 18                                         | 18                                         | 1712         | 25                                         | 25                                         | 25                                            | 1707         | 25                                         | 25                                         | 1855         | 24                                         | 24                                         |                                               |              |                                            |                                            |              |                                            |                                            |                                               |              |                                            |                                            |

Table 4: Point of Reception Predicted Individual Source Sound Levels - Mitigated Normal Operations (Stationary Source)

| Source ID | OPOR020      |                                            |                                            | POR037       |                                            |                                            |                                               | OPOR037      |                                            |                                            | POR044       |                                            |                                            |                                               | OPOR044      |                                            |                                            | POR061       |                                            |                                            |                                               | OPOR061      |                                            |                                            |
|-----------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) |
| MSV004    | 1275 / 1276  | 0                                          | 0                                          | 1663 / 1664  | 0                                          | 0                                          | 0                                             | 1658 / 1659  | 0                                          | 0                                          | 1877 / 1877  | 0                                          | 0                                          | 0                                             | 1863 / 1863  | 0                                          | 0                                          | 1757 / 1758  | 0                                          | 0                                          | 0                                             | 1744 / 1745  | 0                                          | 0                                          |
| MSV005    | 1313 / 1317  | 0                                          | 0                                          | 1685 / 1687  | 0                                          | 0                                          | 0                                             | 1680 / 1682  | 0                                          | 0                                          | 1889 / 1890  | 0                                          | 0                                          | 0                                             | 1875 / 1876  | 0                                          | 0                                          | 1788 / 1790  | 0                                          | 0                                          | 0                                             | 1774 / 1777  | 0                                          | 0                                          |
| MSV006    | 1327 / 1331  | 0                                          | 0                                          | 1691 / 1693  | 0                                          | 0                                          | 0                                             | 1686 / 1688  | 0                                          | 0                                          | 1891 / 1892  | 0                                          | 0                                          | 0                                             | 1877 / 1878  | 0                                          | 0                                          | 1796 / 1799  | 0                                          | 0                                          | 0                                             | 1783 / 1786  | 0                                          | 0                                          |
| MSV007    | 1146 / 1147  | 0                                          | 0                                          | 1635 / 1636  | 0                                          | 0                                          | 0                                             | 1631 / 1632  | 0                                          | 0                                          | 1886 / 1888  | 0                                          | 0                                          | 0                                             | 1872 / 1874  | 0                                          | 0                                          | 1693 / 1694  | 0                                          | 0                                          | 0                                             | 1680 / 1680  | 0                                          | 0                                          |
| MSV008    | 1147 / 1148  | 0                                          | 0                                          | 1650 / 1651  | 0                                          | 0                                          | 0                                             | 1645 / 1646  | 0                                          | 0                                          | 1901 / 1903  | 0                                          | 0                                          | 0                                             | 1887 / 1889  | 0                                          | 0                                          | 1706 / 1706  | 0                                          | 0                                          | 0                                             | 1692 / 1693  | 0                                          | 0                                          |
| MSV009    | 1149 / 1153  | 17                                         | 17                                         | 1626 / 1627  | 0                                          | 0                                          | 0                                             | 1621 / 1622  | 0                                          | 0                                          | 1875 / 1876  | 0                                          | 0                                          | 0                                             | 1861 / 1862  | 0                                          | 0                                          | 1686 / 1689  | 8                                          | 8                                          | 8                                             | 1673 / 1675  | 8                                          | 8                                          |
| MSV010    | 1157 / 1158  | 15                                         | 15                                         | 1629 / 1629  | 0                                          | 0                                          | 0                                             | 1624 / 1624  | 0                                          | 0                                          | 1876 / 1876  | 0                                          | 0                                          | 0                                             | 1862 / 1862  | 0                                          | 0                                          | 1691 / 1692  | 8                                          | 8                                          | 8                                             | 1678 / 1679  | 8                                          | 8                                          |
| MSV011    | 1164 / 1168  | 20                                         | 20                                         | 1631 / 1633  | 0                                          | 0                                          | 0                                             | 1626 / 1628  | 0                                          | 0                                          | 1876 / 1877  | 15                                         | 15                                         | 15                                            | 1862 / 1863  | 14                                         | 14                                         | 1696 / 1698  | 19                                         | 19                                         | 19                                            | 1682 / 1685  | 18                                         | 18                                         |
| MSV012    | 1170 / 1172  | 0                                          | 0                                          | 1669 / 1670  | 0                                          | 0                                          | 0                                             | 1665 / 1665  | 0                                          | 0                                          | 1916 / 1916  | 0                                          | 0                                          | 0                                             | 1902 / 1902  | 0                                          | 0                                          | 1729 / 1730  | 0                                          | 0                                          | 0                                             | 1715 / 1716  | 0                                          | 0                                          |
| MSV013    | 1181 / 1183  | 0                                          | 0                                          | 1673 / 1674  | 0                                          | 0                                          | 0                                             | 1668 / 1669  | 0                                          | 0                                          | 1917 / 1917  | 0                                          | 0                                          | 0                                             | 1903 / 1903  | 0                                          | 0                                          | 1735 / 1736  | 0                                          | 0                                          | 0                                             | 1722 / 1723  | 0                                          | 0                                          |
| MSV014    | 1154 / 1157  | 0                                          | 0                                          | 1607 / 1608  | 0                                          | 0                                          | 0                                             | 1602 / 1603  | 0                                          | 0                                          | 1853 / 1853  | 0                                          | 0                                          | 0                                             | 1839 / 1839  | 0                                          | 0                                          | 1672 / 1674  | 0                                          | 0                                          | 0                                             | 1659 / 1661  | 0                                          | 0                                          |
| MSV015    | 1137 / 1141  | 0                                          | 0                                          | 1601 / 1602  | 0                                          | 0                                          | 0                                             | 1597 / 1598  | 0                                          | 0                                          | 1852 / 1852  | 0                                          | 0                                          | 0                                             | 1838 / 1838  | 0                                          | 0                                          | 1662 / 1664  | 0                                          | 0                                          | 0                                             | 1649 / 1651  | 0                                          | 0                                          |
| MSV016    | 1150 / 1154  | 0                                          | 0                                          | 1587 / 1588  | 0                                          | 0                                          | 0                                             | 1582 / 1583  | 0                                          | 0                                          | 1833 / 1833  | 0                                          | 0                                          | 0                                             | 1819 / 1819  | 0                                          | 0                                          | 1655 / 1657  | 0                                          | 0                                          | 0                                             | 1641 / 1643  | 0                                          | 0                                          |
| MSV017    | 1141 / 1145  | 0                                          | 0                                          | 1584 / 1585  | 0                                          | 0                                          | 0                                             | 1579 / 1580  | 0                                          | 0                                          | 1832 / 1832  | 0                                          | 0                                          | 0                                             | 1818 / 1818  | 0                                          | 0                                          | 1649 / 1651  | 2                                          | 2                                          | 2                                             | 1636 / 1638  | 2                                          | 2                                          |
| MSV018    | 1130 / 1134  | 0                                          | 0                                          | 1580 / 1582  | 4                                          | 4                                          | 4                                             | 1576 / 1577  | 4                                          | 4                                          | 1832 / 1832  | 6                                          | 6                                          | 6                                             | 1818 / 1818  | 5                                          | 5                                          | 1642 / 1645  | 11                                         | 11                                         | 11                                            | 1629 / 1631  | 9                                          | 9                                          |
| MSV019    | 1108 / 1112  | 14                                         | 14                                         | 1565 / 1566  | 14                                         | 14                                         | 14                                            | 1560 / 1561  | 14                                         | 14                                         | 1821 / 1822  | 10                                         | 10                                         | 10                                            | 1808 / 1808  | 9                                          | 9                                          | 1622 / 1624  | 8                                          | 8                                          | 8                                             | 1609 / 1611  | 8                                          | 8                                          |
| MSV022    | 1212 / 1218  | 0                                          | 0                                          | 1481 / 1483  | 8                                          | 8                                          | 8                                             | 1476 / 1478  | 8                                          | 8                                          | 1699 / 1699  | 18                                         | 18                                         | 18                                            | 1685 / 1686  | 18                                         | 18                                         | 1587 / 1591  | 19                                         | 19                                         | 19                                            | 1574 / 1578  | 18                                         | 18                                         |
| MSV023    | 1366 / 1370  | 0                                          | 0                                          | 1604 / 1606  | 0                                          | 0                                          | 0                                             | 1598 / 1601  | 0                                          | 0                                          | 1780 / 1781  | 0                                          | 0                                          | 0                                             | 1767 / 1768  | 0                                          | 0                                          | 1738 / 1741  | 0                                          | 0                                          | 0                                             | 1725 / 1728  | 0                                          | 0                                          |
| MSV024    | 1160 / 1210  | 19                                         | 19                                         | 1571 / 1587  | 22                                         | 22                                         | 22                                            | 1566 / 1582  | 22                                         | 22                                         | 1796 / 1830  | 20                                         | 20                                         | 20                                            | 1782 / 1816  | 19                                         | 19                                         | 1658 / 1661  | 22                                         | 22                                         | 22                                            | 1644 / 1648  | 22                                         | 22                                         |
| MSV025    | 1162 / 1210  | 18                                         | 18                                         | 1577 / 1591  | 21                                         | 21                                         | 21                                            | 1572 / 1586  | 21                                         | 21                                         | 1803 / 1833  | 18                                         | 18                                         | 18                                            | 1789 / 1819  | 19                                         | 19                                         | 1662 / 1666  | 21                                         | 21                                         | 21                                            | 1648 / 1653  | 20                                         | 20                                         |
| MSV027    | 1218 / 1218  | 1                                          | 1                                          | 1578 / 1579  | 0                                          | 0                                          | 0                                             | 1573 / 1574  | 0                                          | 0                                          | 1802 / 1803  | 0                                          | 0                                          | 0                                             | 1788 / 1789  | 0                                          | 0                                          | 1669 / 1670  | 7                                          | 7                                          | 7                                             | 1656 / 1657  | 7                                          | 7                                          |
| MSV028    | 1218 / 1220  | 0                                          | 0                                          | 1579 / 1580  | 0                                          | 0                                          | 0                                             | 1574 / 1575  | 0                                          | 0                                          | 1803 / 1803  | 0                                          | 0                                          | 0                                             | 1789 / 1789  | 0                                          | 0                                          | 1670 / 1671  | 0                                          | 0                                          | 0                                             | 1657 / 1658  | 0                                          | 0                                          |
| MSV029    | 1219 / 1219  | 0                                          | 0                                          | 1578 / 1579  | 0                                          | 0                                          | 0                                             | 1573 / 1574  | 0                                          | 0                                          | 1801 / 1803  | 0                                          | 0                                          | 0                                             | 1788 / 1789  | 0                                          | 0                                          | 1670 / 1671  | 0                                          | 0                                          | 0                                             | 1657 / 1658  | 0                                          | 0                                          |
| MSV030    | 1217 / 1218  | 4                                          | 4                                          | 1577 / 1578  | 4                                          | 4                                          | 4                                             | 1572 / 1573  | 4                                          | 4                                          | 1800 / 1802  | 0                                          | 0                                          | 0                                             | 1786 / 1788  | 0                                          | 0                                          | 1668 / 1669  | 11                                         | 11                                         | 11                                            | 1655 / 1656  | 10                                         | 10                                         |
| MSV031    | 1219 / 1219  | 0                                          | 0                                          | 1577 / 1578  | 0                                          | 0                                          | 0                                             | 1572 / 1573  | 0                                          | 0                                          | 1800 / 1801  | 0                                          | 0                                          | 0                                             | 1786 / 1788  | 0                                          | 0                                          | 1669 / 1670  | 0                                          | 0                                          | 0                                             | 1656 / 1657  | 0                                          | 0                                          |
| MSV032    | 1217 / 1217  | 17                                         | 17                                         | 1575 / 1576  | 17                                         | 17                                         | 17                                            | 1570 / 1572  | 17                                         | 17                                         | 1799 / 1800  | 0                                          | 0                                          | 0                                             | 1785 / 1786  | 0                                          | 0                                          | 1667 / 1668  | 21                                         | 21                                         | 21                                            | 1654 / 1655  | 21                                         | 21                                         |
| MSV033    | 1219 / 1219  | 2                                          | 2                                          | 1576 / 1577  | 2                                          | 2                                          | 2                                             | 1571 / 1572  | 3                                          | 3                                          | 1799 / 1800  | 0                                          | 0                                          | 0                                             | 1785 / 1787  | 0                                          | 0                                          | 1668 / 1669  | 2                                          | 2                                          | 2                                             | 1655 / 1656  | 2                                          | 2                                          |
| MSV034    | 1218 / 1219  | 8                                          | 8                                          | 1577 / 1577  | 18                                         | 18                                         | 18                                            | 1572 / 1573  | 18                                         | 18                                         | 1800 / 1801  | 0                                          | 0                                          | 0                                             | 1787 / 1787  | 0                                          | 0                                          | 1668 / 1669  | 18                                         | 18                                         | 18                                            | 1655 / 1656  | 17                                         | 17                                         |
| MSV035    | 1217 / 1219  | 17                                         | 17                                         | 1575 / 1576  | 2                                          | 2                                          | 2                                             | 1570 / 1571  | 3                                          | 3                                          | 1799 / 1799  | 0                                          | 0                                          | 0                                             | 1785 / 1785  | 0                                          | 0                                          | 1667 / 1668  | 1                                          | 1                                          | 1                                             | 1653 / 1654  | 1                                          | 1                                          |
| MSV036    | 1218 / 1218  | 4                                          | 4                                          | 1575 / 1575  | 0                                          | 0                                          | 0                                             | 1571 / 1571  | 0                                          | 0                                          | 1799 / 1799  | 0                                          | 0                                          | 0                                             | 1785 / 1785  | 0                                          | 0                                          | 1667 / 1667  | 0                                          | 0                                          | 0                                             | 1654 / 1654  | 0                                          | 0                                          |

**Table 5: Acoustic Assessment Summary - Overall Sound Levels - Mitigated Normal Operations (Stationary Source)**

| POR ID  | POR Description             | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Verified by Acoustic Audit | Daytime Performance Limit (dBA) | Evening Performance Limit (dBA) | Night-time Performance Limit (dBA) | Compliance with Performance Limit (Yes/No) |
|---------|-----------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|----------------------------|---------------------------------|---------------------------------|------------------------------------|--------------------------------------------|
| POR003  | POR 003 Elmbrook RD #57     | 41                                         | 34                                         | 33                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR003 | OPOR 003 Elmbrook RD #57    | 41                                         | 30                                         | 30                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR006  | M_POR 006 Elmbrook RD #134  | 40                                         | 32                                         | 32                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR006 | M_OPOR 006 Elmbrook RD #134 | 40                                         | 32                                         | 32                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR016  | M_POR 016                   | 40                                         | 39                                         | 39                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR016 | M_OPOR 016                  | 40                                         | 39                                         | 39                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR020  | M_POR 020                   | 41                                         | 37                                         | 36                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR020 | M_OPOR 020                  | 39                                         | 36                                         | 35                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR037  | M_POR 037                   | 42                                         | 40                                         | 40                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR037 | M_OPOR 037                  | 42                                         | 40                                         | 40                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR044  | M_POR 044                   | 41                                         | 39                                         | 39                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR044 | M_OPOR 044                  | 40                                         | 39                                         | 39                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR061  | M_POR 061                   | 42                                         | 40                                         | 40                                            | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR061 | M_OPOR 061                  | 42                                         | 39                                         | 39                                            | No                         | 45                              | 40                              | —                                  | Yes                                        |

Table 6: Point of Reception Predicted Individual Source Sound Levels - Emergency Generator

| Source ID | POR003       |                                            |                                            |                                               | OPOR003      |                                            |                                            | POR006       |                                            |                                            |                                               | OPOR006      |                                            |                                            | POR016       |                                            |                                            |                                               | OPOR016      |                                            |                                            | POR020       |                                            |                                            |                                               |
|-----------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) |
| GS001     | 1679         | 16                                         | —                                          | —                                             | 1662         | 16                                         | —                                          | 1539         | 17                                         | —                                          | —                                             | 1521         | 17                                         | —                                          | 1372         | 21                                         | —                                          | —                                             | 1342         | 21                                         | —                                          | 1357         | 35                                         | —                                          | —                                             |

Table 6: Point of Reception Predicted Individual Source Sound Levels - Emergency Generator

| Source ID | OPOR020      |                                            |                                            | POR037       |                                            |                                            |                                               | OPOR037      |                                            |                                            | POR044       |                                            |                                            |                                               | OPOR044      |                                            |                                            | POR061       |                                            |                                            |                                               | OPOR061      |                                            |                                            |
|-----------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) |
| GS001     | 1327         | 33                                         | —                                          | 1584         | 32                                         | —                                          | —                                             | 1578         | 32                                         | —                                          | 1772         | 45                                         | —                                          | —                                             | 1759         | 45                                         | —                                          | 1710         | 27                                         | —                                          | —                                             | 1697         | 26                                         | —                                          |

**Table 7: Acoustic Assessment Summary - Overall Sound Levels - Emergency Generator**

| POR ID  | POR Description             | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Verified by Acoustic Audit | Daytime Performance Limit (dBA) | Evening Performance Limit (dBA) | Night-time Performance Limit (dBA) | Compliance with Performance Limit (Yes/No) |
|---------|-----------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|----------------------------|---------------------------------|---------------------------------|------------------------------------|--------------------------------------------|
| POR003  | POR 003 Elmbrook RD #57     | 16                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR003 | OPOR 003 Elmbrook RD #57    | 16                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR006  | M_POR 006 Elmbrook RD #134  | 17                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR006 | M_OPOR 006 Elmbrook RD #134 | 17                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR016  | M_POR 016                   | 21                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR016 | M_OPOR 016                  | 21                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR020  | M_POR 020                   | 35                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR020 | M_OPOR 020                  | 33                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR037  | M_POR 037                   | 32                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR037 | M_OPOR 037                  | 32                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR044  | M_POR 044                   | 45                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR044 | M_OPOR 044                  | 45                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR061  | M_POR 061                   | 27                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR061 | M_OPOR 061                  | 26                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |

Table 8: Point of Reception Predicted Individual Source Sound Levels - Emergency Fire Pump

| Source ID | POR003       |                                            |                                            |                                               | OPOR003      |                                            |                                            | POR006       |                                            |                                            |                                               | OPOR006      |                                            |                                            | POR016       |                                            |                                            |                                               | OPOR016      |                                            |                                            | POR020       |                                            |                                            |                                               |
|-----------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) |
| FPS001    | 1827         | 23                                         | —                                          | —                                             | 1810         | 22                                         | —                                          | 1810         | 10                                         | —                                          | —                                             | 1792         | 10                                         | —                                          | 1899         | 12                                         | —                                          | —                                             | 1870         | 12                                         | —                                          | 874          | 34                                         | —                                          | —                                             |

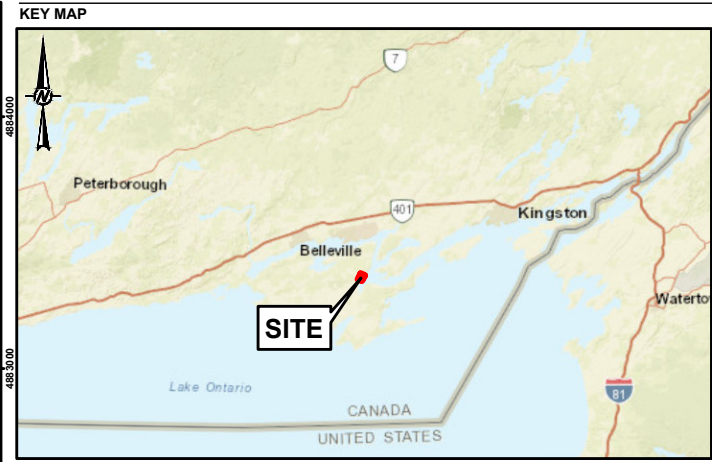
Table 8: Point of Reception Predicted Individual Source Sound Levels - Emergency Fire Pump

| Source ID | OPOR020      |                                            |                                            | POR037       |                                            |                                            |                                               | OPOR037      |                                            |                                            | POR044       |                                            |                                            |                                               | OPOR044      |                                            |                                            | POR061       |                                            |                                            |                                               | OPOR061      |                                            |                                            |
|-----------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|--------------|--------------------------------------------|--------------------------------------------|
|           | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Distance (m) | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) |
| FPS001    | 846          | 34                                         | —                                          | 1162         | 38                                         | —                                          | —                                             | 1156         | 39                                         | —                                          | 1504         | 33                                         | —                                          | —                                             | 1490         | 33                                         | —                                          | 1168         | 38                                         | —                                          | —                                             | 1154         | 38                                         | —                                          |

**Table 9: Acoustic Assessment Summary - Overall Sound Levels - Mitigated Emergency Fire Pump**

| POR ID  | POR Description             | Overall Daytime Sound Pressure Level (dBA) | Overall Evening Sound Pressure Level (dBA) | Overall Night-time Sound Pressure Level (dBA) | Verified by Acoustic Audit | Daytime Performance Limit (dBA) | Evening Performance Limit (dBA) | Night-time Performance Limit (dBA) | Compliance with Performance Limit (Yes/No) |
|---------|-----------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------------------|----------------------------|---------------------------------|---------------------------------|------------------------------------|--------------------------------------------|
| POR003  | POR 003 Elmbrook RD #57     | 23                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR003 | OPOR 003 Elmbrook RD #57    | 22                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR006  | M_POR 006 Elmbrook RD #134  | 10                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR006 | M_OPOR 006 Elmbrook RD #134 | 10                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR016  | M_POR 016                   | 12                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR016 | M_OPOR 016                  | 12                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR020  | M_POR 020                   | 34                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR020 | M_OPOR 020                  | 34                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR037  | M_POR 037                   | 38                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR037 | M_OPOR 037                  | 39                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR044  | M_POR 044                   | 33                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR044 | M_OPOR 044                  | 33                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |
| POR061  | M_POR 061                   | 38                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | 40                                 | Yes                                        |
| OPOR061 | M_OPOR 061                  | 38                                         | 0                                          | 0                                             | No                         | 45                              | 40                              | —                                  | Yes                                        |

## FIGURES



**LEGEND**

- POR LOCATION
- PROPERTY BOUNDARY
- ROADWAY
- WATERCOURSE
- WETLAND

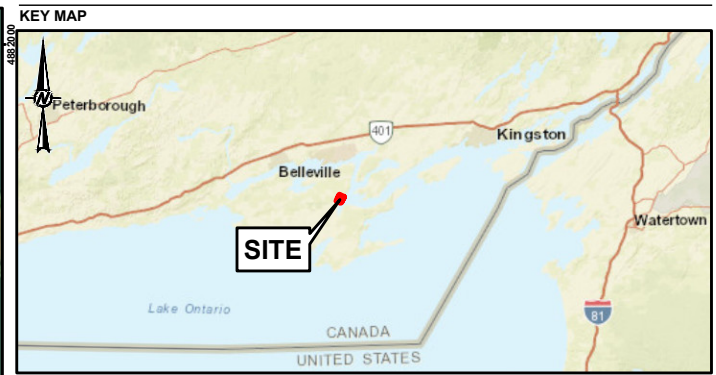
**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
1. PROPERTY BOUNDARY DIGITIZED FROM PRINCE EDWARD COUNTY PUBLIC GIS VIEWER.  
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2022  
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SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY  
4. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28



|                                                                                        |            |            |        |
|----------------------------------------------------------------------------------------|------------|------------|--------|
| CLIENT<br>LEHIGH HANSON MATERIALS LIMITED                                              |            |            |        |
| PROJECT<br>ACOUSTIC ASSESSMENT REPORT – LEHIGH HANSON, PICTON CEMENT PLANT, PICTON, ON |            |            |        |
| TITLE<br>SITE LOCATION PLAN                                                            |            |            |        |
| CONSULTANT                                                                             | YYYY-MM-DD | 2022-11-24 |        |
| DESIGNED                                                                               | ---        |            |        |
| PREPARED                                                                               | BR         |            |        |
| REVIEWED                                                                               | TN         |            |        |
| APPROVED                                                                               | JT         |            |        |
| PROJECT NO.                                                                            | CONTROL    | REV.       | FIGURE |
| 2148080301                                                                             | 0001       | 0          | 1      |





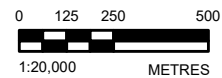
- LEGEND**
- POINT SOURCES
  - VERTICAL AREA SOURCES
  - LINE SOURCES
  - ROADWAY
  - WATERCOURSE
  - WETLAND
  - PROPERTY BOUNDARY
  - BUILDING
  - PROPOSED ALCF BUILDINGS

**NOTE(S)**

1. ALL LOCATIONS ARE APPROXIMATE

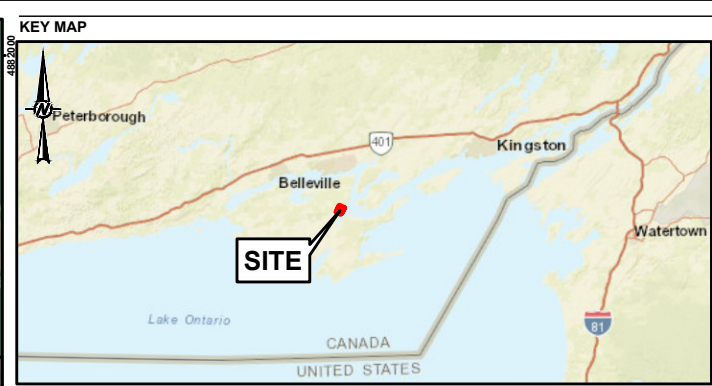
**REFERENCE(S)**

1. PROPERTY BOUNDARY DIGITIZED FROM PRINCE EDWARD COUNTY PUBLIC GIS VIEWER.  
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2022  
3. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
4. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28



|                                                                                        |            |            |        |
|----------------------------------------------------------------------------------------|------------|------------|--------|
| CLIENT<br>LEHIGH HANSON MATERIALS LIMITED                                              |            |            |        |
| PROJECT<br>ACOUSTIC ASSESSMENT REPORT – LEHIGH HANSON, PICTON CEMENT PLANT, PICTON, ON |            |            |        |
| TITLE<br>SITE LAYOUT PLAN                                                              |            |            |        |
| CONSULTANT                                                                             | YYYY-MM-DD | 2022-11-24 |        |
|                                                                                        | DESIGNED   | ---        |        |
|                                                                                        | PREPARED   | BR         |        |
|                                                                                        | REVIEWED   | TN         |        |
|                                                                                        | APPROVED   | JT         |        |
| PROJECT NO.                                                                            | CONTROL    | REV.       | FIGURE |
| 2148080301                                                                             | 0001       | 0          | 2      |



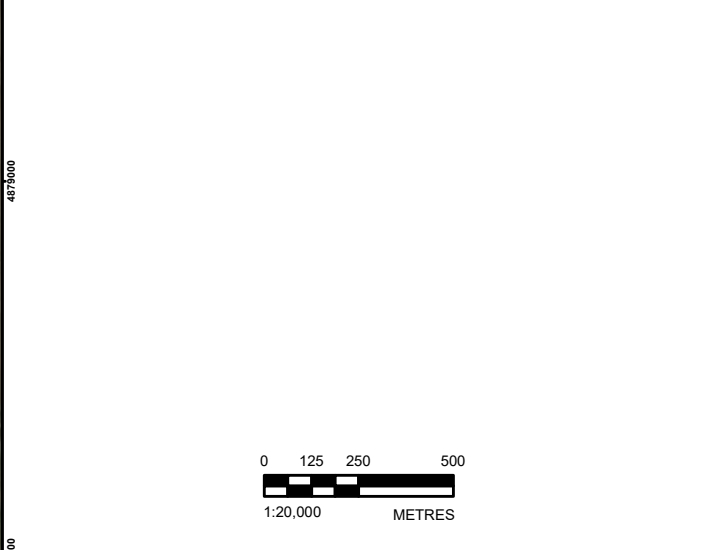


**LEGEND**

|                       |                         |
|-----------------------|-------------------------|
| POINT SOURCES         | BUILDING                |
| VERTICAL AREA SOURCES | PROPOSED ALCF BUILDINGS |
| BERMS                 |                         |
| ROADWAY               |                         |
| WATERCOURSE           |                         |
| WETLAND               |                         |
| PROPERTY BOUNDARY     |                         |

**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

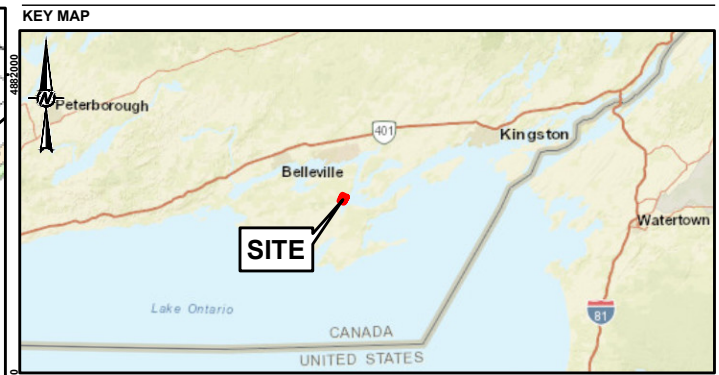
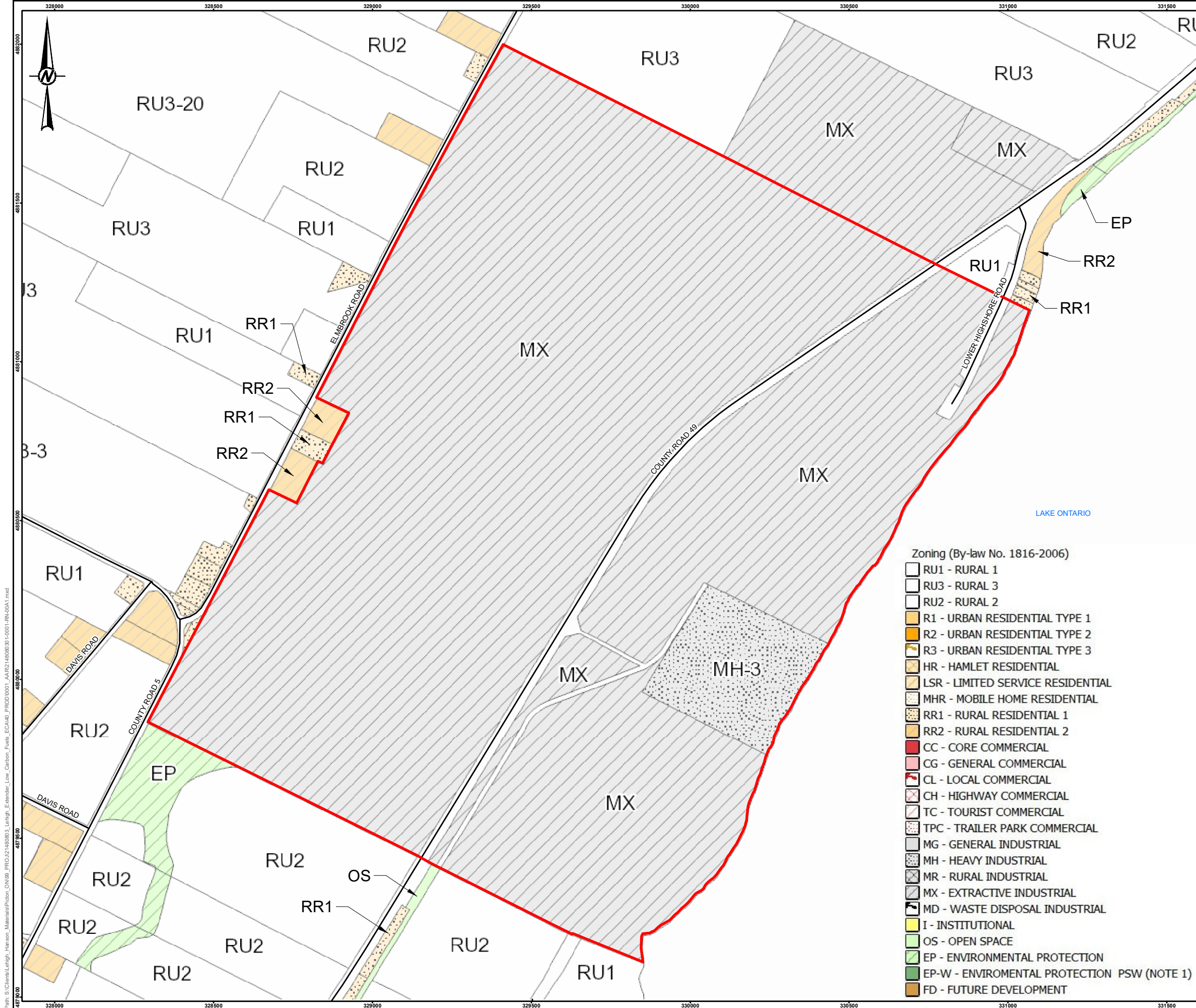
**REFERENCE(S)**  
1. PROPERTY BOUNDARY DIGITIZED FROM PRINCE EDWARD COUNTY PUBLIC GIS VIEWER.  
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEEN'S PRINTER 2022  
3. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
4. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28



|                                                                                        |            |            |
|----------------------------------------------------------------------------------------|------------|------------|
| CLIENT<br>LEHIGH HANSON MATERIALS LIMITED                                              |            |            |
| PROJECT<br>ACOUSTIC ASSESSMENT REPORT – LEHIGH HANSON, PICTON CEMENT PLANT, PICTON, ON |            |            |
| TITLE<br>MITIGATION                                                                    |            |            |
| CONSULTANT                                                                             | YYYY-MM-DD | 2022-11-24 |
|                                                                                        | DESIGNED   | ---        |
|                                                                                        | PREPARED   | BR         |
|                                                                                        | REVIEWED   | TN         |
|                                                                                        | APPROVED   | JT         |
| PROJECT NO.                                                                            | CONTROL    | REV.       |
| 2148080301                                                                             | 0001       | 0          |
|                                                                                        |            | FIGURE     |
|                                                                                        |            | 3          |

**APPENDIX A**

# Zoning/Land Use Designation



**LEGEND**

PROPERTY BOUNDARY

ROADWAY

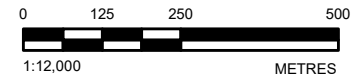
**NOTE(S)**

1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**

1. PROPERTY BOUNDARY DIGITIZED FROM PRINCE EDWARD COUNTY PUBLIC GIS VIEWER.  
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2022  
3. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
4. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

- Zoning (By-law No. 1816-2006)
- RU1 - RURAL 1
  - RU3 - RURAL 3
  - RU2 - RURAL 2
  - R1 - URBAN RESIDENTIAL TYPE 1
  - R2 - URBAN RESIDENTIAL TYPE 2
  - R3 - URBAN RESIDENTIAL TYPE 3
  - HR - HAMLET RESIDENTIAL
  - LSR - LIMITED SERVICE RESIDENTIAL
  - MHR - MOBILE HOME RESIDENTIAL
  - RR1 - RURAL RESIDENTIAL 1
  - RR2 - RURAL RESIDENTIAL 2
  - CC - CORE COMMERCIAL
  - CG - GENERAL COMMERCIAL
  - CL - LOCAL COMMERCIAL
  - CH - HIGHWAY COMMERCIAL
  - TC - TOURIST COMMERCIAL
  - TPC - TRAILER PARK COMMERCIAL
  - MG - GENERAL INDUSTRIAL
  - MH - HEAVY INDUSTRIAL
  - MR - RURAL INDUSTRIAL
  - MX - EXTRACTIVE INDUSTRIAL
  - MD - WASTE DISPOSAL INDUSTRIAL
  - I - INSTITUTIONAL
  - OS - OPEN SPACE
  - EP - ENVIRONMENTAL PROTECTION
  - EP-W - ENVIROMENTAL PROTECTION PSW (NOTE 1)
  - FD - FUTURE DEVELOPMENT



|                                                                                        |         |            |            |
|----------------------------------------------------------------------------------------|---------|------------|------------|
| CLIENT<br>LEHIGH HANSON MATERIALS LIMITED                                              |         |            |            |
| PROJECT<br>ACOUSTIC ASSESSMENT REPORT – LEHIGH HANSON, PICTON CEMENT PLANT, PICTON, ON |         |            |            |
| TITLE<br>LAND USE ZONING DESIGNATION PLAN                                              |         |            |            |
| CONSULTANT                                                                             |         | YYYY-MM-DD | 2022-11-24 |
|                                                                                        |         | DESIGNED   | ---        |
|                                                                                        |         | PREPARED   | BR         |
|                                                                                        |         | REVIEWED   | TN         |
|                                                                                        |         | APPROVED   | JT         |
| PROJECT NO.                                                                            | CONTROL | REV.       | FIGURE     |
| 2148080301                                                                             | 0001    | 0          | A1         |

**APPENDIX B**

# Description of Technical Terms

## DESCRIPTION OF TECHNICAL TERMS

To help understand the analysis and recommendations made in this report, the following is a brief discussion of technical noise terms.

Sound pressure level is expressed on a logarithmic scale in units of decibels (dB). Since the scale is logarithmic, a sound that is twice the sound pressure level as another will be three decibels (3 dB) higher.

The noise data and analysis in this report have been given in terms of frequency distribution. The levels are grouped into octave bands. Typically, the centre frequencies for each octave band are 31.5, 63, 125, 250, 500, 1000, 2000, 4000 and 8000 Hertz (Hz.). The human ear responds to the pressure variations in the atmosphere that reach the ear drum. These pressure variations are composed of different frequencies that give each sound we hear its unique character.

It is common practice to sum sound levels over the entire audible spectrum (i.e., 20 Hz to 20 kHz) to give an overall sound level. However, to approximate the hearing response of humans, each octave band measured has a weighting applied to it. The resulting “A-weighted” sound level is often used as a criterion to indicate a maximum allowable sound level. In general, low frequencies are weighted higher, as human hearing is less sensitive to low frequency sound.

Environmental noise levels vary over time, and are described using an overall sound level known as the  $L_{eq}$ , or energy averaged sound level. The  $L_{eq}$  is the equivalent continuous sound level, which in a stated time, and at a stated location, has the same energy as the time varying noise level. It is common practice to measure  $L_{eq}$  sound levels in order to obtain a representative average sound level. The  $L_{90}$  is defined as the sound level exceeded for 90% of the time and is used as an indicator of the “ambient” noise level.

**APPENDIX C**

# Noise Source Data

## Noise Source Data

| Name                                                                 | ID        | Type | Octave Spectrum (dB) |     |     |     |     |      |      |      |      |     |     |
|----------------------------------------------------------------------|-----------|------|----------------------|-----|-----|-----|-----|------|------|------|------|-----|-----|
|                                                                      |           |      | 31.5                 | 63  | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | A   | lin |
| Primary Crusher<br>Dust Collector                                    | PC_DC_5_7 | Lw   | 95                   | 96  | 95  | 93  | 95  | 90   | 88   | 91   | 90   | 98  | 103 |
| Hammermill / FAM                                                     | S008      | Lw   | 124                  | 126 | 117 | 111 | 112 | 112  | 110  | 106  | 97   | 117 | 129 |
| Screen House                                                         | S009      | Li   | 94                   | 97  | 93  | 96  | 90  | 82   | 81   | 76   | 69   | 92  | 102 |
| Blend Silo 2                                                         | S010      | Lw   | 93                   | 99  | 99  | 116 | 92  | 87   | 82   | 77   | 70   | 107 | 116 |
| Blend Silo 3                                                         | BS3_5_11  | Lw   | 92                   | 91  | 96  | 91  | 81  | 78   | 85   | 98   | 83   | 100 | 102 |
| Blend Silo 4 (#3 Kiln<br>Feed)                                       | S012      | Lw   | 97                   | 101 | 103 | 113 | 93  | 94   | 86   | 79   | 73   | 105 | 114 |
| Blend Silo 6                                                         | S013      | Lw   | 90                   | 97  | 109 | 89  | 81  | 77   | 74   | 73   | 72   | 94  | 110 |
| Dock Silo 1                                                          | DS1_fan   | Lw   | 93                   | 95  | 95  | 86  | 78  | 78   | 80   | 79   | 72   | 87  | 100 |
| Dock Silo 2                                                          | DS2_fan   | Lw   | 92                   | 93  | 95  | 92  | 86  | 87   | 85   | 83   | 78   | 92  | 100 |
| Dock Silo 3                                                          | DS3_fan   | Lw   | 95                   | 95  | 102 | 102 | 100 | 96   | 92   | 86   | 80   | 102 | 107 |
| Dock Silo 4                                                          | DS4_fan   | Lw   | 98                   | 91  | 99  | 100 | 95  | 93   | 88   | 84   | 75   | 98  | 105 |
| Indirect Firing - Coal<br>Silo - South<br>Pulverizing D/C<br>exhaust | S032      | Lw   | 85                   | 103 | 97  | 99  | 98  | 86   | 83   | 79   | 75   | 97  | 106 |
| Indirect Firing -<br>Coke Silo - North<br>Pulverizing D/C<br>exhaust | S033      | Lw   | 86                   | 99  | 100 | 98  | 96  | 88   | 84   | 77   | 71   | 96  | 105 |
| Blend Silo 5                                                         | S041      | Lw   | 87                   | 90  | 95  | 105 | 87  | 84   | 79   | 74   | 67   | 97  | 106 |
| Pan conveyor                                                         | S043      | Lw   | 117                  | 116 | 115 | 110 | 109 | 110  | 109  | 104  | 101  | 115 | 122 |
| S-2 to Crushed<br>Limestone<br>Conveyor                              | S051      | Lw   | 111                  | 112 | 108 | 105 | 103 | 101  | 98   | 94   | 89   | 106 | 116 |
| Kiln 3 Stack with<br>baghouse                                        | S055      | Lw   | 102                  | 96  | 91  | 88  | 89  | 77   | 73   | 69   | 67   | 88  | 104 |
| Kiln 4 Stack with<br>ESPs                                            | S056      | Lw   | 102                  | 96  | 91  | 88  | 89  | 77   | 73   | 69   | 67   | 88  | 104 |
| Loader - quarry                                                      | S060      | Lw   | 113                  | 117 | 116 | 114 | 110 | 106  | 106  | 102  | 96   | 113 | 122 |
| Haul Truck - quarry                                                  | S061      | Lw   | 112                  | 114 | 117 | 115 | 112 | 111  | 109  | 103  | 97   | 116 | 122 |
| Heat exchanger (16<br>fans)                                          | S062      | Lw   | 92                   | 90  | 95  | 85  | 82  | 76   | 77   | 72   | 75   | 85  | 98  |

## Noise Source Data

| Name                                 | ID          | Type | Octave Spectrum (dB) |     |     |     |     |      |      |      |      |     |     |
|--------------------------------------|-------------|------|----------------------|-----|-----|-----|-----|------|------|------|------|-----|-----|
|                                      |             |      | 31.5                 | 63  | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | A   | lin |
| Blend Silo compressors - Double door | S063        | Lw   | 77                   | 90  | 89  | 88  | 101 | 96   | 103  | 96   | 97   | 106 | 107 |
| Blend Silo compressors – Louver 1    | Comp_louver | Lw   | 91                   | 96  | 95  | 92  | 83  | 83   | 88   | 87   | 80   | 93  | 101 |
| Blend Silo compressors – Louver 2    | Comp_louver | Lw   | 91                   | 96  | 95  | 92  | 83  | 83   | 88   | 87   | 80   | 93  | 101 |
| Blend Silo compressors – Louver 3    | Comp_louver | Lw   | 91                   | 96  | 95  | 92  | 83  | 83   | 88   | 87   | 80   | 93  | 101 |
| Blend Silo compressors – Louver 4    | Comp_louver | Lw   | 91                   | 96  | 95  | 92  | 83  | 83   | 88   | 87   | 80   | 93  | 101 |
| Blend Silo compressors - Baydoor     | S070        | Lw   | 77                   | 89  | 88  | 88  | 93  | 91   | 91   | 85   | 84   | 97  | 99  |
| Blend Silo compressors - Baydoor     | S071        | Lw   | 77                   | 91  | 88  | 86  | 86  | 81   | 81   | 72   | 68   | 88  | 95  |
| Blend Silo compressors - Baydoor     | S072        | Lw   | 75                   | 88  | 97  | 86  | 88  | 84   | 84   | 77   | 77   | 91  | 99  |
| Blend Silo compressors - Baydoor     | S073        | Lw   | 85                   | 90  | 100 | 84  | 82  | 76   | 74   | 66   | 61   | 86  | 101 |
| Ball Mill - Door A                   | S074        | Lw   | 82                   | 90  | 92  | 84  | 84  | 82   | 80   | 76   | 69   | 87  | 95  |
| Ball Mill - Door B                   | S075        | Lw   | 81                   | 89  | 88  | 83  | 83  | 81   | 77   | 71   | 59   | 85  | 93  |
| Ball Mill - Door C                   | S076        | Lw   | 84                   | 90  | 90  | 84  | 84  | 82   | 77   | 72   | 60   | 86  | 95  |
| Ball Mill - Door D                   | S077        | Lw   | 75                   | 77  | 90  | 80  | 85  | 85   | 78   | 78   | 66   | 88  | 93  |
| Packaging Silo - dust collector      | PS_DC5_19   | Lw   | 104                  | 102 | 122 | 112 | 97  | 86   | 83   | 80   | 76   | 108 | 123 |
| Heat exchanger - Emergency generator | S081        | Lw   | 106                  | 110 | 117 | 111 | 114 | 111  | 109  | 104  | 98   | 116 | 121 |

## Noise Source Data

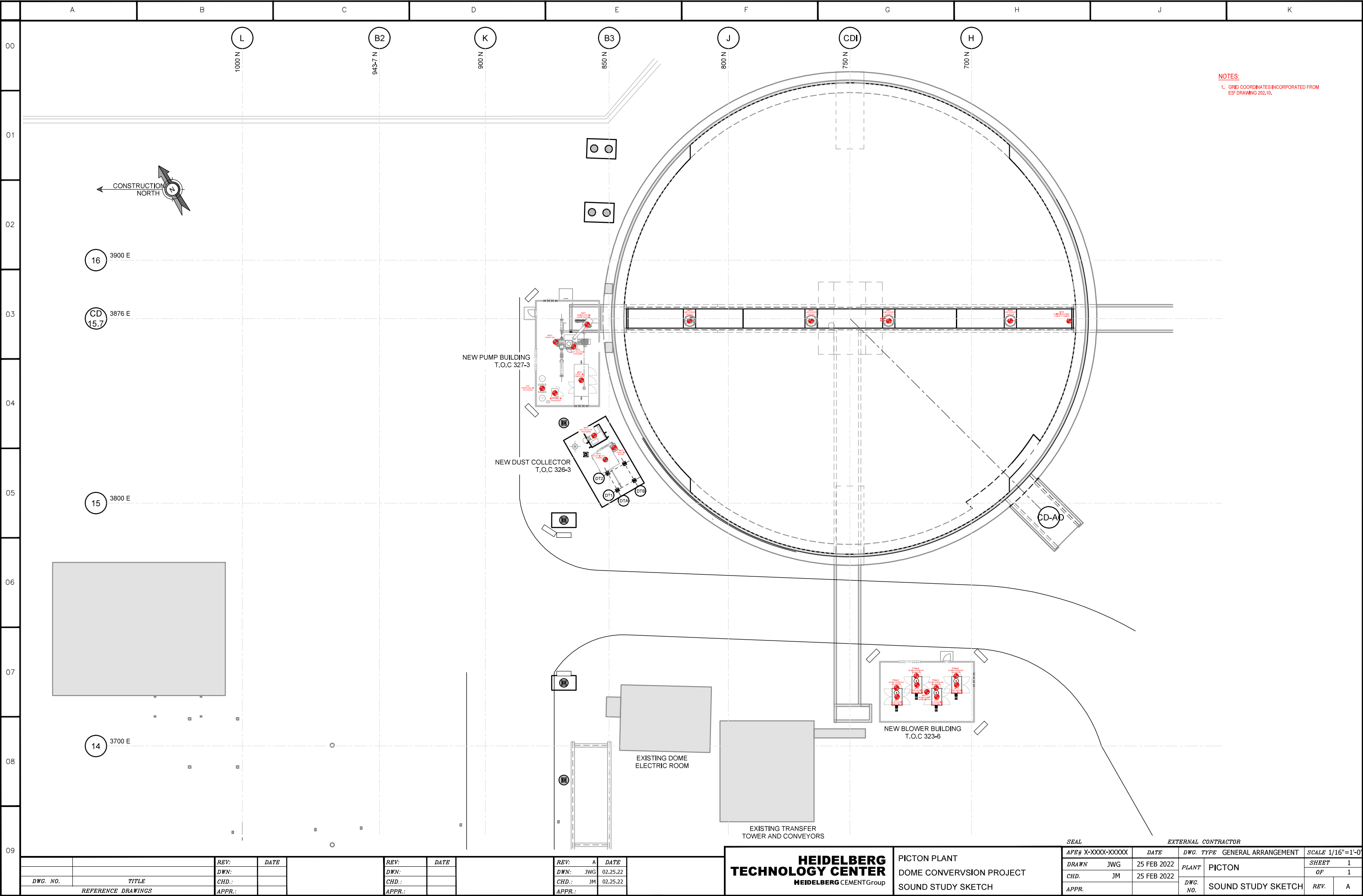
| Name                                        | ID   | Type | Octave Spectrum (dB) |     |     |     |     |      |      |      |      |     |     |
|---------------------------------------------|------|------|----------------------|-----|-----|-----|-----|------|------|------|------|-----|-----|
|                                             |      |      | 31.5                 | 63  | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | A   | lin |
| Emergency water pump (2 stacks and louver)  | S082 | Lw   | 95                   | 111 | 103 | 102 | 99  | 101  | 97   | 92   | 89   | 104 | 113 |
| Kiln 4 - Shell fans                         | S083 | Lw   | 94                   | 97  | 98  | 95  | 95  | 92   | 91   | 87   | 80   | 98  | 104 |
| Loesch Bldg - Baydoor 1                     | S084 | Lw   | 91                   | 89  | 84  | 87  | 84  | 84   | 83   | 82   | 79   | 90  | 96  |
| Loesch Bldg - Baydoor 2                     | S085 | Lw   | 87                   | 87  | 85  | 87  | 81  | 78   | 79   | 79   | 73   | 86  | 93  |
| Loesch Bldg - Baydoor 3                     | S086 | Lw   | 87                   | 84  | 81  | 83  | 79  | 76   | 75   | 75   | 71   | 83  | 91  |
| Loesch Bldg - Baydoor 4                     | S087 | Lw   | 91                   | 87  | 84  | 88  | 83  | 83   | 83   | 83   | 79   | 90  | 95  |
| Loesch Bldg - Baydoor 5                     | S088 | Lw   | 91                   | 92  | 88  | 101 | 85  | 81   | 87   | 90   | 82   | 96  | 102 |
| Loesch Bldg - Cooling radiator              | S089 | Lw   | 100                  | 99  | 103 | 104 | 104 | 101  | 99   | 96   | 90   | 107 | 111 |
| Loesch Bldg - Compressor door               | S090 | Lw   | 78                   | 86  | 95  | 92  | 91  | 96   | 99   | 96   | 88   | 103 | 103 |
| Loesch Bldg - Precipitator rapper opening 2 | S092 | Lw   | 93                   | 89  | 86  | 84  | 79  | 77   | 81   | 87   | 92   | 93  | 98  |
| Main Stack - motor                          | S093 | Lw   | 104                  | 106 | 105 | 102 | 100 | 102  | 97   | 96   | 88   | 105 | 112 |
| South Fan - motor                           | S094 | Li   | 92                   | 94  | 93  | 90  | 85  | 82   | 86   | 83   | 80   | 91  | 99  |
| South Fan - connection                      | S095 | Li   | 94                   | 96  | 97  | 98  | 96  | 92   | 92   | 93   | 92   | 100 | 104 |
| South Fan - ductwork upper                  | S096 | Li   | 96                   | 94  | 91  | 88  | 79  | 74   | 72   | 70   | 65   | 83  | 99  |
| South Fan - fan bearing                     | S097 | Li   | 91                   | 93  | 96  | 97  | 96  | 93   | 91   | 101  | 99   | 104 | 106 |
| South Fan - duct work - ground              | S098 | Li   | 93                   | 98  | 93  | 93  | 87  | 84   | 82   | 82   | 79   | 91  | 101 |
| North Fan - ductwork upper                  | S100 | Li   | 97                   | 93  | 91  | 91  | 79  | 76   | 72   | 68   | 64   | 85  | 100 |
| North Fan - sources                         | S102 | Lw   | 112                  | 112 | 111 | 111 | 103 | 100  | 101  | 102  | 100  | 109 | 118 |
| Preheat tower - south side opening          | S104 | Lw   | 87                   | 85  | 85  | 82  | 78  | 73   | 70   | 66   | 56   | 80  | 91  |

## Noise Source Data

| Name                                             | ID   | Type | Octave Spectrum (dB) |     |     |     |     |      |      |      |      |     |     |
|--------------------------------------------------|------|------|----------------------|-----|-----|-----|-----|------|------|------|------|-----|-----|
|                                                  |      |      | 31.5                 | 63  | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | A   | lin |
| Preheat tower - south side opening               | S105 | Lw   | 87                   | 85  | 85  | 82  | 78  | 73   | 70   | 66   | 56   | 80  | 91  |
| Preheat tower - south side opening               | S106 | Lw   | 87                   | 85  | 85  | 82  | 78  | 73   | 70   | 66   | 56   | 80  | 91  |
| Preheat tower - south side opening               | S107 | Lw   | 87                   | 85  | 85  | 82  | 78  | 73   | 70   | 66   | 56   | 80  | 91  |
| Preheat tower - south side opening               | S108 | Lw   | 87                   | 85  | 85  | 82  | 78  | 73   | 70   | 66   | 56   | 80  | 91  |
| Compressor - shore - louver                      | S109 | Lw   | 73                   | 77  | 88  | 87  | 88  | 85   | 83   | 79   | 75   | 91  | 94  |
| Compressor - shore - door                        | S110 | Lw   | 77                   | 81  | 87  | 87  | 88  | 84   | 81   | 76   | 71   | 89  | 93  |
| Compressor - shore - double door                 | S111 | Lw   | 77                   | 79  | 88  | 89  | 90  | 86   | 83   | 79   | 75   | 91  | 95  |
| Ball Mill 7 - outside                            | S112 | Lw   | 120                  | 121 | 121 | 115 | 113 | 114  | 114  | 109  | 102  | 120 | 127 |
| Kiln 4 - Fan 1                                   | S113 | Lw   | 120                  | 116 | 119 | 115 | 113 | 111  | 107  | 107  | 96   | 116 | 125 |
| Kiln 4 - Fan 2                                   | S114 | Lw   | 113                  | 115 | 115 | 113 | 112 | 108  | 103  | 98   | 91   | 113 | 121 |
| Kiln 4 - Fan 3                                   | S115 | Lw   | 118                  | 117 | 115 | 116 | 111 | 108  | 107  | 105  | 95   | 115 | 123 |
| Kiln 4 - Fan 4                                   | S116 | Lw   | 107                  | 110 | 110 | 107 | 103 | 100  | 98   | 94   | 88   | 106 | 115 |
| Kiln 4 - Fan 5                                   | S117 | Lw   | 112                  | 114 | 113 | 110 | 104 | 100  | 98   | 95   | 87   | 107 | 119 |
| Kiln 4 - Fan 7                                   | S119 | Lw   | 106                  | 109 | 107 | 105 | 100 | 97   | 95   | 90   | 83   | 103 | 113 |
| Kiln 4 - Fan 8                                   | S120 | Lw   | 106                  | 109 | 107 | 102 | 99  | 96   | 92   | 87   | 81   | 101 | 113 |
| 1792 Loesch Feed - openings                      | S121 | Lw   | 83                   | 84  | 83  | 82  | 82  | 84   | 86   | 84   | 78   | 91  | 93  |
| Coal system - Baydoor                            | S123 | Li   | 82                   | 84  | 81  | 80  | 79  | 79   | 93   | 80   | 69   | 95  | 95  |
| Coal system - Schenck blower - 2nd floor opening | S124 | Lw   | 83                   | 85  | 90  | 95  | 90  | 85   | 83   | 80   | 73   | 92  | 98  |
| Kiln 4 - Blue fan                                | S127 | Lw   | 97                   | 100 | 99  | 106 | 102 | 102  | 97   | 90   | 84   | 106 | 110 |
| Ship Genset (2000 kW)                            | S700 | Lw   | 0                    | 71  | 89  | 85  | 86  | 88   | 92   | 95   | 93   | 99  | 99  |
| Ship Genset (300 kW)                             | S701 | Lw   | 0                    | 64  | 78  | 76  | 61  | 78   | 77   | 81   | 80   | 86  | 86  |
| Mill Fans                                        | S800 | Lw   | 0                    | 132 | 129 | 124 | 112 | 106  | 102  | 102  | 96   | 119 | 134 |

## Noise Source Data

| Name                                           | ID            | Type | Octave Spectrum (dB) |     |     |     |     |      |      |      |      |     |     |
|------------------------------------------------|---------------|------|----------------------|-----|-----|-----|-----|------|------|------|------|-----|-----|
|                                                |               |      | 31.5                 | 63  | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | A   | lin |
| Mill 10                                        | S900          | Lw   | 114                  | 115 | 115 | 110 | 108 | 109  | 108  | 104  | 97   | 114 | 121 |
| Coal drop point                                | S998          | Lw   | 117                  | 117 | 118 | 111 | 118 | 115  | 107  | 98   | 90   | 119 | 125 |
| Highway truck                                  | S999          | Lw   | 106                  | 106 | 100 | 94  | 96  | 99   | 93   | 85   | 79   | 101 | 110 |
| Substation                                     | TS001         | Lw   | 92                   | 98  | 100 | 95  | 95  | 81   | 84   | 79   | 72   | 94  | 104 |
| Low carbon fuel project blower                 | LCFP_B        | Lw   | 93                   | 93  | 103 | 103 | 104 | 99   | 95   | 89   | 79   | 105 | 109 |
| Low carbon fuel project loader                 | LCFP_L        | Lw   | 106                  | 110 | 108 | 101 | 103 | 104  | 99   | 92   | 86   | 107 | 114 |
| Low carbon fuel project transport truck idling | LCFP_TI       | Lw   | 109                  | 110 | 108 | 102 | 101 | 97   | 94   | 89   | 86   | 103 | 115 |
| Low carbon fuel project truck unloading        | LCFP_TU       | Lw   | 97                   | 95  | 108 | 102 | 102 | 100  | 98   | 93   | 87   | 105 | 111 |
| Low carbon fuel project screen                 | LCFP_S        | Lw   | 102                  | 106 | 107 | 101 | 102 | 101  | 101  | 97   | 91   | 107 | 112 |
| Low carbon fuel project metal reject bin       | LCFP_MRB      | Lw   | 108                  | 109 | 108 | 106 | 114 | 115  | 116  | 109  | 102  | 120 | 121 |
| Cement dome project BU 323-6 louver            | CD_BU323_6_L  | Lw   | 101                  | 98  | 107 | 107 | 107 | 101  | 96   | 89   | 79   | 107 | 113 |
| Cement dome BU 327-3 louver south              | CD_BU327_3_LS | Lw   | 118                  | 115 | 108 | 100 | 99  | 98   | 98   | 92   | 84   | 104 | 120 |
| Cement dome BU 327-3 louver north              | CD_BU327_3_LN | Lw   | 118                  | 115 | 108 | 100 | 99  | 98   | 98   | 91   | 84   | 104 | 120 |
| Cement dome dust collector                     | CD_DC         | Lw   | 116                  | 116 | 110 | 99  | 97  | 90   | 91   | 82   | 68   | 100 | 119 |
| Cement Dome Conversion outdoor blower          | CDC_B         | Lw   | 91                   | 91  | 101 | 101 | 102 | 97   | 93   | 87   | 77   | 102 | 107 |



NOTES:  
1. GRID COORDINATES INCORPORATED FROM  
ESP DRAWING 202.10.

|  |  | SEAL     |                    | EXTERNAL CONTRACTOR |                     |                    |                   |
|--|--|----------|--------------------|---------------------|---------------------|--------------------|-------------------|
|  |  | AFE#     | DATE               | DWG. TYPE           | GENERAL ARRANGEMENT |                    | SCALE 1/16"=1'-0" |
|  |  | DRAWN    | JWG                | 25 FEB 2022         | PLANT               | PICTON             | SHEET 1           |
|  |  | CHD.     | JM                 | 25 FEB 2022         | DWG. NO.            | SOUND STUDY SKETCH | OF 1              |
|  |  | APPR.    |                    |                     |                     |                    | REV. A            |
|  |  | REV.     | DATE               | REV.                | DATE                | REV.               | DATE              |
|  |  | DWN:     | JWG                | DWN:                | 02.25.22            | CHD.:              |                   |
|  |  | CHD.:    | JM                 | CHD.:               | 02.25.22            | APPR.:             |                   |
|  |  | APPR.:   |                    | APPR.:              |                     | APPR.:             |                   |
|  |  | DWG. NO. | TITLE              | REV.                | DATE                | REV.               | DATE              |
|  |  |          | REFERENCE DRAWINGS |                     |                     |                    |                   |

**HEIDELBERG  
TECHNOLOGY CENTER**  
HEIDELBERG CEMENT Group

PICTON PLANT  
DOME CONVERSVION PROJECT  
SOUND STUDY SKETCH

00

NOTES:  
A. 3D VIEW DOES NOT SHOW ALL INFORMATION, SEE GSN, PLANS, ELEVATIONS, AND DETAILS FOR ADDITIONAL REQUIREMENTS  
B. FOR CLARITY, SOME ITEMS ARE HIDDEN IN VIEW  
3D VIEW IS SCHEMATIC ONLY  
NOTE: SEE OWNER SPECIFICATIONS FOR ALL PAINTING AND COATING REQUIREMENTS

01

02

03

04

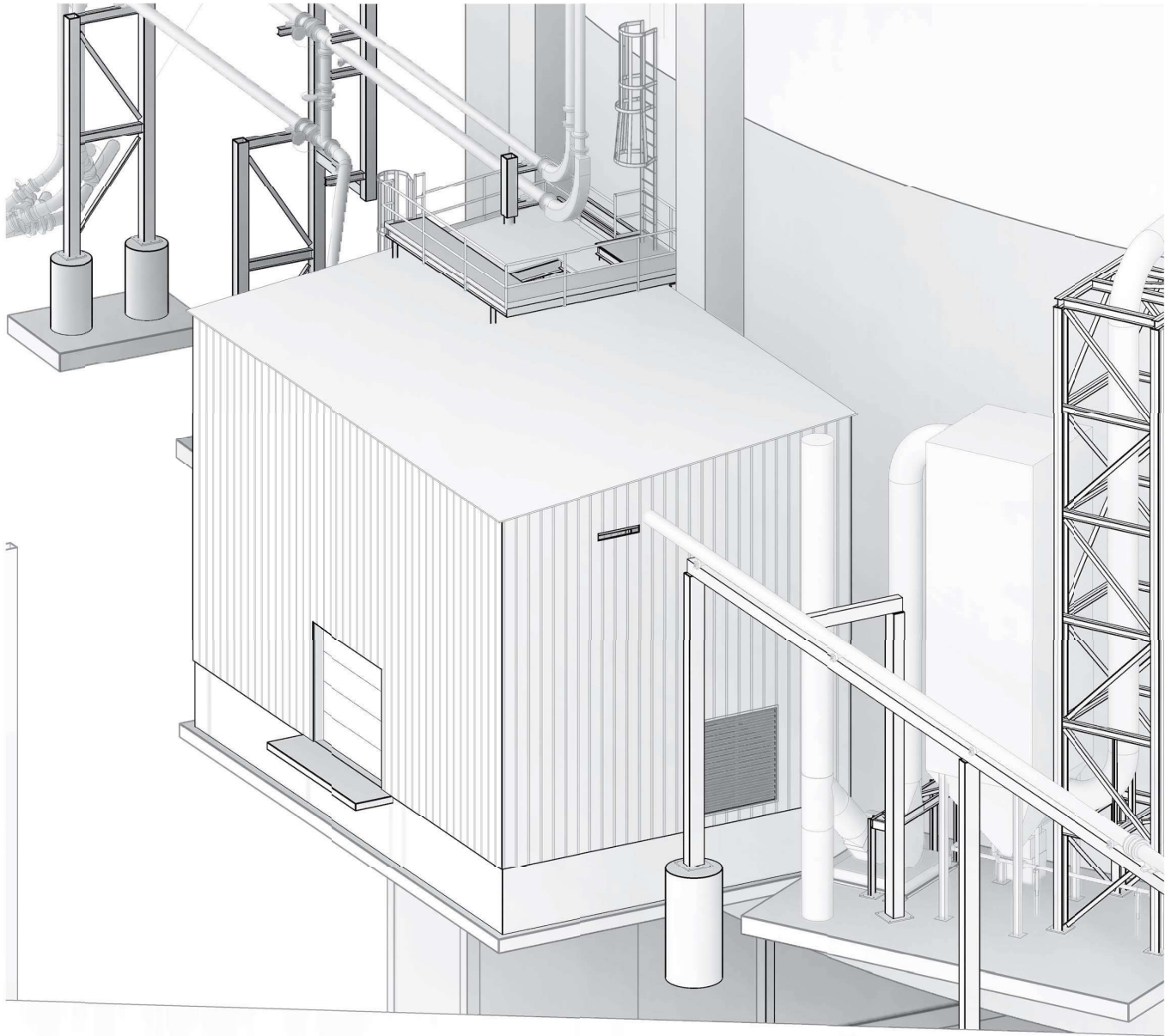
05

06

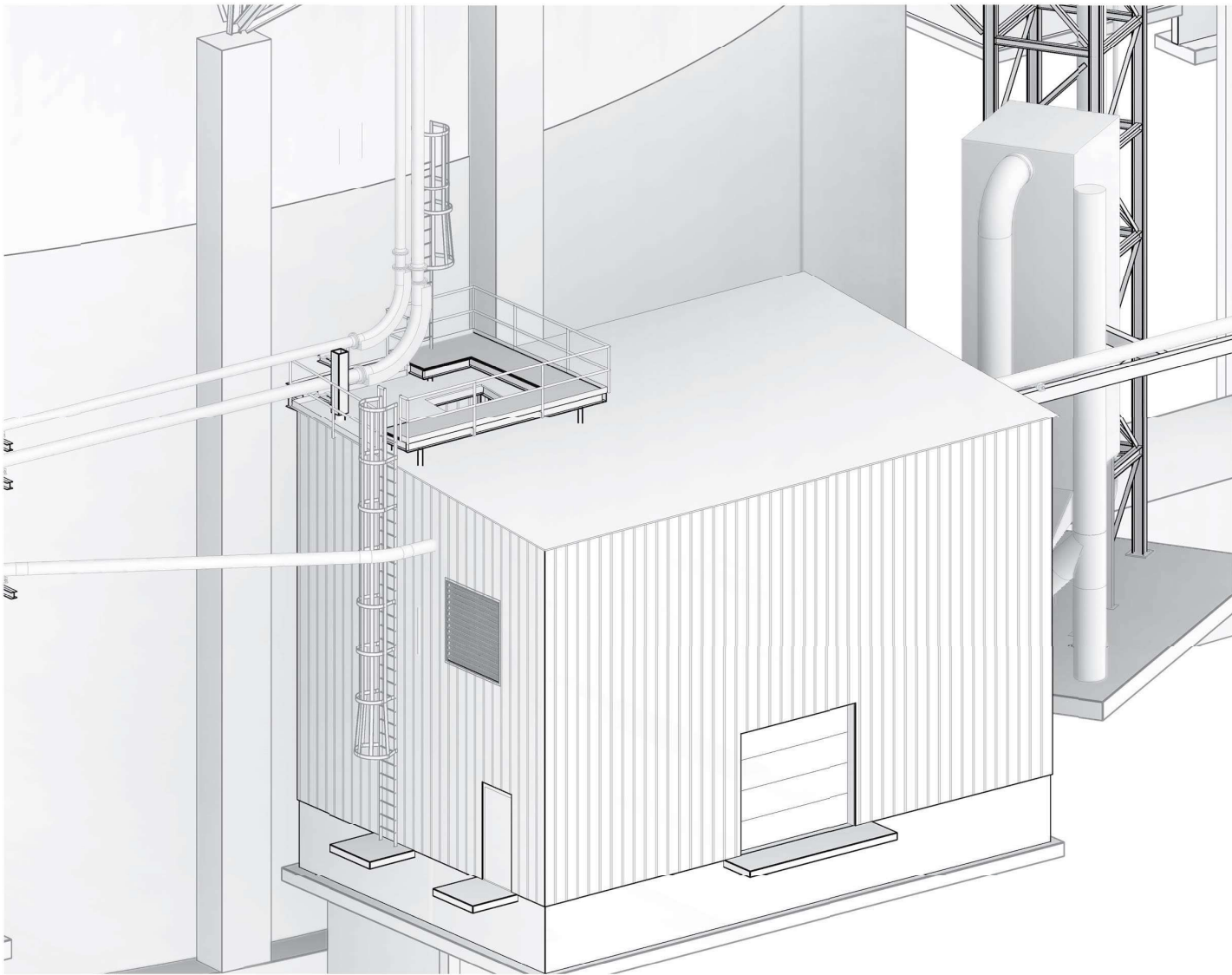
07

08

09



PUMP BUILDING WITH CLADDING SHOWN LOOKING CONSTRUCTION SE  
NO SCALE



PUMP BUILDING WITH CLADDING SHOWN LOOKING CONSTRUCTION SW  
NO SCALE

| DWG NO             | TITLE | REV.   | DATE | REV.   | DATE | ISSUED FOR CONSTRUCTION | REV.   | DATE | ISSUED FOR BID |
|--------------------|-------|--------|------|--------|------|-------------------------|--------|------|----------------|
|                    |       | DWN:   |      |        |      |                         | DWN:   |      |                |
| REFERENCE DRAWINGS |       | CHD.:  |      | APPR.: |      | APPR.:                  | CHD.:  |      | APPR.:         |
|                    |       | APPR.: |      |        |      |                         | APPR.: |      |                |

**HEIDELBERG  
TECHNOLOGY CENTER**  
HEIDELBERG CEMENTGroup

DOME CONVERSION - CEMENT STORAGE  
PUMP BUILDING 3D VEIW  
WITH CLADDING SHOWN



Professional Engineers  
Ontario  
05/18/2022  
Temporary Licensee  
Name: Douglas H. Weber  
Number: 100166709-02  
Limitations: Design of a cement storage facility in  
North Ontario for Lighthouse  
C. Weber, P. M. Renaud, P. Eng.  
Expiry Date: March 31, 2023  
Association of Professional Engineers of Ontario



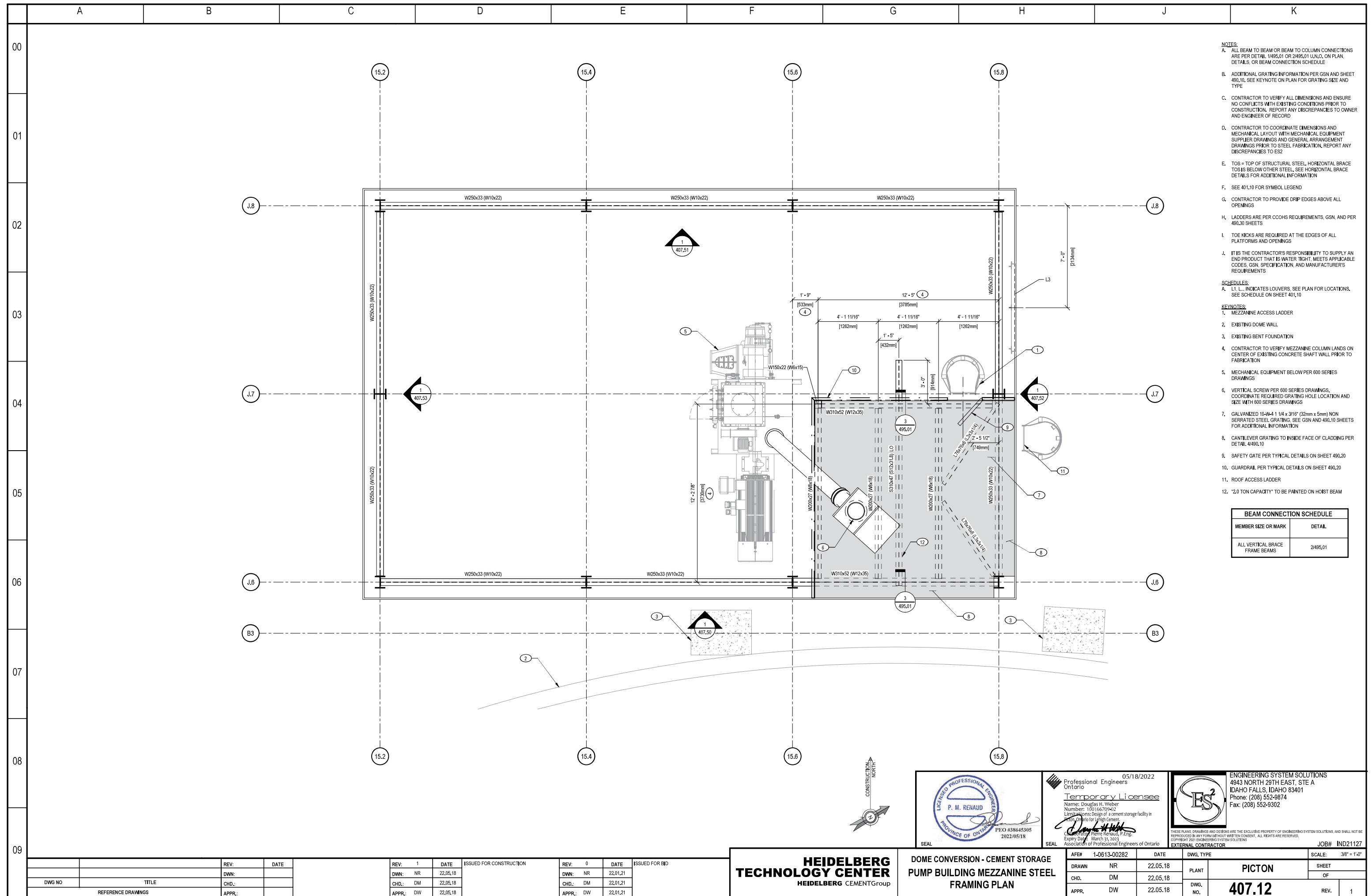
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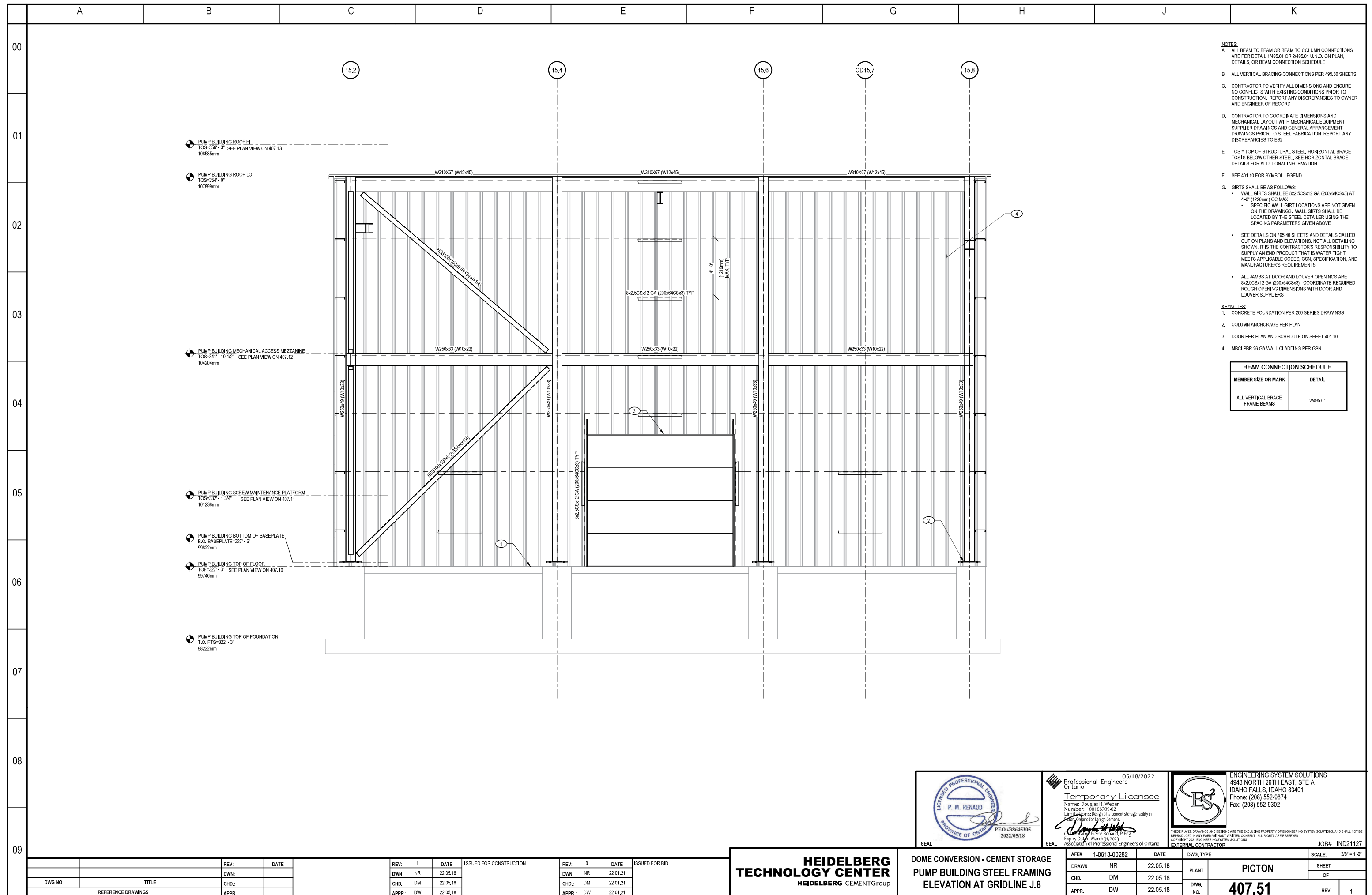
ENGINEERING SYSTEM SOLUTIONS  
4943 NORTH 29TH EAST, STE A  
IDAHO FALLS, IDAHO 83401  
Phone: (208) 552-9874  
Fax: (208) 552-9302

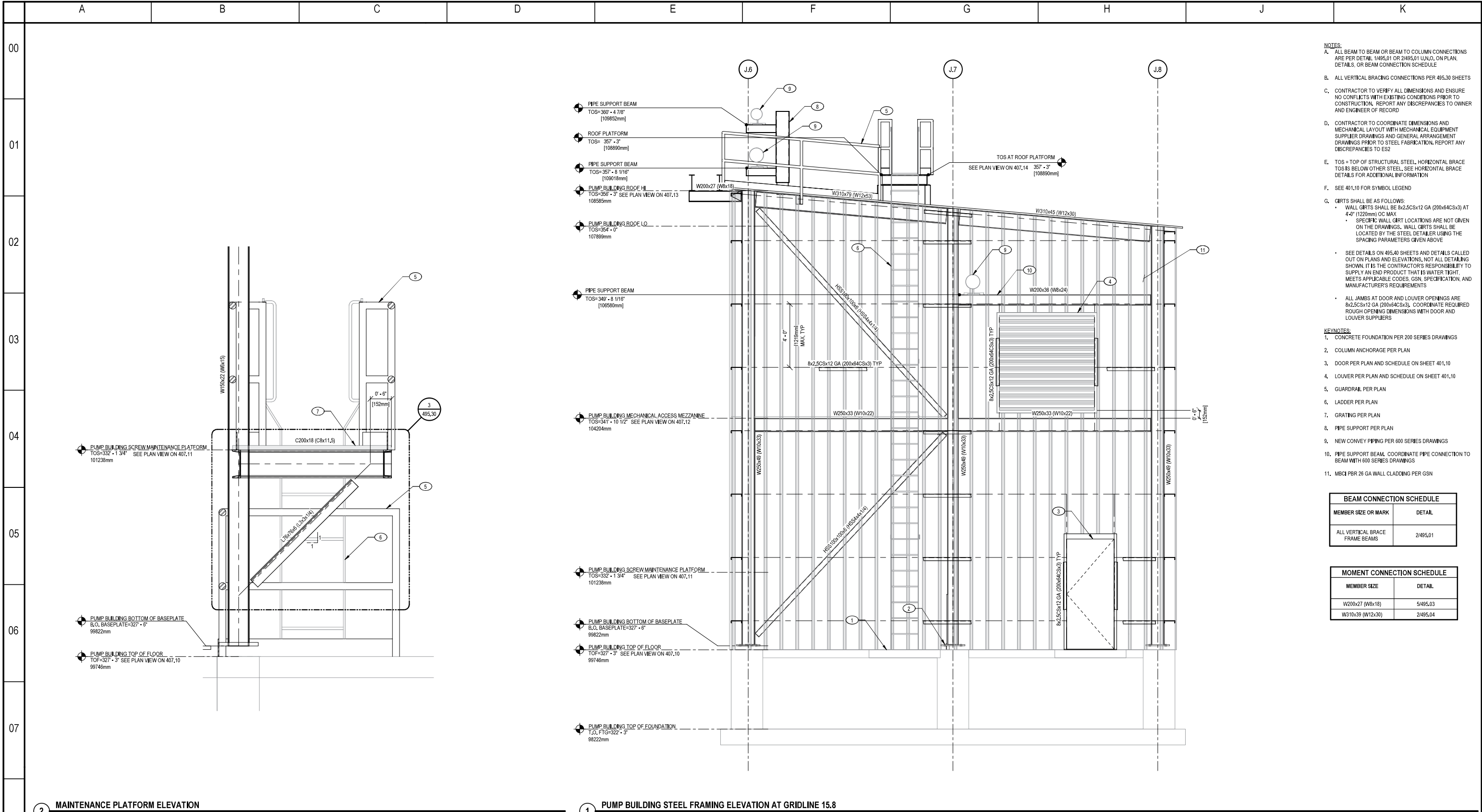
| AFER  | 1-0613-00282 | DATE     | 05/18/2022 | DWG. TYPE   | SCALE: | NO SCALE |
|-------|--------------|----------|------------|-------------|--------|----------|
| DRAWN | NR           | 22.05.18 |            | PLANT       | SHEET  |          |
| CHD.  | DM           | 22.05.18 |            | DWG.<br>NO. | OF     |          |
| APPR. | DW           | 22.05.18 |            |             | REV. 1 |          |

PICTON

407.01







- NOTES:
- A. ALL BEAM TO BEAM OR BEAM TO COLUMN CONNECTIONS ARE PER DETAIL 1/495.01 OR 2/495.01 UNLESS OTHERWISE NOTED, ON PLAN, DETAILS, OR BEAM CONNECTION SCHEDULE
  - B. ALL VERTICAL BRACING CONNECTIONS PER 495.30 SHEETS
  - C. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ENSURE NO CONFLICTS WITH EXISTING CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO OWNER AND ENGINEER OF RECORD
  - D. CONTRACTOR TO COORDINATE DIMENSIONS AND MECHANICAL LAYOUT WITH MECHANICAL EQUIPMENT SUPPLIER DRAWINGS AND GENERAL ARRANGEMENT DRAWINGS PRIOR TO STEEL FABRICATION. REPORT ANY DISCREPANCIES TO E32
  - E. TOS = TOP OF STRUCTURAL STEEL, HORIZONTAL BRACE TOS IS BELOW OTHER STEEL, SEE HORIZONTAL BRACE DETAILS FOR ADDITIONAL INFORMATION
  - F. SEE 401.10 FOR SYMBOL LEGEND
  - G. GIRTS SHALL BE AS FOLLOWS:
    - WALL GIRTS SHALL BE 8x2.5CSx12 GA (200x64CSx3) AT 4'-0" (1220mm) OC MAX
    - SPECIFIC WALL GIRT LOCATIONS ARE NOT GIVEN ON THE DRAWINGS. WALL GIRTS SHALL BE LOCATED BY THE STEEL DETAILER USING THE SPACING PARAMETERS GIVEN ABOVE
    - SEE DETAILS ON 495.40 SHEETS AND DETAILS CALLED OUT ON PLANS AND ELEVATIONS. NOT ALL DETAILING SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY AN END PRODUCT THAT IS WATER TIGHT, MEETS APPLICABLE CODES, GSN, SPECIFICATION, AND MANUFACTURER'S REQUIREMENTS
    - ALL JAMBS AT DOOR AND LOUVER OPENINGS ARE 8x2.5CSx12 GA (200x64CSx3). COORDINATE REQUIRED ROUGH OPENING DIMENSIONS WITH DOOR AND LOUVER SUPPLIERS

- KEYNOTES:
- 1. CONCRETE FOUNDATION PER 200 SERIES DRAWINGS
  - 2. COLUMN ANCHORAGE PER PLAN
  - 3. DOOR PER PLAN AND SCHEDULE ON SHEET 401.10
  - 4. LOUVER PER PLAN AND SCHEDULE ON SHEET 401.10
  - 5. GUARDRAIL PER PLAN
  - 6. LADDER PER PLAN
  - 7. GRATING PER PLAN
  - 8. PIPE SUPPORT PER PLAN
  - 9. NEW CONVEY PIPING PER 600 SERIES DRAWINGS
  - 10. PIPE SUPPORT BEAM, COORDINATE PIPE CONNECTION TO BEAM WITH 600 SERIES DRAWINGS
  - 11. MBQI PBR 26 GA WALL CLADDING PER GSN

| BEAM CONNECTION SCHEDULE       |          |
|--------------------------------|----------|
| MEMBER SIZE OR MARK            | DETAIL   |
| ALL VERTICAL BRACE FRAME BEAMS | 2/495.01 |

| MOMENT CONNECTION SCHEDULE |          |
|----------------------------|----------|
| MEMBER SIZE                | DETAIL   |
| W200x27 (W8x18)            | 5/495.03 |
| W310x39 (W12x30)           | 2/495.04 |

2 MAINTENANCE PLATFORM ELEVATION  
SCALE: 1" = 1'-0"

1 PUMP BUILDING STEEL FRAMING ELEVATION AT GRIDLINE 15.8  
SCALE: 3/8" = 1'-0"

Professional Engineers  
Ontario  
Temporary Licensee  
Name: Douglas H. Weber  
Number: 100166709-02  
Limitations: Design of a cement storage facility in  
western Ontario for Uplift Concept  
C. Renaud, P. Eng.  
Expiry Date: March 31, 2023  
Association of Professional Engineers of Ontario

ENGINEERING SYSTEM SOLUTIONS  
4943 NORTH 29TH EAST, STE A  
IDAHO FALLS, IDAHO 83401  
Phone: (208) 552-9874  
Fax: (208) 552-9302

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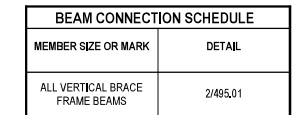
| REV.   |    | DATE     | ISSUED FOR CONSTRUCTION |    | REV.     | DATE   | ISSUED FOR BID |          |
|--------|----|----------|-------------------------|----|----------|--------|----------------|----------|
| DWN:   | NR | 22.05.18 | CHD.:                   | DM | 22.01.21 | DWN:   | NR             | 22.01.21 |
| CHD.:  | DM | 22.05.18 | APPR.:                  | DW | 22.01.21 | CHD.:  | DM             | 22.01.21 |
| APPR.: | DW | 22.05.18 | APPR.:                  | DW | 22.01.21 | APPR.: | DW             | 22.01.21 |

**HEIDELBERG TECHNOLOGY CENTER**  
HEIDELBERG CEMENT Group

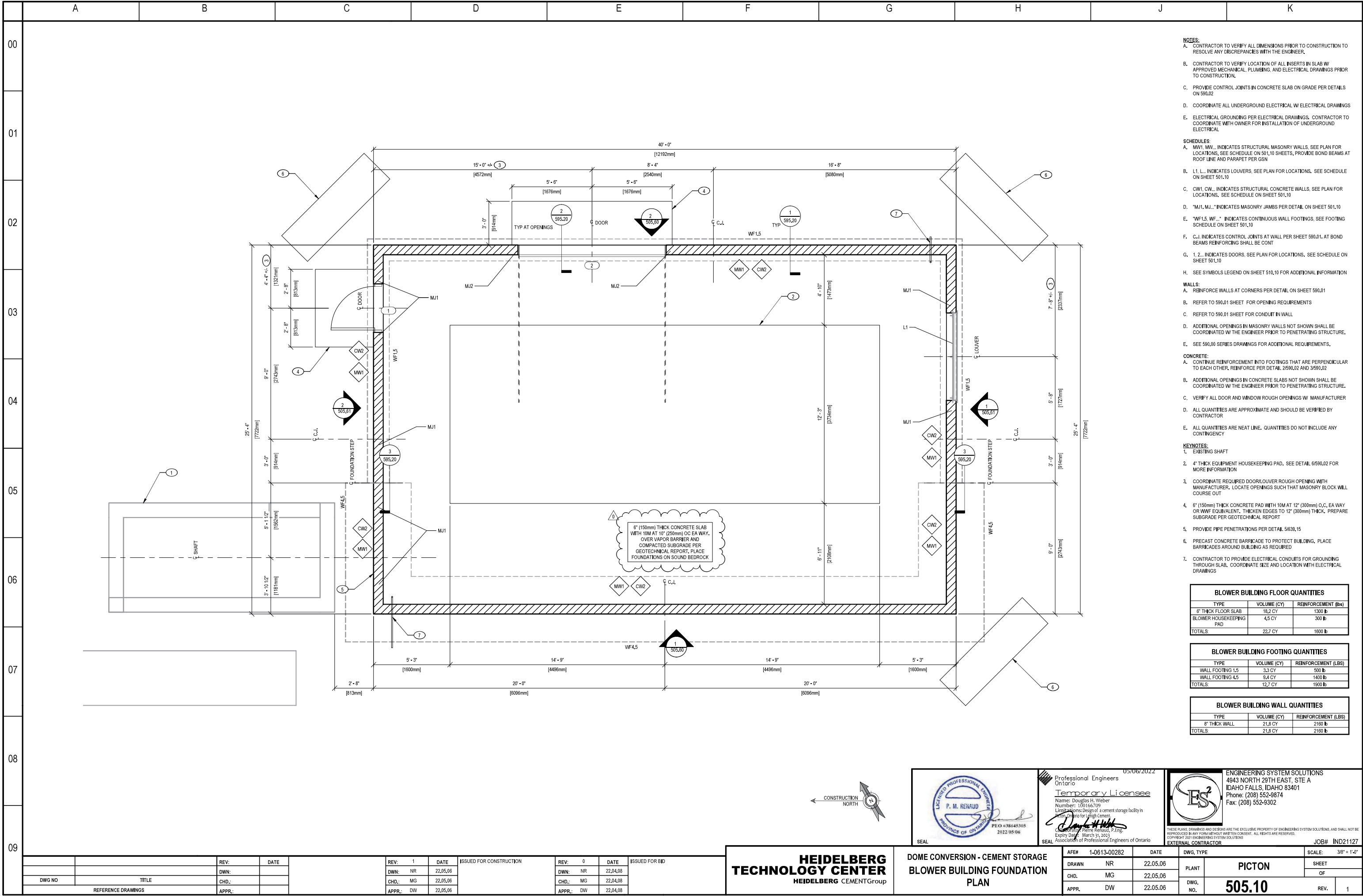
**DOMES CONVERSION - CEMENT STORAGE**  
PUMP BUILDING STEEL FRAMING  
ELEVATION

| AFER  | 1-0613-00282 | DATE     | 22.05.18 | DWG. TYPE | PLANT | PICTON | SCALE: | As indicated |
|-------|--------------|----------|----------|-----------|-------|--------|--------|--------------|
| DRAWN | NR           | 22.05.18 |          |           |       |        |        |              |
| CHD.  | DM           | 22.05.18 |          |           |       |        |        |              |
| APPR. | DW           | 22.05.18 |          |           |       |        |        |              |

**407.52**  
REV. 1



|                                                                   |                                                                                               |                   |          |           |        |                     |   |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------|----------|-----------|--------|---------------------|---|
| <b>HEIDELBERG<br/>TECHNOLOGY CENTER</b><br>HEIDELBERG CEMENTGroup | DOME CONVERSION - CEMENT STORAGE<br>PUMP BUILDING STEEL FRAMING<br>ELEVATION AT GRIDLINE 15.2 | AFE# 1-0613-00282 | DATE     | DWG. TYPE |        | SCALE: 3/8" = 1'-0" |   |
|                                                                   |                                                                                               | DRAWN NR          | 22.05.18 | PLANT     | PICTON | SHEET               |   |
|                                                                   |                                                                                               | CHD. DM           | 22.05.18 |           |        | OF                  |   |
|                                                                   |                                                                                               | APPR. DW          | 22.05.18 | DWG. NO.  | 407.53 | REV.                | 1 |



- NOTES:**
- A. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION TO RESOLVE ANY DISCREPANCIES WITH THE ENGINEER.
  - B. CONTRACTOR TO VERIFY LOCATION OF ALL INSERTS IN SLAB W/ APPROVED MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS PRIOR TO CONSTRUCTION.
  - C. PROVIDE CONTROL JOINTS IN CONCRETE SLAB ON GRADE PER DETAILS ON 590.02
  - D. COORDINATE ALL UNDERGROUND ELECTRICAL W/ ELECTRICAL DRAWINGS
  - E. ELECTRICAL GROUNDING PER ELECTRICAL DRAWINGS. CONTRACTOR TO COORDINATE WITH OWNER FOR INSTALLATION OF UNDERGROUND ELECTRICAL

- SCHEDULES:**
- A. MW1, MW... INDICATES STRUCTURAL MASONRY WALLS. SEE PLAN FOR LOCATIONS, SEE SCHEDULE ON 501,10 SHEETS, PROVIDE BOND BEAMS AT ROOF LINE AND PARAPET PER GSN
  - B. L1, L... INDICATES LOUVERS. SEE PLAN FOR LOCATIONS. SEE SCHEDULE ON SHEET 501,10
  - C. CW1, CW... INDICATES STRUCTURAL CONCRETE WALLS. SEE PLAN FOR LOCATIONS. SEE SCHEDULE ON SHEET 501,10
  - D. MJ1, MJ... INDICATES MASONRY JAMBS PER DETAIL ON SHEET 501,10
  - E. WF1.5, WF... INDICATES CONTINUOUS WALL FOOTINGS, SEE FOOTING SCHEDULE ON SHEET 501,10
  - F. C.J. INDICATES CONTROL JOINTS AT WALL PER SHEET 590.01, AT BOND BEAMS REINFORCING SHALL BE CONT
  - G. 1, 2... INDICATES DOORS. SEE PLAN FOR LOCATIONS. SEE SCHEDULE ON SHEET 501,10
  - H. SEE SYMBOLS LEGEND ON SHEET 510,10 FOR ADDITIONAL INFORMATION

- WALLS:**
- A. REINFORCE WALLS AT CORNERS PER DETAIL ON SHEET 590,01
  - B. REFER TO 590,01 SHEET FOR OPENING REQUIREMENTS
  - C. REFER TO 590,01 SHEET FOR CONDUIT IN WALL
  - D. ADDITIONAL OPENINGS IN MASONRY WALLS NOT SHOWN SHALL BE COORDINATED W/ THE ENGINEER PRIOR TO PENETRATING STRUCTURE.
  - E. SEE 590,00 SERIES DRAWINGS FOR ADDITIONAL REQUIREMENTS.

- CONCRETE:**
- A. CONTINUE REINFORCEMENT INTO FOOTINGS THAT ARE PERPENDICULAR TO EACH OTHER, REINFORCE PER DETAIL 2/590,02 AND 3/590,02
  - B. ADDITIONAL OPENINGS IN CONCRETE SLABS NOT SHOWN SHALL BE COORDINATED W/ THE ENGINEER PRIOR TO PENETRATING STRUCTURE.
  - C. VERIFY ALL DOOR AND WINDOW ROUGH OPENINGS W/ MANUFACTURER
  - D. ALL QUANTITIES ARE APPROXIMATE AND SHOULD BE VERIFIED BY CONTRACTOR
  - E. ALL QUANTITIES ARE NEAT LINE. QUANTITIES DO NOT INCLUDE ANY CONTINGENCY

- KEYNOTES:**
- 1. EXISTING SHAFT
  - 2. 4\"/>

| BLOWER BUILDING FLOOR QUANTITIES |             |                     |
|----------------------------------|-------------|---------------------|
| TYPE                             | VOLUME (CY) | REINFORCEMENT (lbs) |
| 6" THICK FLOOR SLAB              | 18.2 CY     | 1300 lb             |
| BLOWER HOUSEKEEPING PAD          | 4.5 CY      | 300 lb              |
| TOTALS:                          | 22.7 CY     | 1600 lb             |

| BLOWER BUILDING FOOTING QUANTITIES |             |                     |
|------------------------------------|-------------|---------------------|
| TYPE                               | VOLUME (CY) | REINFORCEMENT (LBS) |
| WALL FOOTING 1.5                   | 3.3 CY      | 500 lb              |
| WALL FOOTING 4.5                   | 9.4 CY      | 1400 lb             |
| TOTALS:                            | 12,7 CY     | 1900 lb             |

| BLOWER BUILDING WALL QUANTITIES |             |                     |
|---------------------------------|-------------|---------------------|
| TYPE                            | VOLUME (CY) | REINFORCEMENT (LBS) |
| 8" THICK WALL                   | 21.8 CY     | 2160 <b>b</b>       |
| TOTALS:                         | 21.8 CY     | 2160 <b>b</b>       |

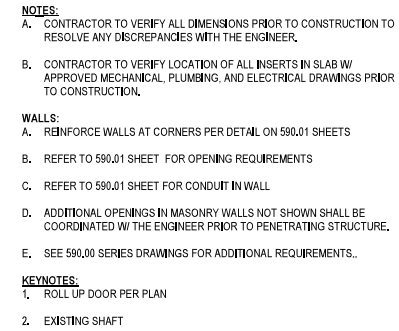
**HEIDELBERG  
TECHNOLOGY CENTER**  
HEIDELBERG CEMENT Group

**DOMES CONVERSION - CEMENT STORAGE  
BLOWER BUILDING FOUNDATION  
PLAN**

| AFER  | 1-0613-00282 | DATE     | 22.05.06 | DWG. TYPE | PLANT | PICTON | SHEET | OF |
|-------|--------------|----------|----------|-----------|-------|--------|-------|----|
| DRAWN | NR           | 22.05.06 |          |           |       |        |       |    |
| CHD.  | MG           | 22.05.06 |          |           |       |        |       |    |
| APPR. | DW           | 22.05.06 |          |           |       |        |       |    |

505.10

REV. 1



**1 BLOWER BUILDING E**  
NO SCALE SHEET:505.10



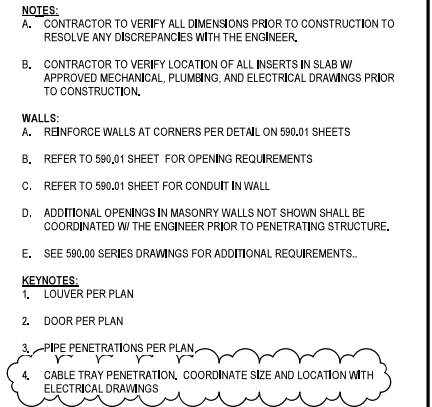
**2 BLOWER BUILDING E**  
NO SCALE SHEET: 505.10

|                    |       |          |          |                         |  |          |          |                |  |
|--------------------|-------|----------|----------|-------------------------|--|----------|----------|----------------|--|
|                    |       | REV: 1   | DATE     | ISSUED FOR CONSTRUCTION |  | REV: 0   | DATE     | ISSUED FOR BID |  |
|                    |       | DWN: NR  | 22.05.06 |                         |  | DWN: NR  | 22.04.08 |                |  |
| DWG NO             | TITLE | CHD: MG  | 22.05.06 |                         |  | CHD: MG  | 22.04.08 |                |  |
| REFERENCE DRAWINGS |       | APPR: DW | 22.05.06 |                         |  | APPR: DW | 22.04.08 |                |  |
|                    |       | REV: 1   | DATE     | ISSUED FOR CONSTRUCTION |  | REV: 0   | DATE     | ISSUED FOR BID |  |
|                    |       | DWN: NR  | 22.05.06 |                         |  | DWN: NR  | 22.04.08 |                |  |
| DWG NO             | TITLE | CHD: MG  | 22.05.06 |                         |  | CHD: MG  | 22.04.08 |                |  |
| REFERENCE DRAWINGS |       | APPR: DW | 22.05.06 |                         |  | APPR: DW | 22.04.08 |                |  |

**HEIDELBERG  
TECHNOLOGY CENTER**  
HEIDELBERG CEMENTGroup

**BLOWER BUILDING ELEVATIONS**

Professional Engineers  
Ontario  
Temporary Licensee  
Name: Douglas H. Weber  
Number: 100166709  
Limitations: Design of a cement storage facility in  
Ontario for Lehigh Cement.  
Expiry Date: March 31, 2023  
Association of Professional Engineers of Ontario

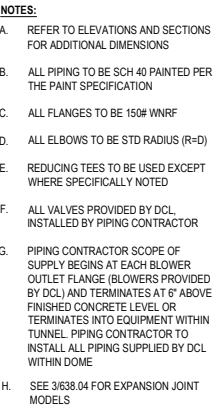


**1 BLOWER BUILDING E**  
NO SCALE SHEET:505.10



**2 BLOWER BUILDING E**  
NO SCALE SHEET:505.10

|                    |       |       |      |           |          |                         |           |          |                |                                                                                                                                                      |                                                                              |                           |           |
|--------------------|-------|-------|------|-----------|----------|-------------------------|-----------|----------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------|-----------|
|                    |       | REV:  | DATE | REV: 1    | DATE     | ISSUED FOR CONSTRUCTION | REV: 0    | DATE     | ISSUED FOR BID |  <b>HEIDELBERG TECHNOLOGY CENTER</b><br>HEIDELBERG CEMENT Group | DOME CONVERSION - CEMENT STORAGE<br>BLOWER BUILDING ELEVATIONS               |                           |           |
|                    |       | DWN:  |      | DWN: NR   | 22,05,06 |                         | DWN: NR   | 22,04,08 |                |                                                                                                                                                      | A1/P 1201200022<br>DATE: 22,05,06<br>DWG. TYPE: PLANT<br>SCALE: 1/4" = 1'-0" | SHEET<br>OF               |           |
| DWG NO             | TITLE | CHD:  |      | CHD.: MG  | 22,05,06 |                         | CHD.: MG  | 22,04,08 |                |                                                                                                                                                      | CHD. MG<br>22,05,06                                                          | DWG. NO.<br><b>505.61</b> | REV.<br>1 |
| REFERENCE DRAWINGS |       | APPR: |      | APPR.: DW | 22,05,06 |                         | APPR.: DW | 22,04,08 |                |                                                                                                                                                      | APPR. DW<br>22,05,06                                                         |                           |           |



| EXP.JOINT | MODEL    | INSTALL PER |
|-----------|----------|-------------|
| EJ-101    | DA-96-EE | 3B/39.20    |
| EJ-102    | DA-96-EE | 3B/39.20    |
| EJ-103    | DA-96-EE | 3C/39.20    |
| EJ-104    | DA-96-EE | 3C/39.20    |
| EJ-105    | DA-96-EE | 3C/39.20    |
| EJ-106    | DA-96-EE | 3C/39.20    |
| EJ-201    | DA-96-EE | 3B/39.20    |
| EJ-202    | DA-96-EE | 3B/39.20    |
| EJ-203    | DA-96-EE | 3C/39.20    |
| EJ-204    | DA-96-EE | 3C/39.20    |
| EJ-205    | DA-96-EE | 3C/39.20    |
| EJ-206    | DA-96-EE | 3C/39.20    |
| EJ-207    | DA-96-EE | 3C/39.20    |
| EJ-301    | DA-96-EE | 3B/39.20    |
| EJ-302    | DA-96-EE | 3B/39.20    |
| EJ-303    | DA-96-EE | 3C/39.20    |
| EJ-304    | DA-96-EE | 3C/39.20    |
| EJ-305    | DA-96-EE | 3C/39.20    |
| EJ-306    | DA-96-EE | 3B/39.20    |
| EJ-307    | DA-96-EE | 3B/39.20    |
| EJ-401    | DA-96-EE | 3B/39.20    |
| EJ-402    | DA-96-EE | 3B/39.20    |
| EJ-403    | DA-96-EE | 3C/39.20    |
| EJ-404    | DA-96-EE | 3C/39.20    |
| EJ-405    | DA-96-EE | 3C/39.20    |
| EJ-406    | DA-96-EE | 3C/39.20    |
| EJ-501    | DA-96-EE | 3B/39.20    |
| EJ-502    | SA-48-EE | 3A/39.20    |
| EJ-503    | SA-48-EE | 3A/39.20    |
| EJ-504    | SA-48-CC | 3A/G9.20    |

NON-SERRATED FLAT-FACED FLANGES TO  
BE USED WITH EXPANSION JOINTS

| LINE SELECTION VALVES |                  | LINE 100 VALVES |             | LINE 200 VALVES |         | LINE 300 VALVES |         | LINE 400 VALVES |         | LINE 500 VALVES |          |
|-----------------------|------------------|-----------------|-------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|----------|
| VALVE                 | SERVICE          | VALVE           | SERVICE     | VALVE           | SERVICE | VALVE           | SERVICE | VALVE           | SERVICE | VALVE           | SERVICE  |
| SV- 021               | VALVE 1 LINE 200 | SV- 101         | FBB/FC-3555 | SV- 205         | Z-5     | SVB- 306        | Z-8     | SV- 407         | Z-7     | SVB- 3555       | FCV-3555 |
| SV- 022               | VALVE 2 LINE 200 | SV- 102         | FBB/FC-3556 | SV- 209         | Z-9     | SVB- 308        | Z-8     | SV- 410         | Z-10    | SVB- 3556       | FCV-3556 |
| SV- 031               | VALVE 1 LINE 300 | SV- 103         | FBB/FC-3557 | SV- 213         | Z-13    | SVB- 311        | Z-11    | SV- 414         | Z-14    | SVB- 3557       | FCV-3557 |
| SV- 032               | VALVE 2 LINE 300 | SV- 104         | FBB/FC-3558 | SV- 216         | Z-16    | SVB- 312        | Z-12    | SV- 419         | Z-19    | SVB- 3558       | FCV-3558 |
| SV- 041               | VALVE 1 LINE 400 | SV- 11A         | Z-1A        | SV- 217         | Z-17    | SVB- 315        | Z-15    | SV- 424         | Z-24    |                 |          |
| SV- 042               | VALVE 2 LINE 400 | SV- 11B         | Z-1B        | SV- 220         | Z-20    | SVB- 318        | Z-18    | SV- 429         | Z-29    |                 |          |
|                       |                  | SV- 12A         | Z-2A        | SV- 223         | Z-23    | SVB- 321        | Z-21    | SV- 434         | Z-34    |                 |          |
|                       |                  | SV- 12B         | Z-2B        | SV- 226         | Z-26    | SVB- 322        | Z-22    | SV- 438         | Z-38    |                 |          |
|                       |                  | SV- 13A         | Z-3A        | SV- 228         | Z-28    | SVB- 325        | Z-25    | SV- 441         | Z-41    |                 |          |
|                       |                  | SV- 13B         | Z-3B        | SV- 231         | Z-31    | SVB- 327        | Z-27    | SV- 444         | Z-44    |                 |          |
|                       |                  | SV- 14A         | Z-4A        | SV- 233         | Z-33    | SVB- 330        | Z-30    | SV- 448         | Z-48    |                 |          |
|                       |                  | SV- 14B         | Z-4B        | SV- 237         | Z-37    | SVB- 332        | Z-32    | SV- 453         | Z-53    |                 |          |
|                       |                  |                 |             | SV- 239         | Z-39    | SVB- 335        | Z-35    | SV- 458         | Z-58    |                 |          |
|                       |                  |                 |             | SV- 242         | Z-42    | SVB- 336        | Z-36    | SV- 463         | Z-63    |                 |          |
|                       |                  |                 |             | SV- 245         | Z-45    | SVB- 340        | Z-40    | SV- 468         | Z-68    |                 |          |
|                       |                  |                 |             | SV- 246         | Z-46    | SVB- 343        | Z-43    | SV- 472         | Z-72    |                 |          |
|                       |                  |                 |             | SV- 249         | Z-49    | SVB- 347        | Z-47    |                 |         |                 |          |
|                       |                  |                 |             | SV- 252         | Z-52    | SVB- 350        | Z-50    |                 |         |                 |          |
|                       |                  |                 |             | SV- 255         | Z-55    | SVB- 351        | Z-51    |                 |         |                 |          |
|                       |                  |                 |             | SV- 256         | Z-56    | SVB- 354        | Z-54    |                 |         |                 |          |
|                       |                  |                 |             | SV- 259         | Z-59    | SVB- 357        | Z-57    |                 |         |                 |          |
|                       |                  |                 |             | SV- 261         | Z-61    | SVB- 360        | Z-60    |                 |         |                 |          |
|                       |                  |                 |             | SV- 264         | Z-64    | SVB- 362        | Z-62    |                 |         |                 |          |
|                       |                  |                 |             | SV- 266         | Z-66    | SVB- 365        | Z-65    |                 |         |                 |          |
|                       |                  |                 |             | SV- 269         | Z-69    | SVB- 367        | Z-67    |                 |         |                 |          |
|                       |                  |                 |             | SV- 270         | Z-70    | SVB- 371        | Z-71    |                 |         |                 |          |

### 3 EXPANSION JOINT MODELS

2 FLOOR AERATION AIR VALVE NUMBERING  
NONE

|          |          |                |
|----------|----------|----------------|
| REV: 0   | DATE     | ISSUED FOR BID |
| DWN: AA  | 22.01.21 |                |
| CHD.: AA | 22.01.21 |                |
| APPR: AA | 22.01.21 |                |

**DOME CONVERSION - CEMENT STORAGE**  
BLOWER BLDG PIPING AND BLOWER LAYOUT  
VALVE NUMBERING, AND EJ MODELS

**ISSUED FOR**



**CONSTRUCTION**

05/20/2022



**ENGINEERING SYSTEM SOLUTIONS**  
4943 NORTH 29TH EAST, STE A  
IDAHO FALLS, IDAHO 83401  
Phone: (208) 552-9874  
Fax: (208) 552-9302

THESE PLANS, DRAWINGS AND DESIGNS ARE THE EXCLUSIVE PROPERTY OF ENGINEERING SYSTEM SOLUTIONS, AND SHALL NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN CONSENT. ALL RIGHTS ARE RESERVED.

JOB# IND21127

| AFE#  | 1-0613-00282 | DATE     | DWG. TYPE | AERATION PIPING | SCALE | AS NOTED |
|-------|--------------|----------|-----------|-----------------|-------|----------|
| DRAWN | AA           | 22.05.20 | PLANT     | PICTON          | SHEET | 4        |
| CHD.  | AA           | 22.05.20 |           |                 | OF    | 4        |
| APPR. | AA           | 22.05.20 | DWG. NO.  | 638.04          | REV.  | 1        |

**APPENDIX D**

**Noise Source Summary Table  
Nomenclature**

## NOISE SOURCE SUMMARY TABLE NOMENCLATURE

### Source Location

O – located/installed outside the building, including on the roof

I – located/installed inside the building

### Sound Characteristics

S – Steady

Q – Quasi Steady Impulsive

I – Impulsive

B – Buzzing

T – Tonal

C – Cyclic

### Noise Control Measures

S – silencer, acoustic louver, muffler

A – acoustic lining, plenum

B – barrier, berm, screening

L – lagging

E – acoustic enclosure

O – other

U – uncontrolled

**APPENDIX E**

# Insignificant Noise Sources

| Source Description (ESDM Report ID)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rational                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Packhouse Truck #1 (5-15)<br>Packhouse North Packer (5-16)<br>Packhouse South Packer (5-17)<br>Packhouse Masonary (5-18)<br>Clinker Fines Bin (5-24)<br>K-4 De-aeration (5-25)<br>Brick Saw K-4 (5-28)<br>Clinker Conv. C-8/C-15 (5-29)<br>Indirect Firing - Coal Silo (5-32)<br>Indirect Firing - Coke Silo (5-33)<br>Ind. Firing - Weigh Feeder (5-34)<br>Ind. Firing - Weigh Feeder (5-35)<br>Coal Handling (5-36)<br>Coal Handling (5-37)<br>Expansion - Bucket Elev. Dedust. 105-5 (5-40)<br>Lime addition silo (5-42)<br>Truck load dust collector 2 - South scale (5-44)<br>Truck load dust collector 4 - South scale (5-45) | Considered secondary noise sources and are not expected to affect the findings of the assessment if included in the modelling. |

**APPENDIX F**

# Calibration Certificates

# Calibration Certificate

**Certificate Number** 2021013636

**Customer:**

Golder Associates Inc  
Suite 100  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** 831  
**Serial Number** 0001669  
**Test Results** **Pass**  
**Initial Condition** AS RECEIVED same as shipped  
**Description** Larson Davis Model 831  
Class 1 Sound Level Meter  
Firmware Revision: 2.403

**Procedure Number** D0001.8378  
**Technician** Ron Harris  
**Calibration Date** 25 Oct 2021  
**Calibration Due** 25 Oct 2023  
**Temperature** 23.28 °C ± 0.25 °C  
**Humidity** 52 %RH ± 2.0 %RH  
**Static Pressure** 85.26 kPa ± 0.13 kPa

**Evaluation Method** Tested electrically using Larson Davis PRM831 S/N 019104 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

**Compliance Standards** Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

|                        |                           |
|------------------------|---------------------------|
| IEC 60651:2001 Type 1  | ANSI S1.4-2014 Class 1    |
| IEC 60804:2000 Type 1  | ANSI S1.4 (R2006) Type 1  |
| IEC 61252:2002         | ANSI S1.25 (R2007)        |
| IEC 61672:2013 Class 1 | ANSI S1.43 (R2007) Type 1 |

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev S, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa; Reference Range: 0 dB gain

Periodic tests were performed in accordance with procedures from IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part3.

LARSON DAVIS - A PCB PIEZOTRONICS DIV.  
1681 West 820 North  
Provo, UT 84601, United States  
716-684-0001



# Calibration Certificate

**Certificate Number** 2021013634

**Customer:**

Golder Associates Inc  
Suite 100  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** PRM831  
**Serial Number** 019104  
**Test Results** Pass  
**Initial Condition** AS RECEIVED same as shipped  
**Description** Larson Davis 1/2" Preamplifier for Model 831  
Type 1

**Procedure Number** D0001.8383  
**Technician** Ron Harris  
**Calibration Date** 25 Oct 2021  
**Calibration Due** 25 Oct 2023  
**Temperature** 23.21 °C ± 0.01 °C  
**Humidity** 52.4 %RH ± 0.5 %RH  
**Static Pressure** 85.29 kPa ± 0.03 kPa

**Evaluation Method** Tested electrically using a 12.0 pF capacitor to simulate microphone capacitance.  
Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

**Compliance Standards** Compliant to Manufacturer Specifications

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.

**Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level. Tests are considered to pass when the measured value is within the acceptance limits, which are derived from industry standards.

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| Standards Used                             |            |            |              |
|--------------------------------------------|------------|------------|--------------|
| Description                                | Cal Date   | Cal Due    | Cal Standard |
| Larson Davis Model 2900 Real Time Analyzer | 03/05/2021 | 03/05/2022 | 003003       |
| Hart Scientific 2626-H Temperature Probe   | 02/04/2021 | 08/04/2022 | 006767       |
| Agilent 34401A DMM                         | 06/25/2021 | 06/25/2022 | 007165       |
| SRS DS360 Ultra Low Distortion Generator   | 09/02/2021 | 09/02/2022 | 007167       |

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716-684-0001



# Calibration Certificate

**Certificate Number** 2021013629

**Customer:**

Golder Associates Inc  
Suite 100  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** 377B20  
**Serial Number** 112206  
**Test Results** **Pass**  
**Initial Condition** AS RECEIVED same as shipped  
**Description** 1/2 inch Microphone - RI - 0V

**Procedure Number** D0001.8387  
**Technician** Abraham Ortega  
**Calibration Date** 22 Oct 2021  
**Calibration Due** 22 Oct 2023  
**Temperature** 24.9 °C ± 0.01 °C  
**Humidity** 30.2 %RH ± 0.5 %RH  
**Static Pressure** 101.50 kPa ± 0.03 kPa

**Evaluation Method** Tested electrically using an electrostatic actuator.

**Compliance Standards** Compliant to Manufacturer Specifications.

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.

**Test points marked with a ‡ do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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# Calibration Certificate

Certificate Number 2021013649

**Customer:**

Golder Associates Inc  
Suite 100  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** 831  
**Serial Number** 0001669  
**Test Results** Pass  
**Initial Condition** AS RECEIVED same as shipped  
**Description** Larson Davis Model 831  
Class 1 Sound Level Meter  
Firmware Revision: 2.403

**Procedure Number** D0001.8384  
**Technician** Ron Harris  
**Calibration Date** 25 Oct 2021  
**Calibration Due** 25 Oct 2023  
**Temperature** 23.28 °C ± 0.25 °C  
**Humidity** 51.2 %RH ± 2.0 %RH  
**Static Pressure** 85.18 kPa ± 0.13 kPa

**Evaluation Method** **Tested with:** **Data reported in dB re 20 µPa.**

PCB 377B20. S/N 112206  
Larson Davis CAL291. S/N 0108  
Larson Davis PRM831. S/N 019104  
Larson Davis CAL200. S/N 9079

**Compliance Standards** Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

|                        |                            |
|------------------------|----------------------------|
| IEC 60651:2001 Type 1  | ANSI S1.4-2014 Class 1     |
| IEC 60804:2000 Type 1  | ANSI S1.4 (R2006) Type 1   |
| IEC 61252:2002         | ANSI S1.11 (R2009) Class 1 |
| IEC 61260:2001 Class 1 | ANSI S1.25 (R2007)         |
| IEC 61672:2013 Class 1 | ANSI S1.43 (R2007) Type 1  |

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis Model 831 Sound Level Meter Manual, I831.01 Rev O, 2016-09-19

For 1/4" microphones, the Larson Davis ADP024 1/4" to 1/2" adaptor is used with the calibrators and the Larson Davis ADP043 1/4" to

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# Calibration Certificate

Certificate Number 2021013746

**Customer:**

Golder Associates Inc  
Suite 100  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** CAL200  
**Serial Number** 7021  
**Test Results** Pass  
**Initial Condition** AS RECEIVED same as shipped  
**Description** Larson Davis CAL200 Acoustic Calibrator

**Procedure Number** D0001.8386  
**Technician** Scott Montgomery  
**Calibration Date** 27 Oct 2021  
**Calibration Due** 27 Oct 2022  
**Temperature** 24 °C ± 0.3 °C  
**Humidity** 28 %RH ± 3 %RH  
**Static Pressure** 101.2 kPa ± 1 kPa

**Evaluation Method** The data is acquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

**Compliance Standards** Compliant to Manufacturer Specifications per D0001.8190 and the following standards:  
IEC 60942:2017 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.

Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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## Standards Used

| Description                                | Cal Date   | Cal Due    | Cal Standard |
|--------------------------------------------|------------|------------|--------------|
| Larson Davis Model 2900 Real Time Analyzer | 04/01/2021 | 04/01/2022 | 001051       |
| Agilent 34401A DMM                         | 03/02/2021 | 03/02/2022 | 002588       |
| Microphone Calibration System              | 02/24/2021 | 02/24/2022 | 005446       |
| 1/2" Preamplifier                          | 08/26/2021 | 08/26/2022 | 006506       |
| Larson Davis 1/2" Preamplifier 7-pin LEMO  | 08/09/2021 | 08/09/2022 | 006507       |
| 1/2 inch Microphone - RI - 200V            | 09/23/2021 | 09/23/2022 | 006511       |
| Hart Scientific 2626-H Temperature Probe   | 02/04/2021 | 08/04/2022 | 006767       |
| Pressure Transducer                        | 06/28/2021 | 06/28/2022 | 007310       |

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# Calibration Certificate

**Certificate Number** 2017003797

**Customer:**

Golder Associates Inc  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** CAL200  
**Serial Number** 7021  
**Test Results** Pass  
**Initial Condition** Adjusted  
**Description** Larson Davis CAL200 Acoustic Calibrator

**Procedure Number** D0001.8386  
**Technician** Scott Montgomery  
**Calibration Date** 11 Apr 2017  
**Calibration Due** 11 Apr 2018  
**Temperature** 24 °C ± 0.3 °C  
**Humidity** 27 %RH ± 3 %RH  
**Static Pressure** 101.0 kPa ± 1 kPa

**Evaluation Method** The data is acquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

**Compliance Standards** Compliant to Manufacturer Specifications per D0001.8190 and the following standards:  
IEC 60942:2003 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005.

**Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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| Standards Used                            |            |            |              |
|-------------------------------------------|------------|------------|--------------|
| Description                               | Cal Date   | Cal Due    | Cal Standard |
| Agilent 34401A DMM                        | 09/07/2016 | 09/07/2017 | 001021       |
| Sound Level Meter / Real Time Analyzer    | 04/10/2017 | 04/10/2018 | 001051       |
| Microphone Calibration System             | 08/17/2016 | 08/17/2017 | 005446       |
| 1/2" Preamplifier                         | 10/06/2016 | 10/06/2017 | 006506       |
| Larson Davis 1/2" Preamplifier 7-pin LEMO | 08/22/2016 | 08/22/2017 | 006507       |
| 1/2 inch Microphone - RI - 200V           | 10/03/2016 | 10/03/2017 | 006511       |
| Pressure Transducer                       | 07/01/2016 | 07/01/2017 | 007368       |

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# Calibration Certificate

**Certificate Number 2015008621**

**Customer:**

Golder Associates Inc  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** 831  
**Serial Number** 0001702  
**Test Results** **Pass**  
**Initial Condition** Inoperable  
**Description** Larson Davis Model 831

**Procedure Number** D0001.8378  
**Technician** Ron Harris  
**Calibration Date** 4 Sep 2015  
**Calibration Due** 4 Sep 2017  
**Temperature** 23.09 °C ± 0.01 °C  
**Humidity** 48.8 %RH ± 0.5 %RH  
**Static Pressure** 85.84 kPa ± 0.03 kPa

**Evaluation Method** Tested electrically using PRM831 S/N 019106 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

**Compliance Standards** Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

|                        |                            |
|------------------------|----------------------------|
| IEC 60651:2001 Type 1  | ANSI S1.4-2014 Class 1     |
| IEC 60804:2000 Type 1  | ANSI S1.4 (R2006) Type 1   |
| IEC 61252:2002         | ANSI S1.11 (R2009) Class 1 |
| IEC 61260:2001 Class 1 | ANSI S1.25 (R2007)         |

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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## Standards Used

| Description                              | Cal Date   | Cal Due    | Cal Standard |
|------------------------------------------|------------|------------|--------------|
| SRS DS360 Ultra Low Distortion Generator | 02/06/2015 | 02/06/2016 | 006239       |
| Hart Scientific 2626-H Temperature Probe | 06/17/2015 | 06/17/2016 | 006798       |

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# Calibration Certificate

**Certificate Number** 2015005805

**Customer:**

Golder Associates Inc  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** 831  
**Serial Number** 0001702  
**Test Results** **Pass**  
**Initial Condition** AS RECEIVED same as shipped  
**Description** Larson Davis Model 831

**Procedure Number** D0001.8384  
**Technician** Ron Harris  
**Calibration Date** 17 Jun 2015  
**Calibration Due** 17 Jun 2017  
**Temperature** 23.23 °C ± 0.01 °C  
**Humidity** 49.2 %RH ± 0.5 %RH  
**Static Pressure** 86.26 kPa ± 0.03 kPa

**Evaluation Method** **Tested with:**

PRM831, S/N 019106  
377B20, S/N 115034

**Data reported in dB re 20 µPa.**

**Compliance Standards**

Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

|                        |                            |
|------------------------|----------------------------|
| IEC 60651:2001 Type 1  | ANSI S1.4-2014 Class 1     |
| IEC 60804:2000 Type 1  | ANSI S1.4 (R2006) Type 1   |
| IEC 61252:2002         | ANSI S1.11 (R2009) Class 1 |
| IEC 61260:2001 Class 1 | ANSI S1.25 (R2007)         |
| IEC 61672:2013 Class 1 | ANSI S1.43 (R2007) Type 1  |

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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## Standards Used

| Description                                       | Cal Date   | Cal Due    | Cal Standard |
|---------------------------------------------------|------------|------------|--------------|
| SRS DS360 Ultra Low Distortion Generator          | 07/08/2014 | 07/08/2015 | 006311       |
| Hart Scientific 2626-H Temperature Probe          | 07/05/2014 | 07/05/2015 | 006767       |
| Larson Davis CAL200 Acoustic Calibrator           | 08/06/2014 | 08/06/2015 | 007027       |
| Larson Davis Model 831                            | 03/05/2015 | 03/05/2016 | 007182       |
| 1/2 inch Microphone - P - 0V                      | 03/11/2015 | 03/11/2016 | 007185       |
| Larson Davis CAL291 Residual Intensity Calibrator | 09/26/2014 | 09/26/2015 | 007287       |

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# Calibration Certificate

**Certificate Number** 2015008620

**Customer:**

Golder Associates Inc  
6925 Century Avenue  
Mississauga, ON L5N 7K2, Canada

**Model Number** PRM831

**Serial Number** 019106

**Test Results** Pass

**Initial Condition** AS RECEIVED same as shipped

**Description** Larson Davis 1/2" Preamplifier for Model 831  
Type 1

**Procedure Number** D0001.8383

**Technician** Ron Harris

**Calibration Date** 4 Sep 2015

**Calibration Due** 4 Sep 2017

**Temperature** 23.13 °C ± 0.01 °C

**Humidity** 49.1 %RH ± 0.5 %RH

**Static Pressure** 85.84 kPa ± 0.03 kPa

**Evaluation Method** Tested electrically using a 12.0 pF capacitor to simulate microphone capacitance.  
Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

**Compliance Standards** Compliant to Manufacturer Specifications

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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| Standards Used                           |            |            |              |
|------------------------------------------|------------|------------|--------------|
| Description                              | Cal Date   | Cal Due    | Cal Standard |
| Sound Level Meter / Real Time Analyzer   | 11/05/2014 | 11/05/2015 | 001150       |
| Hart Scientific 2626-H Temperature Probe | 06/17/2015 | 06/17/2016 | 006798       |
| Agilent 34401A DMM                       | 06/25/2015 | 06/25/2016 | 007165       |
| SRS DS360 Ultra Low Distortion Generator | 11/13/2014 | 11/13/2015 | 007167       |

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**APPENDIX G**

# Weather Data

**Weather Data for October 4, 2017 from Environment Canada**  
**(<http://weather.gc.ca/>)**

Station Name      TRENTON A  
 Province          ONTARIO  
 Latitude          44.12  
 Longitude        -77.53  
 Elevation        86.3  
 Climate Identifier   6158875  
 WMO Identifier    71621  
 TC Identifier      YTR

All times are specified in Local Standard Time (LST). Add 1 hour to adjust for Daylight Saving Time where and when it is observed.

| Time  | Temp (°C) | Dew Point Temp (°C) | Rel Hum (%) | Wind Dir (10s deg) | Wind Spd (km/h) | Stn Press (kPa) | Weather                              |
|-------|-----------|---------------------|-------------|--------------------|-----------------|-----------------|--------------------------------------|
| 0:00  | 11.4      | 10.7                | 95          |                    | 0               | 101.65          | Mostly Cloudy                        |
| 1:00  | 17.5      | 15.2                | 86          | 21                 | 7               | 101.63          | Mostly Cloudy                        |
| 2:00  | 18        | 15.2                | 84          | 20                 | 7               | 101.56          | Mostly Cloudy                        |
| 3:00  | 17.6      | 15.3                | 86          | 19                 | 7               | 101.5           | Mostly Cloudy                        |
| 4:00  | 17.4      | 15.1                | 86          | 18                 | 7               | 101.46          | Mostly Cloudy                        |
| 5:00  | 18.4      | 14.6                | 79          | 20                 | 15              | 101.41          | Mostly Cloudy                        |
| 6:00  | 18.7      | 14.3                | 76          | 21                 | 15              | 101.36          | Mostly Cloudy                        |
| 7:00  | 18.9      | 14.5                | 76          | 21                 | 20              | 101.34          | Mostly Cloudy                        |
| 8:00  | 19.6      | 14.8                | 74          | 21                 | 17              | 101.29          | Mostly Cloudy                        |
| 9:00  | 19.9      | 15                  | 73          | 22                 | 15              | 101.28          | Cloudy                               |
| 10:00 | 20.6      | 15.6                | 73          | 23                 | 19              | 101.22          | Mostly Cloudy                        |
| 11:00 | 21.5      | 16.4                | 73          | 23                 | 15              | 101.09          | Mostly Cloudy                        |
| 12:00 | 23.6      | 16.8                | 66          | 22                 | 20              | 100.92          | Mostly Cloudy                        |
| 13:00 | 23.6      | 16.7                | 65          | 23                 | 26              | 100.85          | Mostly Cloudy                        |
| 14:00 | 22        | 17.5                | 76          | 23                 | 20              | 100.77          | Rain Showers                         |
| 15:00 | 21.8      | 18.1                | 80          | 23                 | 26              | 100.69          | Cloudy                               |
| 16:00 | 20.9      | 18.1                | 84          | 23                 | 26              | 100.67          | Rain Showers                         |
| 17:00 | 19.7      | 18.5                | 93          | 24                 | 22              | 100.63          | Rain Showers,Fog                     |
| 18:00 | 19.9      | 18.5                | 92          | 25                 | 30              | 100.67          | Thunderstorms,Heavy Rain Showers,Fog |
| 19:00 | 17.7      | 15.8                | 89          | 31                 | 19              | 100.75          | Mostly Cloudy                        |
| 20:00 | 16.7      | 14.4                | 86          | 30                 | 9               | 100.83          | Mostly Cloudy                        |
| 21:00 | 15.3      | 12.8                | 85          | 30                 | 11              | 100.9           | Mainly Clear                         |
| 22:00 | 14        | 12                  | 88          | 30                 | 11              | 100.94          | Mainly Clear                         |
| 23:00 | 13.4      | 11.4                | 88          | 28                 | 11              | 100.97          | Clear                                |

**Weather Data for October 5, 2017 from Environment Canada**  
**(<http://weather.gc.ca/>)**

Station Name      TRENTON A  
 Province          ONTARIO  
 Latitude          44.12  
 Longitude        -77.53  
 Elevation        86.3  
 Climate Identifier   6158875  
 WMO Identifier    71621  
 TC Identifier      YTR

All times are specified in Local Standard Time (LST). Add 1 hour to adjust for Daylight Saving Time where and when it is observed.

| Time  | Temp (°C) | Dew Point Temp (°C) | Rel Hum (%) | Wind Dir (10s deg) | Wind Spd (km/h) | Stn Press (kPa) | Weather       |
|-------|-----------|---------------------|-------------|--------------------|-----------------|-----------------|---------------|
| 0:00  | 12.4      | 11.3                | 93          | 24                 | 4               | 100.97          | Clear         |
| 1:00  | 11.1      | 10.7                | 97          | 25                 | 4               | 101.01          | Clear         |
| 2:00  | 10.9      | 10.1                | 95          | 23                 | 4               | 101             | Clear         |
| 3:00  | 12.3      | 10.8                | 91          | 23                 | 9               | 100.98          | Clear         |
| 4:00  | 11.6      | 10.4                | 92          | 22                 | 6               | 100.97          | Clear         |
| 5:00  | 9.4       | 9.4                 | 100         |                    | 0               | 100.98          | Clear         |
| 6:00  | 7         | 7                   | 100         |                    | 0               | 100.99          | Fog           |
| 7:00  | 7.5       | 7.5                 | 100         |                    | 0               | 101.02          | Clear         |
| 8:00  | 13.4      | 11.7                | 89          |                    | 0               | 101.01          | Clear         |
| 9:00  | 16.3      | 12.4                | 78          | 29                 | 11              | 100.99          | Clear         |
| 10:00 | 17.7      | 10.8                | 64          | 25                 | 13              | 100.94          | Clear         |
| 11:00 | 19.2      | 9.9                 | 55          | 23                 | 19              | 100.87          | Mainly Clear  |
| 12:00 | 18.4      | 11.6                | 65          | 23                 | 26              | 100.78          | Mainly Clear  |
| 13:00 | 18.8      | 11.3                | 62          | 23                 | 26              | 100.74          | Mostly Cloudy |
| 14:00 | 18.5      | 11.7                | 65          | 23                 | 22              | 100.68          | Mainly Clear  |
| 15:00 | 19        | 11.8                | 63          | 23                 | 22              | 100.64          | Mainly Clear  |
| 16:00 | 19.1      | 11.6                | 62          | 24                 | 26              | 100.61          | Mainly Clear  |
| 17:00 | 18.8      | 11.2                | 61          | 23                 | 13              | 100.58          | Mainly Clear  |
| 18:00 | 16.7      | 10.4                | 66          | 25                 | 11              | 100.59          | Mainly Clear  |
| 19:00 | 15.6      | 11.1                | 75          | 25                 | 11              | 100.63          | Mainly Clear  |
| 20:00 | 15.2      | 10.9                | 75          | 31                 | 11              | 100.69          | Mostly Cloudy |
| 21:00 | 14        | 10.6                | 80          | 31                 | 9               | 100.75          | Mostly Cloudy |
| 22:00 | 15.3      | 10.4                | 73          | 33                 | 15              | 100.76          | Cloudy        |
| 23:00 | 14.6      | 10.3                | 75          | 32                 | 7               | 100.73          | Cloudy        |

**Weather Data for October 18, 2017 from Environment Canada  
(<http://weather.gc.ca/>)**

Station Name        TRENTON A  
 Province            ONTARIO  
 Latitude            44.12  
 Longitude          -77.53  
 Elevation           86.3  
 Climate Identifier   6158875  
 WMO Identifier     71621  
 TC Identifier        YTR

All times are specified in Local Standard Time (LST). Add 1 hour to adjust for Daylight Saving Time where and when it is observed.

| Time  | Temp (°C) | Dew Point Temp (°C) | Rel Hum (%) | Wind Dir (10s deg) | Wind Spd (km/h) | Stn Press (kPa) | Weather |
|-------|-----------|---------------------|-------------|--------------------|-----------------|-----------------|---------|
| 0:00  | 13.1      | 9.6                 | 79          | 25                 | 15              | 100.9           | Clear   |
| 1:00  | 12.7      | 8.8                 | 77          | 25                 | 15              | 100.95          | Clear   |
| 2:00  | 12.9      | 8.5                 | 75          | 23                 | 7               | 101             | Clear   |
| 3:00  | 12.3      | 8.1                 | 76          | 22                 | 7               | 101.05          | Clear   |
| 4:00  | 12        | 8.1                 | 77          | 22                 | 7               | 101.11          | Clear   |
| 5:00  | 9.6       | 7.8                 | 89          |                    | 0               | 101.17          | Clear   |
| 6:00  | 7.1       | 6.9                 | 99          | 24                 | 4               | 101.2           | Clear   |
| 7:00  | 5.9       | 5.8                 | 99          |                    | 0               | 101.26          | Clear   |
| 8:00  | 10.8      | 9.9                 | 94          |                    | 0               | 101.34          | Clear   |
| 9:00  | 15.6      | 10.3                | 71          | 18                 | 7               | 101.35          | Clear   |
| 10:00 | 16.7      | 12.2                | 75          | 21                 | 11              | 101.35          | Clear   |
| 11:00 | 16.2      | 12.6                | 79          | 21                 | 17              | 101.34          | Clear   |
| 12:00 | 17.2      | 12.5                | 74          | 21                 | 15              | 101.29          | Clear   |
| 13:00 | 18.2      | 8.4                 | 53          | 21                 | 19              | 101.21          | Clear   |
| 14:00 | 17.5      | 10.7                | 64          | 21                 | 19              | 101.18          | Clear   |
| 15:00 | 17.2      | 11.5                | 69          | 21                 | 11              | 101.14          | Clear   |
| 16:00 | 17        | 11.9                | 72          | 20                 | 13              | 101.09          | Clear   |
| 17:00 | 15.7      | 12.2                | 80          | 21                 | 7               | 101.08          | Clear   |
| 18:00 | 14        | 12.2                | 89          | 16                 | 4               | 101.06          | Clear   |
| 19:00 | 11.5      | 11.1                | 97          | 15                 | 6               | 101.04          | Clear   |
| 20:00 | 12.9      | 11                  | 88          | 18                 | 7               | 101.01          | Clear   |
| 21:00 | 13.9      | 11.7                | 87          | 20                 | 11              | 100.96          | Clear   |
| 22:00 | 14.2      | 11.8                | 85          | 21                 | 7               | 100.9           | Clear   |
| 23:00 | 12.3      | 11.7                | 96          | 21                 | 4               | 100.87          | Clear   |

**Weather Data for October 9, 2017 from Environment Canada  
(<http://weather.gc.ca/>)**

Station Name        TRENTON A  
 Province            ONTARIO  
 Latitude            44.12  
 Longitude          -77.53  
 Elevation           86.3  
 Climate Identifier   6158875  
 WMO Identifier     71621  
 TC Identifier        YTR

All times are specified in Local Standard Time (LST). Add 1 hour to adjust for Daylight Saving Time where and when it is observed.

| Time  | Temp (°C) | Dew Point Temp (°C) | Rel Hum (%) | Wind Dir (10s deg) | Wind Spd (km/h) | Stn Press (kPa) | Weather       |
|-------|-----------|---------------------|-------------|--------------------|-----------------|-----------------|---------------|
| 0:00  | 14.1      | 11.3                | 83          | 22                 | 11              | 100.85          | Clear         |
| 1:00  | 12        | 11.2                | 95          | 19                 | 7               | 100.82          | Clear         |
| 2:00  | 13.6      | 10.7                | 83          | 20                 | 15              | 100.78          | Clear         |
| 3:00  | 14.2      | 11                  | 81          | 21                 | 13              | 100.73          | Clear         |
| 4:00  | 14.3      | 10.1                | 76          | 21                 | 11              | 100.7           | Clear         |
| 5:00  | 11.9      | 9.7                 | 86          | 23                 | 7               | 100.68          | Clear         |
| 6:00  | 14.5      | 10.2                | 75          | 22                 | 13              | 100.61          | Clear         |
| 7:00  | 14.9      | 10.7                | 76          | 23                 | 15              | 100.58          | Mainly Clear  |
| 8:00  | 15.5      | 10.8                | 74          | 22                 | 20              | 100.57          | Mostly Cloudy |
| 9:00  | 15.8      | 10.7                | 72          | 22                 | 24              | 100.54          | Mostly Cloudy |
| 10:00 | 16.8      | 11.5                | 71          | 22                 | 26              | 100.5           | Mostly Cloudy |
| 11:00 | 16.8      | 12                  | 73          | 22                 | 26              | 100.47          | Mostly Cloudy |
| 12:00 | 17.4      | 13                  | 75          | 22                 | 26              | 100.4           | Cloudy        |
| 13:00 | 18.1      | 13.3                | 74          | 23                 | 32              | 100.36          | Cloudy        |
| 14:00 | 18.4      | 13.5                | 73          | 23                 | 26              | 100.28          | Mainly Clear  |
| 15:00 | 18.3      | 13.6                | 74          | 23                 | 24              | 100.29          | Mostly Cloudy |
| 16:00 | 18.9      | 11.3                | 61          | 23                 | 22              | 100.28          | Cloudy        |
| 17:00 | 17        | 11.5                | 70          | 24                 | 17              | 100.37          | Mostly Cloudy |
| 18:00 | 17.2      | 8.2                 | 55          | 28                 | 24              | 100.48          | Mostly Cloudy |
| 19:00 | 15.9      | 5.9                 | 51          | 29                 | 20              | 100.57          | Mostly Cloudy |
| 20:00 | 14.6      | 4.7                 | 51          | 28                 | 15              | 100.63          | Mostly Cloudy |
| 21:00 | 13.6      | 3.1                 | 49          | 26                 | 15              | 100.66          | Mostly Cloudy |
| 22:00 | 11.5      | 1.7                 | 51          | 25                 | 11              | 100.7           | Mainly Clear  |
| 23:00 | 10.7      | 2.3                 | 56          | 24                 | 9               | 100.71          | Mainly Clear  |

# **Weather Data for May 13, 2022 from Environment Canada** **(<http://weather.gc.ca/>)**

Station Name Belleville Quinte  
 Province ONTARIO  
 Latitude 44,09'33.705  
 Longitude 77, 26'23.430  
 Elevation 96.3  
 Climate Identifier 6150690  
 WMO Identifier 73042  
 TC Identifier OBQ

All times are specified in Local Standard Time (LST). Add 1 hour to adjust for Daylight Saving Time

| Time  | Temp (°C) | Dew Point Temp (°C) | Rel Hum (%) | Wind Dir (10s deg) | Wind Spd (km/h) | Stn Press (kPa) | Weather |
|-------|-----------|---------------------|-------------|--------------------|-----------------|-----------------|---------|
| 0:00  | 11.1      | 7.9                 | 81          | 31                 | 2               | 101             | N/A     |
| 1:00  | 10.5      | 7.7                 | 83          | 27                 | 2               | 100.99          | N/A     |
| 2:00  | 10        | 7.1                 | 82          | 0                  | 1               | 100.96          | N/A     |
| 3:00  | 9.7       | 7.2                 | 84          | 1                  | 1               | 100.97          | N/A     |
| 4:00  | 10        | 7.6                 | 85          | 3                  | 2               | 101.03          | N/A     |
| 5:00  | 9.8       | 7.4                 | 85          | 0                  | 1               | 101.07          | N/A     |
| 6:00  | 14.5      | 9.9                 | 74          | 12                 | 2               | 101.15          | N/A     |
| 7:00  | 18.7      | 11.3                | 62          |                    | 0               | 101.22          | N/A     |
| 8:00  | 20.9      | 13.4                | 62          | 23                 | 7               | 101.22          | N/A     |
| 9:00  | 23        | 13.9                | 56          | 23                 | 10              | 101.22          | N/A     |
| 10:00 | 23.9      | 14.2                | 54          | 22                 | 11              | 101.18          | N/A     |
| 11:00 | 24        | 14.2                | 54          | 26                 | 14              | 101.17          | N/A     |
| 12:00 | 24.8      | 14.6                | 53          | 26                 | 12              | 101.11          | N/A     |
| 13:00 | 25.9      | 14.7                | 50          | 25                 | 10              | 101             | N/A     |
| 14:00 | 26.3      | 14.6                | 49          | 20                 | 9               | 100.93          | N/A     |
| 15:00 | 26.2      | 14                  | 47          | 19                 | 9               | 100.87          | N/A     |
| 16:00 | 26.1      | 14.3                | 48          | 25                 | 8               | 100.8           | N/A     |
| 17:00 | 26        | 14.5                | 49          | 21                 | 8               | 100.77          | N/A     |
| 18:00 | 25        | 13.7                | 49          | 21                 | 3               | 100.72          | N/A     |
| 19:00 | 22.8      | 15.2                | 62          | 0                  | 1               | 100.7           | N/A     |
| 20:00 | 19.3      | 14.6                | 74          | 33                 | 2               | 100.69          | N/A     |
| 21:00 | 17        | 14.4                | 84          |                    | 0               | 100.7           | N/A     |
| 22:00 | 16.6      | 14.4                | 87          | 0                  | 1               | 100.68          | N/A     |
| 23:00 | 15.8      | 14.2                | 90          | 0                  | 1               | 100.67          | N/A     |

**APPENDIX H**

# Sample Calculation

## Receiver

Name: M\_POR 037

ID: POR037

X: 331013.75 m

Y: 4878781.30 m

Z: 79.72 m

Point Source, ISO 9613, Name: "Kiln 4 - Fan 5", ID: "SP055"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5333 | 330171.85 | 4880147.87 | 106.30 | 1     | DEN | A     | 107.4 | 0.0 | 0.0    | 0.0  | 0.0  | 75.4 | 3.7  | -3.7 | 0.0  | 0.0   | 6.1  | 0.0  | 2.0  | 23.8  |

Point Source, ISO 9613, Name: "Kiln 4 - Fan 6", ID: "SP056"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5339 | 330173.44 | 4880150.90 | 106.28 | 1     | DEN | A     | 107.4 | 0.0 | 0.0    | 0.0  | 0.0  | 75.4 | 3.7  | -3.7 | 0.0  | 0.0   | 6.6  | 0.0  | 2.0  | 23.4  |

Point Source, ISO 9613, Name: "Kiln 4 - Fan 4", ID: "SP054"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5349 | 330164.05 | 4880150.46 | 106.45 | 1     | DEN | A     | 106.1 | 0.0 | 0.0    | 0.0  | 0.0  | 75.3 | 4.4  | -3.8 | 0.0  | 0.0   | 6.9  | 0.0  | 2.0  | 21.2  |

Point Source, ISO 9613, Name: "Kiln 4 - Blue fan", ID: "SP059"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5353 | 330150.89 | 4880111.54 | 109.59 | 0     | DEN | A     | 105.8 | 0.0 | 0.0    | 0.0  | 0.0  | 75.0 | 4.9  | -3.9 | 0.0  | 0.0   | 6.7  | 0.0  | 0.0  | 23.1  |
| 5356 | 330150.89 | 4880111.54 | 109.59 | 1     | DEN | A     | 105.8 | 0.0 | 0.0    | 0.0  | 0.0  | 75.3 | 5.0  | -4.0 | 0.0  | 0.0   | 0.0  | 0.0  | 2.0  | 27.4  |

Point Source, ISO 9613, Name: "CD Builing 323-6 louver", ID: "IK02!BU\_323\_6\_L"

| Nr.  | X         | Y          | Z     | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|-------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)   |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5359 | 330211.74 | 4880008.86 | 99.80 | 0     | DEN | A     | 103.8 | 0.0 | 0.0    | 0.0  | 0.0  | 74.3 | 3.4  | -2.8 | 0.0  | 0.0   | 4.8  | 0.0  | 0.0  | 24.1  |

Point Source, ISO 9613, Name: "Dock Silo 3 (5-22)", ID: "ICS01!MSP033upd"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5379 | 330250.42 | 4879887.51 | 145.28 | 0     | DEN | A     | 101.5 | 0.0 | 0.0    | 0.0  | 0.0  | 73.6 | 3.7  | -1.8 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 26.0  |

Point Source, ISO 9613, Name: "Kiln 4 - B fan 1", ID: "ICS03!MSP060upd"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5381 | 330146.10 | 4880104.75 | 109.66 | 0     | DEN | A     | 102.7 | 0.0 | 0.0    | 0.0  | 0.0  | 75.0 | 4.2  | -3.5 | 0.0  | 0.0   | 5.8  | 0.0  | 0.0  | 21.4  |

Point Source, ISO 9613, Name: "Kiln 4 - B fan 2", ID: "ICS03!MSP061upd"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5387 | 330148.48 | 4880108.66 | 109.62 | 0     | DEN | A     | 102.7 | 0.0 | 0.0    | 0.0  | 0.0  | 75.0 | 4.2  | -3.5 | 0.0  | 0.0   | 6.6  | 0.0  | 0.0  | 20.5  |

Point Source, ISO 9613, Name: "Loader - quarry", ID: "SP103"

| Nr.  | X         | Y          | Z     | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|-------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)   |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5396 | 329024.15 | 4880584.09 | 90.32 | 0     | D   | A     | 113.3 | 0.0 | 0.0    | 0.0  | 0.0  | 79.6 | 6.7  | -1.6 | 0.0  | 0.0   | 4.8  | 0.0  | 0.0  | 23.9  |

Point Source, ISO 9613, Name: "CDC Outdoor Blower", ID: "IK02!CDC\_B"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5397 | 330182.23 | 4880058.54 | 121.00 | 0     | DEN | A     | 102.0 | 0.0 | 0.0    | 0.0  | 0.0  | 74.7 | 4.2  | -2.7 | 0.0  | 0.0   | 4.8  | 0.0  | 0.0  | 21.1  |

Point Source, ISO 9613, Name: "Expansion - Hopper Feedweights (5-47)", ID: "SP026"

| Nr.  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | I/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
|      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5399 | 330116.77 | 4879930.77 | 129.69 | 0     | DEN | A     | 101.6 | 0.0 | 0.0    | 0.0  | 0.0  | 74.3 | 3.8  | -2.8 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 26.3  |

| Point Source, ISO 9613, Name: "LCFP loader", ID: "!E01!LCFP_L" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|----------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                            | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5435                                                           | 330242.71 | 4880310.06 | 103.60 | 0     | D   | A     | 103.1 | 0.0 | -1.2   | 0.0  | 0.0  | 75.7 | 5.8  | -4.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 24.6  |

| Point Source, ISO 9613, Name: "Transformer", ID: "SP098" |           |            |       |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|----------------------------------------------------------|-----------|------------|-------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                      | X         | Y          | Z     | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                          | (m)       | (m)        | (m)   |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5436                                                     | 330290.06 | 4879949.02 | 97.26 | 0     | DEN | A     | 99.4  | 0.0 | 0.0    | 0.0  | 0.0  | 73.8 | 2.9  | -2.2 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 25.0  |

| Point Source, ISO 9613, Name: "Dock Silo 4 (5-23)", ID: "!CS01!MSP034upd" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|---------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                       | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                           | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5524                                                                      | 330256.03 | 4879899.10 | 145.24 | 0     | DEN | A     | 98.0  | 0.0 | 0.0    | 0.0  | 0.0  | 73.6 | 3.7  | -1.8 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 22.4  |

| Point Source, ISO 9613, Name: "Primary Crusher - Dust collector (5-7)", ID: "!CS01!MSP029upd" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|-----------------------------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                                           | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                                               | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5525                                                                                          | 330203.74 | 4879845.77 | 108.24 | 0     | DEN | A     | 97.8  | 0.0 | 0.0    | 0.0  | 0.0  | 73.5 | 6.1  | -4.0 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 22.2  |

| Point Source, ISO 9613, Name: "LCFP screen ", ID: "!E01!LCFP_S" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|-----------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                             | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                 | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5532                                                            | 330233.23 | 4880308.16 | 107.86 | 0     | DEN | A     | 99.7  | 0.0 | 0.0    | 0.0  | 0.0  | 75.7 | 7.1  | -4.1 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.1  |

| Point Source, ISO 9613, Name: "Blend Silo 6 (5-13) - Kiln 3", ID: "SP015" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|---------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                       | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                           | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5534                                                                      | 329976.35 | 4880053.61 | 138.35 | 0     | DEN | A     | 98.9  | 0.0 | 0.0    | 0.0  | 0.0  | 75.3 | 1.0  | -2.4 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 25.0  |

| Point Source, ISO 9613, Name: "Expansion - Limestone Storage 105-1 (5-39)", ID: "SP025" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|-----------------------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                                     | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                                         | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5581                                                                                    | 330115.37 | 4879936.13 | 127.48 | 0     | DEN | A     | 97.1  | 0.0 | 0.0    | 0.0  | 0.0  | 74.3 | 1.8  | -2.3 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 23.4  |

| Point Source, ISO 9613, Name: "Kiln 4 - Shell fan 20", ID: "SP081" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|--------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                    | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5585                                                               | 330138.73 | 4880107.79 | 109.80 | 0     | DEN | A     | 97.8  | 0.0 | 0.0    | 0.0  | 0.0  | 75.0 | 5.8  | -4.0 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.0  |

| Point Source, ISO 9613, Name: "Kiln 4 - Shell fan 19", ID: "SP080" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|--------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                    | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5595                                                               | 330139.68 | 4880109.37 | 109.79 | 0     | DEN | A     | 97.8  | 0.0 | 0.0    | 0.0  | 0.0  | 75.0 | 5.8  | -3.8 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 20.8  |

| Point Source, ISO 9613, Name: "Kiln 4 - Shell fan 18", ID: "SP079" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|--------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                    | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5600                                                               | 330140.62 | 4880110.94 | 109.78 | 0     | DEN | A     | 97.8  | 0.0 | 0.0    | 0.0  | 0.0  | 75.0 | 5.8  | -3.8 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 20.8  |

| Point Source, ISO 9613, Name: "Coal Mill Dust Collector - South (5-31)", ID: "SP040" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|--------------------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                                  | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                                      | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5766                                                                                 | 330204.09 | 4880156.36 | 121.10 | 0     | DEN | A     | 97.2  | 0.0 | 0.0    | 0.0  | 0.0  | 75.1 | 3.1  | -3.1 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 22.2  |

| Point Source, ISO 9613, Name: "S-2 to Crushed Limestone Conveyor (1-2)", ID: "!CS03!MSP028" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|---------------------------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                                         | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                                             | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5771                                                                                        | 330134.53 | 4879913.29 | 103.02 | 0     | D   | A     | 96.1  | 0.0 | 0.0    | 0.0  | 0.0  | 74.1 | 4.6  | -4.0 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.4  |

| Point Source, ISO 9613, Name: "Blend Silo 5 (5-41) - Kiln 3", ID: "SP014" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|---------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                       | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                           | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 5775                                                                      | 329963.58 | 4880060.06 | 138.49 | 0     | DEN | A     | 97.1  | 0.0 | 0.0    | 0.0  | 0.0  | 75.4 | 2.0  | -2.1 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.9  |

| Point Source, ISO 9613, Name: "New Secondary Crusher (5-38)", ID: "SP027" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|---------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                       | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                           | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 6089                                                                      | 330104.29 | 4880032.15 | 115.21 | 0     | DEN | A     | 93.9  | 0.0 | 0.0    | 0.0  | 0.0  | 74.8 | 0.9  | -3.6 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 21.8  |

| Line Source, ISO 9613, Name: "Coal haul truck to Kiln4 (3-7)", ID: "SL003" |           |            |       |       |     |       |       |      |        |      |      |      |      |      |      |       |      |      |      |       |
|----------------------------------------------------------------------------|-----------|------------|-------|-------|-----|-------|-------|------|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                        | X         | Y          | Z     | Refl. | DEN | Freq. | Lw    | l/a  | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                            | (m)       | (m)        | (m)   |       |     | (Hz)  | dB(A) | dB   | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 6288                                                                       | 330085.95 | 4879502.06 | 81.96 | 0     | D   | A     | 82.1  | 11.4 | 0.0    | 0.0  | 0.0  | 72.4 | 4.4  | -3.9 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 20.6  |

| Point Source, ISO 9613, Name: "Mill 10 Stack (5-49)", ID: "ICS05!MSP008b" |           |            |        |       |     |       |       |     |        |      |      |      |      |      |      |       |      |      |      |       |
|---------------------------------------------------------------------------|-----------|------------|--------|-------|-----|-------|-------|-----|--------|------|------|------|------|------|------|-------|------|------|------|-------|
| Nr.                                                                       | X         | Y          | Z      | Refl. | DEN | Freq. | Lw    | l/a | Optime | K0   | Di   | Adiv | Aatm | Agr  | Afol | Ahous | Abar | Cmet | RL   | Lr    |
|                                                                           | (m)       | (m)        | (m)    |       |     | (Hz)  | dB(A) | dB  | dB     | (dB) | (dB) | (dB) | (dB) | (dB) | (dB) | (dB)  | (dB) | (dB) | (dB) | dB(A) |
| 6280                                                                      | 330201.93 | 4880249.51 | 126.18 | 0     | DEN | A     | 92.3  | 0.0 | 0.0    | 0.0  | 0.0  | 75.5 | 1.1  | -4.5 | 0.0  | 0.0   | 0.0  | 0.0  | 0.0  | 20.2  |



## Report (1899309 Lehigh Picton CadnaA May 2022 V11 AAR ver.cna)

### CALCULATION CONFIGURATION

| Configuration                                  |                                |
|------------------------------------------------|--------------------------------|
| Parameter                                      | Value                          |
| General                                        |                                |
| Country                                        | (user defined)                 |
| Max. Error (dB)                                | 0.00                           |
| Max. Search Radius (#(Unit,LEN))               | 4000.00                        |
| Min. Dist Src to Rcvr                          | 0.00                           |
| Partition                                      |                                |
| Raster Factor                                  | 0.50                           |
| Max. Length of Section (#(Unit,LEN))           | 1000.00                        |
| Min. Length of Section (#(Unit,LEN))           | 1.00                           |
| Min. Length of Section (%)                     | 0.00                           |
| Proj. Line Sources                             | On                             |
| Proj. Area Sources                             | On                             |
| Ref. Time                                      |                                |
| Reference Time Day (min)                       | 960.00                         |
| Reference Time Night (min)                     | 480.00                         |
| Daytime Penalty (dB)                           | 0.00                           |
| Recr. Time Penalty (dB)                        | 0.00                           |
| Night-time Penalty (dB)                        | 0.00                           |
| DTM                                            |                                |
| Standard Height (m)                            | 36.00                          |
| Model of Terrain                               | Triangulation                  |
| Reflection                                     |                                |
| max. Order of Reflection                       | 2                              |
| Search Radius Src                              | 100.00                         |
| Search Radius Rcvr                             | 100.00                         |
| Max. Distance Source - Rcvr                    | 4000.00 4000.00                |
| Min. Distance Rcvr - Reflector                 | 1.00 1.00                      |
| Min. Distance Source - Reflector               | 0.10                           |
| Industrial (ISO 9613)                          |                                |
| Lateral Diffraction                            | some Obj                       |
| Obst. within Area Src do not shield            | On                             |
| Screening                                      | Excl. Ground Att. over Barrier |
|                                                | Dz with limit (20/25)          |
| Barrier Coefficients C1,2,3                    | 3.0 20.0 0.0                   |
| Temperature (#(Unit,TEMP))                     | 10                             |
| rel. Humidity (%)                              | 70                             |
| Ground Absorption G                            | 0.80                           |
| Wind Speed for Dir. (#(Unit,SPEED))            | 3.0                            |
| Roads (RLS-90)                                 |                                |
| Strictly acc. to RLS-90                        |                                |
| Railways (Schall 03 (1990))                    |                                |
| Strictly acc. to Schall 03 / Schall-Transrapid |                                |
| Aircraft (???)                                 |                                |
| Strictly acc. to AzB                           |                                |

## NOISE SOURCES

### Noise Source Library

| Name                                                        | ID    | Type | 1/3 Oktave Spectrum (dB) |       |       |       |       |       |       |       |       |       |       |       | Source |
|-------------------------------------------------------------|-------|------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|                                                             |       |      | Weight.                  | 31.5  | 63    | 125   | 250   | 500   | 1000  | 2000  | 4000  | 8000  | A     | lin   |        |
| Primary Crusher                                             | S007  | Lw   |                          | 110.4 | 110.3 | 107.1 | 107.5 | 105.8 | 101.5 | 99.2  | 95.1  | 91.6  | 107.6 | 115.9 |        |
| Hammermill / FAM                                            | S008  | Lw   |                          | 123.6 | 126.0 | 117.4 | 111.1 | 111.6 | 111.8 | 110.2 | 106.2 | 97.3  | 116.6 | 128.7 |        |
| Hammermill / FAM M                                          | S008M | Lw   |                          | 107.6 | 110.0 | 101.4 | 95.1  | 95.6  | 95.8  | 94.2  | 90.2  | 81.3  | 100.6 | 112.7 |        |
| Screen House                                                | S009  | Li   |                          | 94.2  | 96.9  | 93.4  | 96.3  | 90.4  | 81.8  | 80.8  | 76.4  | 68.7  | 91.9  | 101.9 |        |
| Blend Silo 2                                                | S010  | Lw   |                          | 93.2  | 99.4  | 99.2  | 115.5 | 91.8  | 87.3  | 82.0  | 77.4  | 70.4  | 107.1 | 115.8 |        |
| Blend Silo 3                                                | S011  | Lw   |                          | 97.2  | 101.3 | 101.3 | 103.0 | 98.9  | 97.8  | 89.8  | 81.8  | 73.8  | 101.6 | 108.3 |        |
| Blend Silo 4 (#3 Kiln Feed)                                 | S012  | Lw   |                          | 96.7  | 101.0 | 102.6 | 113.4 | 93.3  | 94.0  | 85.5  | 79.0  | 72.6  | 105.4 | 114.1 |        |
| Blend Silo 6                                                | S013  | Lw   |                          | 90.3  | 97.4  | 109.4 | 89.2  | 81.1  | 77.1  | 73.6  | 73.4  | 71.6  | 93.9  | 109.8 |        |
| Dock Silo 1                                                 | S020  | Lw   |                          | 98.9  | 95.9  | 99.7  | 100.5 | 95.8  | 92.1  | 89.2  | 83.0  | 73.0  | 98.2  | 105.9 |        |
| Dock Silo 3                                                 | S022  | Lw   |                          | 100.8 | 106.6 | 107.4 | 102.7 | 100.0 | 98.5  | 94.0  | 88.7  | 82.4  | 103.1 | 111.8 |        |
| Indirect Firing - Coal Silo - South Pulverizing D/C exhaust | S032  | Lw   |                          | 84.6  | 103.1 | 96.6  | 98.7  | 98.4  | 86.0  | 82.6  | 78.7  | 74.7  | 97.2  | 106.1 |        |
| Indirect Firing - Coke Silo - North Pulverizing D/C exhaust | S033  | Lw   |                          | 86.1  | 98.6  | 99.8  | 97.9  | 96.2  | 87.6  | 83.8  | 77.0  | 70.9  | 96.1  | 104.5 |        |
| Blend Silo 5                                                | S041  | Lw   |                          | 86.9  | 90.0  | 95.4  | 105.1 | 86.7  | 83.8  | 78.8  | 74.2  | 66.9  | 97.1  | 105.8 |        |
| Pan conveyor                                                | S043  | Lw   |                          | 116.7 | 115.9 | 115.1 | 109.8 | 109.3 | 109.9 | 109.2 | 103.8 | 100.7 | 114.9 | 122.0 |        |
| S-2 to Crushed Limestone Conveyor                           | S051  | Lw   |                          | 111.1 | 112.3 | 107.5 | 105.3 | 103.3 | 100.5 | 98.2  | 94.0  | 89.0  | 106.1 | 116.3 |        |
| LSC and coke unloading from ship                            | S053  | Lw   |                          | 118.1 | 112.0 | 112.6 | 107.4 | 113.7 | 109.1 | 102.5 | 93.7  | 88.8  | 113.7 | 121.4 |        |
| Kiln 3 Stack with baghouse                                  | S055  | Lw   |                          | 102.0 | 96.2  | 91.2  | 88.2  | 89.3  | 77.3  | 73.3  | 69.3  | 67.3  | 88.1  | 103.6 |        |
| Kiln 4 Stack with ESPs                                      | S056  | Lw   |                          | 102.0 | 96.2  | 91.2  | 88.2  | 89.3  | 77.3  | 73.3  | 69.3  | 67.3  | 88.1  | 103.6 |        |
| Loader - quarry                                             | S060  | Lw   |                          | 112.9 | 116.8 | 116.1 | 114.0 | 109.9 | 106.1 | 106.4 | 101.9 | 95.5  | 113.3 | 121.9 |        |
| Haul Truck - quarry                                         | S061  | Lw   |                          | 111.7 | 114.1 | 117.0 | 115.4 | 111.8 | 111.3 | 109.4 | 102.5 | 97.0  | 116.1 | 122.2 |        |
| Heat exchanger (16 fans)                                    | S062  | Lw   |                          | 92.1  | 89.6  | 94.6  | 84.7  | 82.3  | 76.4  | 76.6  | 72.3  | 74.8  | 85.3  | 97.8  |        |
| Blend Silo compressors - Double door                        | S063  | Lw   |                          | 77.1  | 90.1  | 89.1  | 87.7  | 101.1 | 95.8  | 102.7 | 95.6  | 97.4  | 106.4 | 106.7 |        |
| Blend Silo compressors - Louver                             | S064  | Lw   |                          | 79.5  | 93.2  | 89.7  | 91.1  | 105.3 | 100.7 | 103.8 | 96.4  | 96.5  | 108.4 | 109.2 |        |
| Blend Silo compressors - Louver                             | S065  | Lw   |                          | 79.5  | 93.2  | 92.5  | 91.1  | 105.3 | 100.7 | 103.8 | 96.4  | 96.5  | 108.4 | 109.2 |        |
| Blend Silo compressors - Louver                             | S067  | Lw   |                          | 79.8  | 90.4  | 92.6  | 92.7  | 94.9  | 90.8  | 92.1  | 85.1  | 80.9  | 97.5  | 100.5 |        |
| Blend Silo compressors - Louver                             | S068  | Lw   |                          | 77.9  | 91.0  | 90.6  | 88.4  | 90.2  | 87.5  | 89.9  | 84.3  | 80.0  | 94.6  | 97.9  |        |
| Blend Silo compressors - Baydoor                            | S070  | Lw   |                          | 76.7  | 89.2  | 88.0  | 88.2  | 93.1  | 91.0  | 90.8  | 84.8  | 83.8  | 96.5  | 98.6  |        |
| Blend Silo compressors - Baydoor                            | S071  | Lw   |                          | 77.1  | 91.3  | 88.1  | 85.6  | 85.6  | 81.3  | 80.7  | 72.3  | 68.3  | 87.5  | 94.8  |        |
| Blend Silo compressors - Baydoor                            | S072  | Lw   |                          | 74.9  | 88.3  | 97.3  | 86.1  | 87.5  | 84.1  | 83.8  | 77.3  | 77.1  | 90.6  | 98.8  |        |
| Blend Silo compressors - Baydoor                            | S073  | Lw   |                          | 85.4  | 90.3  | 100.0 | 84.2  | 82.0  | 76.4  | 73.5  | 66.3  | 61.4  | 86.4  | 100.8 |        |
| Ball Mill - Door A                                          | S074  | Lw   |                          | 82.4  | 89.7  | 91.7  | 83.7  | 83.6  | 82.1  | 79.5  | 76.2  | 68.5  | 87.1  | 95.3  |        |
| Ball Mill - Door B                                          | S075  | Lw   |                          | 81.2  | 88.6  | 87.6  | 83.4  | 82.8  | 80.9  | 76.5  | 70.9  | 59.3  | 85.3  | 93.1  |        |
| Ball Mill - Door C                                          | S076  | Lw   |                          | 83.5  | 89.9  | 90.2  | 84.0  | 83.8  | 82.3  | 77.2  | 71.9  | 60.2  | 86.4  | 94.7  |        |
| Ball Mill - Door D                                          | S077  | Lw   |                          | 75.2  | 76.7  | 90.3  | 80.1  | 85.3  | 84.6  | 78.4  | 78.0  | 65.8  | 88.2  | 93.0  |        |
| Ball Mill - Door E                                          | S078  | Lw   |                          | 84.9  | 89.2  | 92.0  | 84.0  | 83.7  | 79.9  | 75.7  | 70.3  | 61.6  | 85.4  | 95.3  |        |
| Packaging Silo - dust collector                             | S080  | Lw   |                          | 110.4 | 105.0 | 135.0 | 120.1 | 102.0 | 94.6  | 89.3  | 84.2  | 82.4  | 119.7 | 135.2 |        |
| Heat exchanger - Emergency generator                        | S081  | Lw   |                          | 105.5 | 109.5 | 117.0 | 111.1 | 114.0 | 111.4 | 109.1 | 104.4 | 98.2  | 116.4 | 121.0 |        |
| Emergency water pump (2 stacks and louver)                  | S082  | Lw   |                          | 95.0  | 111.4 | 103.4 | 101.6 | 99.3  | 100.6 | 97.2  | 91.7  | 88.9  | 104.4 | 113.1 |        |
| Kiln 4 - Shell fans                                         | S083  | Lw   |                          | 94.1  | 97.4  | 98.2  | 94.7  | 94.6  | 92.4  | 91.0  | 87.1  | 80.0  | 97.8  | 103.8 |        |
| Loesch Bldg - Baydoor 1                                     | S084  | Lw   |                          | 90.5  | 88.7  | 84.3  | 86.9  | 83.9  | 83.9  | 83.1  | 82.1  | 79.0  | 89.9  | 95.5  |        |
| Loesch Bldg - Baydoor 2                                     | S085  | Lw   |                          | 86.9  | 87.2  | 84.5  | 87.2  | 80.6  | 77.7  | 78.7  | 78.8  | 73.4  | 86.1  | 93.4  |        |
| Loesch Bldg - Baydoor 3                                     | S086  | Lw   |                          | 86.9  | 84.3  | 81.2  | 82.8  | 78.6  | 76.4  | 74.9  | 74.6  | 71.2  | 82.9  | 91.1  |        |
| Loesch Bldg - Baydoor 4                                     | S087  | Lw   |                          | 90.6  | 86.5  | 84.4  | 88.1  | 82.5  | 82.5  | 82.6  | 82.9  | 78.7  | 89.6  | 95.2  |        |
| Loesch Bldg - Baydoor 5                                     | S088  | Lw   |                          | 90.5  | 92.2  | 87.8  | 100.5 | 84.6  | 81.0  | 87.0  | 90.1  | 81.7  | 95.9  | 102.2 |        |
| Loesch Bldg - Cooling radiator                              | S089  | Lw   |                          | 100.4 | 99.3  | 103.0 | 104.1 | 103.9 | 101.4 | 99.1  | 95.5  | 89.5  | 106.6 | 110.7 |        |
| Loesch Bldg - Compressor door                               | S090  | Lw   |                          | 78.3  | 86.1  | 95.4  | 91.5  | 90.9  | 95.6  | 98.5  | 95.9  | 87.7  | 102.8 | 103.4 |        |
| Loesch Bldg - Precipitator rapper opening 1                 | S091  | Lw   |                          | 92.9  | 88.8  | 86.3  | 84.3  | 78.8  | 77.2  | 81.3  | 87.3  | 91.5  | 93.2  | 97.5  |        |
| Loesch Bldg - Precipitator rapper opening 2                 | S092  | Lw   |                          | 92.9  | 88.8  | 86.3  | 84.3  | 78.8  | 77.2  | 81.3  | 87.3  | 91.5  | 93.2  | 97.5  |        |
| Main Stack - motor                                          | S093  | Lw   |                          | 104.3 | 105.8 | 105.0 | 101.7 | 99.5  | 101.5 | 97.1  | 96.0  | 87.6  | 105.3 | 111.6 |        |
| South Fan - motor                                           | S094  | Li   |                          | 92.2  | 93.9  | 92.9  | 90.4  | 85.4  | 82.1  | 86.2  | 82.6  | 79.5  | 91.4  | 99.2  |        |
| South Fan - connection                                      | S095  | Li   |                          | 94.1  | 96.3  | 96.9  | 97.6  | 95.6  | 91.6  | 91.6  | 92.8  | 92.4  | 99.9  | 104.4 |        |
| South Fan - ductwork upper                                  | S096  | Li   |                          | 95.9  | 93.6  | 91.1  | 87.9  | 78.5  | 74.0  | 72.1  | 69.9  | 64.5  | 83.4  | 99.1  |        |
| South Fan - fan bearing                                     | S097  | Li   |                          | 91.1  | 93.0  | 95.8  | 97.2  | 96.1  | 93.2  | 91.4  | 100.8 | 98.6  | 104.4 | 105.9 |        |
| South Fan - duct work - ground                              | S098  | Li   |                          | 93.1  | 98.0  | 93.2  | 93.0  | 87.4  | 84.0  | 81.7  | 81.6  | 79.1  | 91.1  | 101.3 |        |
| North Fan - ductwork upper                                  | S100  | Li   |                          | 96.6  | 93.2  | 91.2  | 90.8  | 79.4  | 76.3  | 71.6  | 68.4  | 63.5  | 85.0  | 99.7  |        |
| North Fan - sources                                         | S102  | Lw   |                          | 112.2 | 111.6 | 110.8 | 110.5 | 103.3 | 100.0 | 100.9 | 101.9 | 100.3 | 109.2 | 117.9 |        |
| South Fan - sources                                         | S103  | Lw   |                          | 118.6 | 117.6 | 115.9 | 113.2 | 109.5 | 107.3 | 107.4 | 106.5 | 103.3 | 114.5 | 123.3 |        |
| Preheat tower - south side opening                          | S104  | Lw   |                          | 86.9  | 85.1  | 84.5  | 81.7  | 78.0  | 73.0  | 70.2  | 66.0  | 55.9  | 79.9  | 91.3  |        |
| Preheat tower - south side opening                          | S105  | Lw   |                          | 86.9  | 85.1  | 84.5  | 81.7  | 78.0  | 73.0  | 70.2  | 66.0  | 55.9  | 79.9  | 91.3  |        |
| Preheat tower - south side opening                          | S106  | Lw   |                          | 86.9  | 85.1  | 84.5  | 81.7  | 78.0  | 73.0  | 70.2  | 66.0  | 55.9  | 79.9  | 91.3  |        |
| Preheat tower - south side opening                          | S107  | Lw   |                          | 86.9  | 85.1  | 84.5  | 81.7  | 78.0  | 73.0  | 70.2  | 66.0  | 55.9  | 79.9  | 91.3  |        |
| Preheat tower - south side opening                          | S108  | Lw   |                          | 86.9  | 85.1  | 84.5  | 81.7  | 78.0  | 73.0  | 70.2  | 66.0  | 55.9  | 79.9  | 91.3  |        |
| Compressor - shore - louver                                 | S109  | Lw   |                          | 72.9  | 77.0  | 87.7  | 86.8  | 88.4  | 85.4  | 83.0  | 79.0  | 75.0  | 90.6  | 94.0  |        |
| Compressor - shore - door                                   | S110  | Lw   |                          | 76.9  | 81.0  | 86.5  | 87.3  | 87.6  | 83.6  | 80.8  | 76.3  | 71.4  | 89.1  | 93.3  |        |
| Compressor - shore - double door                            | S111  | Lw   |                          | 77.2  | 78.5  | 87.7  | 89.1  | 89.7  | 85.5  | 83.0  | 79.0  | 75.1  | 91.2  | 95.0  |        |
| Ball Mill 7 - outside                                       | S112  | Lw   |                          | 119.6 | 120.7 | 120.8 | 115.2 | 113.2 | 114.4 | 113.8 | 109.3 | 102.1 | 119.5 | 126.5 |        |
| Kiln 4 - Fan 1                                              | S113  | Lw   |                          | 117.9 | 114.4 | 117.5 | 112.9 | 111.6 | 108.8 | 105.6 | 105.5 | 93.8  | 114.5 | 122.9 |        |
| Kiln 4 - Fan 2                                              | S114  | Lw   |                          | 112.4 | 114.6 | 115.1 | 112.6 | 111.3 | 107.9 | 102.8 | 98.1  | 91.1  | 112.9 | 120.8 |        |
| Kiln 3 - Fan                                                | S114a | Lw   |                          | 99.5  | 101.7 | 102.2 | 99.7  | 98.4  | 95.0  | 89.9  | 85.2  | 78.2  | 100.0 | 107.9 |        |
| Kiln 4 - Fan 3                                              | S115  | Lw   |                          | 118.3 | 117.2 | 114.8 | 115.7 | 111.3 | 108.4 | 106.8 | 105.4 | 94.7  | 114.8 | 123.4 |        |
| Kiln 4 - Fan 4                                              | S116  | Lw   |                          | 106.8 | 109.9 | 110.3 | 107.3 | 103.1 | 99.8  | 97.6  | 93.6  | 87.7  | 106.1 | 115.4 |        |
| Kiln 4 - Fan 5                                              | S117  | Lw   |                          | 111.9 | 114.3 | 113.3 | 110.0 | 104.1 | 100.2 | 97.7  | 94.8  | 86.7  | 107.4 | 118.9 |        |
| Kiln 4 - Fan 7                                              | S119  | Lw   |                          | 106.0 | 108.6 | 107.1 | 104.7 | 100.2 | 97.4  | 97.7  | 89.6  | 83.2  | 103.3 | 113.3 |        |
| Kiln 4 - Fan 8                                              | S120  | Lw   |                          | 106.2 | 108.6 | 106.9 | 102.0 | 98.5  | 95.8  | 92.3  | 87.3  | 80.7  | 101.4 | 112.9 |        |
| 1792 Loesch Feed - openings                                 | S121  | Lw   |                          | 82.9  | 83.6  | 83.2  | 81.8  | 82.0  | 83.8  | 85.7  | 84.0  | 77.5  | 90.8  | 92.7  |        |
| Coal system - Baydoor                                       | S123  | Li   |                          | 82.0  | 83.7  | 81.3  | 79.7  | 79.3  | 78.5  | 93.2  | 80.3  | 68.8  | 94.8  | 94.7  |        |

| Name                                             | ID            | Type | 1/3 Oktave Spectrum (dB) |       |       |       |       |       |       |       |       |       |       |       | Source |  |
|--------------------------------------------------|---------------|------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--|
|                                                  |               |      | Weight.                  | 31.5  | 63    | 125   | 250   | 500   | 1000  | 2000  | 4000  | 8000  | A     | lin   |        |  |
| Coal system - Schenck blower - 2nd floor opening | S124          | Lw   |                          | 83.2  | 84.8  | 89.9  | 94.9  | 90.1  | 84.5  | 83.1  | 80.4  | 72.6  | 92.2  | 97.9  |        |  |
| Coal system - Baydoor - south                    | S126          | Lw   |                          | 82.0  | 83.7  | 81.3  | 79.7  | 79.3  | 78.5  | 93.2  | 80.3  | 68.8  | 94.8  | 94.8  |        |  |
| Kiln 4 - Blue fan                                | S127          | Lw   |                          | 96.9  | 100.1 | 98.5  | 106.1 | 102.4 | 101.8 | 97.4  | 89.8  | 84.4  | 105.8 | 110.1 |        |  |
| Highway truck                                    | S999          | Lw   |                          | 105.8 | 106.1 | 100.3 | 93.9  | 95.6  | 98.9  | 92.6  | 84.8  | 79.1  | 101.2 | 110.2 |        |  |
| Coal drop point                                  | S998          | Lw   |                          | 117.4 | 116.7 | 118.3 | 111.1 | 118.1 | 114.7 | 106.8 | 97.5  | 89.7  | 118.5 | 124.5 |        |  |
| South Fan - Bearing                              | S997          | Lw   |                          | 103.5 | 104.2 | 102.7 | 107.5 | 103.4 | 99.4  | 98.6  | 108.8 | 104.1 | 111.8 | 114.2 |        |  |
| Substation                                       | TS001         | Lw   |                          | 92.0  | 98.0  | 100.0 | 95.0  | 95.0  | 81.0  | 84.0  | 79.0  | 72.0  | 94.4  | 103.9 |        |  |
| Ship Genset (2000 kW)                            | S700          | Lw   |                          | 0.0   | 71.3  | 88.7  | 85.2  | 86.3  | 88.0  | 91.5  | 95.1  | 92.7  | 99.2  | 99.4  |        |  |
| Ship Genset (300 kW)                             | S701          | Lw   |                          | 0.0   | 64.4  | 78.1  | 75.9  | 60.7  | 77.9  | 76.6  | 81.0  | 79.6  | 85.5  | 86.4  |        |  |
| Mill Fans                                        | S800          | Lw   |                          | 0.0   | 132.4 | 128.6 | 123.9 | 112.2 | 106.2 | 102.4 | 102.2 | 96.2  | 118.6 | 134.4 |        |  |
| Mill 10                                          | S900          | Lw   |                          | 95.0  | 96.1  | 96.2  | 90.6  | 88.6  | 89.8  | 89.2  | 84.7  | 77.5  | 94.9  | 101.9 |        |  |
| Compressor building louver                       | Comp_louver   | Lw   |                          | 91.0  | 96.0  | 95.0  | 92.0  | 83.0  | 83.0  | 88.0  | 87.0  | 80.0  | 93.3  | 100.7 |        |  |
| Packaging Silo #4 DC (5-19)                      | PS_DC5_19     | Lw   |                          | 104.0 | 102.0 | 122.0 | 112.0 | 97.0  | 86.0  | 83.0  | 80.0  | 76.0  | 108.1 | 122.5 |        |  |
| Blend silo 3 (5-11)                              | BS3_5_11      | Lw   |                          | 92.0  | 91.0  | 96.0  | 91.0  | 81.0  | 78.0  | 85.0  | 98.0  | 83.0  | 99.5  | 101.8 |        |  |
| Primary crusher dust collector (5-7)             | PC_DC_5_7     | Lw   |                          | 95.0  | 96.0  | 95.0  | 93.0  | 95.0  | 90.0  | 88.0  | 91.0  | 90.0  | 97.8  | 102.9 |        |  |
| Dock silo 1 fan                                  | DS1_fan       | Lw   |                          | 93.0  | 95.0  | 95.0  | 86.0  | 78.0  | 78.0  | 80.0  | 79.0  | 72.0  | 86.8  | 99.6  |        |  |
| Dock silo 2 fan                                  | DS2_fan       | Lw   |                          | 92.0  | 93.0  | 95.0  | 92.0  | 86.0  | 87.0  | 85.0  | 83.0  | 78.0  | 92.3  | 99.9  |        |  |
| Dock silo 3 fan                                  | DS3_fan       | Lw   |                          | 95.0  | 95.0  | 102.0 | 102.0 | 100.0 | 96.0  | 92.0  | 86.0  | 80.0  | 101.5 | 107.3 |        |  |
| Dock silo 4 fan                                  | DS4_fan       | Lw   |                          | 98.0  | 91.0  | 99.0  | 100.0 | 95.0  | 93.0  | 88.0  | 84.0  | 75.0  | 98.0  | 105.0 |        |  |
| Low carbon fuel project blower                   | LCFP_B        | Lw   |                          | 93.0  | 93.0  | 103.0 | 103.0 | 104.0 | 99.0  | 95.0  | 89.0  | 79.0  | 104.5 | 109.1 |        |  |
| Low carbon fuel project loader                   | LCFP_L        | Lw   |                          | 106.0 | 110.0 | 108.0 | 101.0 | 103.0 | 104.0 | 99.0  | 92.0  | 86.0  | 107.1 | 114.3 |        |  |
| Low carbon fuel project transport truck idling   | LCFP_TI       | Lw   |                          | 109.0 | 110.0 | 108.0 | 102.0 | 101.0 | 97.0  | 94.0  | 89.0  | 86.0  | 102.9 | 114.5 |        |  |
| Low carbon fuel project truck unlaopding         | LCFP_TU       | Lw   |                          | 97.0  | 95.0  | 108.0 | 102.0 | 102.0 | 100.0 | 98.0  | 93.0  | 87.0  | 105.1 | 110.9 |        |  |
| Low carbon fuel project screen                   | LCFP_S        | Lw   |                          | 102.0 | 106.0 | 107.0 | 101.0 | 102.0 | 101.0 | 101.0 | 97.0  | 91.0  | 106.7 | 112.2 |        |  |
| Low carbon fuel project metal reject bin         | LCFP_MRB      | Lw   |                          | 108.0 | 109.0 | 108.0 | 106.0 | 114.0 | 115.0 | 116.0 | 109.0 | 102.0 | 120.3 | 121.2 |        |  |
| Cement dome project BU 323-6 louver              | CD_BU323_6_L  | Lw   |                          | 101.0 | 98.0  | 107.0 | 107.0 | 107.0 | 101.0 | 96.0  | 89.0  | 79.0  | 107.1 | 112.7 |        |  |
| Cement dome BU 327-3 louver south                | CD_BU327_3_LS | Lw   |                          | 118.0 | 115.0 | 108.0 | 100.0 | 99.0  | 98.0  | 98.0  | 92.0  | 84.0  | 103.9 | 120.2 |        |  |
| Cement dome BU 327-3 louver north                | CD_BU327_3_LN | Lw   |                          | 118.0 | 115.0 | 108.0 | 100.0 | 99.0  | 98.0  | 98.0  | 91.0  | 84.0  | 103.8 | 120.2 |        |  |
| Cement dome dust collector                       | CD_DC         | Lw   |                          | 115.8 | 115.8 | 109.8 | 98.8  | 96.8  | 89.8  | 90.8  | 81.8  | 67.8  | 99.7  | 119.4 |        |  |
| Cement Dome Conversion outdoor blower            | CDC_B         | Lw   |                          | 90.5  | 90.5  | 100.5 | 100.5 | 101.5 | 96.5  | 92.5  | 86.5  | 76.5  | 102.0 | 106.6 |        |  |

## Point Source(s)

| Name                                             | M. | ID           | Result, PWL |         |       | Lw / Li |       |       | Correction |         |       | Sound Reduction |      | Attenuation | (   |
|--------------------------------------------------|----|--------------|-------------|---------|-------|---------|-------|-------|------------|---------|-------|-----------------|------|-------------|-----|
|                                                  |    |              | Day         | Evening | Night | Type    | Value | norm. | Day        | Evening | Night | R               | Area |             |     |
|                                                  |    |              | (dBA)       | (dBA)   | (dBA) |         |       | dB(A) | dB(A)      | dB(A)   | dB(A) |                 | (m²) |             | Day |
| Backup water pump                                | ~  | !FPIFPS001   | 109.4       | 109.4   | 109.4 | Lw      | S082  |       | 5.0        | 5.0     | 5.0   |                 |      |             | 60. |
| Emergency Generator                              | ~  | !G!GS001     | 121.4       | 121.4   | 121.4 | Lw      | S081  |       | 5.0        | 5.0     | 5.0   |                 |      |             | 60. |
| K3 Cooling Kiln Fan 1                            | ~  | !K01!K3S001  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooling Kiln Fan 2                            | ~  | !K01!K3S002  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooling Kiln Fan 3                            | ~  | !K01!K3S003  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooling Kiln Fan 4                            | ~  | !K01!K3S004  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 1                      | ~  | !K01!K3S005  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 2                      | ~  | !K01!K3S006  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 3                      | ~  | !K01!K3S007  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 4                      | ~  | !K01!K3S008  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 5                      | ~  | !K01!K3S009  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 6                      | ~  | !K01!K3S010  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 7                      | ~  | !K01!K3S011  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 8                      | ~  | !K01!K3S012  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 9                      | ~  | !K01!K3S013  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Dust Collector Fan 10                     | ~  | !K01!K3S014  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Fan I.D.                                  | ~  | !K01!K3S015  | 105.3       | 105.3   | 105.3 | Lw      | S093  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Baghouse                                  | ~  | !K01!K3S016  | 96.1        | 96.1    | 96.1  | Lw      | S033  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooler Compt 1 fan                            | ~  | !K01!K3S017  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooler Compt 2 fan                            | ~  | !K01!K3S018  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooler Compt 3 fan                            | ~  | !K01!K3S019  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooler Compt 4 fan                            | ~  | !K01!K3S020  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| K3 Cooler Compt 5 fan                            | ~  | !K01!K3S021  | 97.8        | 97.8    | 97.8  | Lw      | S083  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Waste Dust Bin - Dust Collector                  | ~  | !K01!K3S022  | 97.2        | 97.2    | 97.2  | Lw      | S032  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Feed System (Dust Collector) (5-14)       | ~  | !K01!K3S023  | 97.2        | 97.2    | 97.2  | Lw      | S032  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 - Fan 1                                   | ~  | !K01!K3S024  | 100.0       | 100.0   | 100.0 | Lw      | S114a |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Kiln 3 Stack with baghouse (4-1)                 | ~  | !K01!K3S025  | 88.1        | 88.1    | 88.1  | Lw      | S055  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| #1 Mill Stack (5-1)                              | ~  | !NC03!USP001 | 102.9       | 102.9   | 102.9 | Lw      | S800  |       | 0.0        | 0.0     | 0.0   |                 |      | MF          |     |
| #2 Mill Stack (5-2)                              | ~  | !NC03!USP002 | 102.9       | 102.9   | 102.9 | Lw      | S800  |       | 0.0        | 0.0     | 0.0   |                 |      | MF          |     |
| #3 Mill Stack (5-3)                              | ~  | !NC03!USP003 | 102.9       | 102.9   | 102.9 | Lw      | S800  |       | 0.0        | 0.0     | 0.0   |                 |      | MF          |     |
| #4 Mill Stack (5-4)                              | ~  | !NC03!USP004 | 102.9       | 102.9   | 102.9 | Lw      | S800  |       | 0.0        | 0.0     | 0.0   |                 |      | MF          |     |
| #5 Mill Stack (5-5)                              | ~  | !NC03!USP005 | 102.9       | 102.9   | 102.9 | Lw      | S800  |       | 0.0        | 0.0     | 0.0   |                 |      | MF          |     |
| #6 & #7 Mill Stack (5-6)                         | ~  | !NC03!USP006 | 102.9       | 102.9   | 102.9 | Lw      | S800  |       | 0.0        | 0.0     | 0.0   |                 |      | MF          |     |
| Ball Mill 7 - outside                            | ~  | !NC03!USP007 | 119.5       | 119.5   | 119.5 | Lw      | S112  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Mill 10 (5-49)                                   | ~  | !NC04!USP008 | 119.5       | 119.5   | 119.5 | Lw      | S112  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Slag dryer (5-48)                                | ~  | SP009        | 107.6       | 107.6   | 107.6 | Lw      | S007  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Packaging Silo (Silo #4) - dust collector (5-19) | ~  | USP010       | 124.7       | 124.7   | 124.7 | Lw      | S080  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo 2 (5-10)                              | ~  | USP011       | 112.1       | 112.1   | 112.1 | Lw      | S010  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo 3 (5-11)                              | ~  | USP012       | 106.6       | 106.6   | 106.6 | Lw      | S011  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo 4 (#3 Kiln Feed) (5-12)               | ~  | USP013       | 110.4       | 110.4   | 110.4 | Lw      | S012  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo 5 (5-41) - Kiln 3                     | ~  | SP014        | 97.1        | 97.1    | 97.1  | Lw      | S041  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Blend Silo 6 (5-13) - Kiln 3                     | ~  | SP015        | 98.9        | 98.9    | 98.9  | Lw      | S013  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  | ~  | USP016       | 113.4       | 113.4   | 113.4 | Lw      | S064  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  | ~  | USP017       | 113.4       | 113.4   | 113.4 | Lw      | S065  |       | 5.0        | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  | -  | SP018        | 93.5        | 102.5   | 102.5 | Lw      | S067  |       | -4.0       | 5.0     | 5.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  | -  | SP019        | 93.6        | 99.6    | 99.6  | Lw      | S068  |       | -1.0       | 5.0     | 5.0   |                 |      |             |     |
| Loesch Bldg - Cooling radiator                   | ~  | !NC01!USP020 | 106.6       | 106.6   | 106.6 | Lw      | S089  |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |

| Name                                             | M. | ID           | Result. PWL  |                  |                | Lw / Li |       |                | Correction   |                  |                | Sound Reduction |              | Attenuation | (mir) |
|--------------------------------------------------|----|--------------|--------------|------------------|----------------|---------|-------|----------------|--------------|------------------|----------------|-----------------|--------------|-------------|-------|
|                                                  |    |              | Day<br>(dBA) | Evening<br>(dBA) | Night<br>(dBA) | Type    | Value | norm.<br>dB(A) | Day<br>dB(A) | Evening<br>dB(A) | Night<br>dB(A) | R               | Area<br>(m²) |             |       |
| Loesch Bldg - Precipitator rapper opening 1      |    | SP021        | 93.2         | 93.2             | 93.2           | Lw      | S092  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Loesch Bldg - Precipitator rapper opening 2      |    | SP022        | 93.2         | 93.2             | 93.2           | Lw      | S092  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 Stack with ESPs (4-2)                     |    | SP023        | 88.1         | 88.1             | 88.1           | Lw      | S056  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Main Stack - motor                               |    | SP024        | 105.3        | 105.3            | 105.3          | Lw      | S093  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Expansion - Limestone Storage 105-1 (5-39)       |    | SP025        | 97.1         | 97.1             | 97.1           | Lw      | S041  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Expansion - Hopper Feedweights (5-47)            |    | SP026        | 101.6        | 101.6            | 101.6          | Lw      | S011  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| New Secondary Crusher (5-38)                     |    | SP027        | 93.9         | 93.9             | 93.9           | Lw      | S013  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| S-2 to Crushed Limestone Conveyor (1-2)          | ~  | !NC02!USP028 | 106.1        | 106.1            | 106.1          | Lw      | S051  |                | 0.0          | 0.0              | 0.0            |                 |              |             | 60.   |
| Primary Crusher - Dust collector (5-7)           | -  | !NC01!USP029 | 107.6        | 107.6            | 107.6          | Lw      | S007  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Secondary Crusher (FAM and Hammermill) (5-8)     | ~  | !NC02!USP030 | 116.6        | 116.6            | 116.6          | Lw      | S008  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Dock Silo 1 (5-20)                               | ~  | USP031       | 98.2         | 98.2             | 98.2           | Lw      | S020  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Dock Silo 2 (5-21)                               | ~  | USP032       | 98.2         | 98.2             | 98.2           | Lw      | S020  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Dock Silo 3 (5-22)                               | ~  | USP033       | 103.1        | 103.1            | 103.1          | Lw      | S022  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Dock Silo 4 (5-23)                               | ~  | USP034       | 103.1        | 103.1            | 103.1          | Lw      | S022  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Compressor - shore - door                        |    | SP035        | 89.1         | 89.1             | 89.1           | Lw      | S110  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Compressor - shore - louver                      |    | SP036        | 90.6         | 90.6             | 90.6           | Lw      | S109  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Compressor - shore - double door                 |    | SP037        | 91.2         | 91.2             | 91.2           | Lw      | S111  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| C-15 Discharge to Dome (5-30)                    | -  | SP038        | 96.1         | 96.1             | 96.1           | Lw      | S033  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Coal Mill Dust Collector - North (5-31)          |    | SP039        | 96.1         | 96.1             | 96.1           | Lw      | S033  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Coal Mill Dust Collector - South (5-31)          |    | SP040        | 97.2         | 97.2             | 97.2           | Lw      | S032  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Pan conveyor (5-43)                              | ~  | !NC02!USP041 | 114.9        | 114.9            | 114.9          | Lw      | S043  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Coal system - Schenck blower - 2nd floor opening |    | SP042        | 92.2         | 92.2             | 92.2           | Lw      | S124  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| North Fan Sources                                | ~  | !NC04!USP043 | 109.2        | 109.2            | 109.2          | Lw      | S102  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Preheat tower - south side opening               |    | SP045        | 79.9         | 79.9             | 79.9           | Lw      | S104  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Preheat tower - south side opening               |    | SP046        | 79.9         | 79.9             | 79.9           | Lw      | S105  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Preheat tower - south side opening               |    | SP047        | 79.9         | 79.9             | 79.9           | Lw      | S106  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Preheat tower - south side opening               |    | SP048        | 79.9         | 79.9             | 79.9           | Lw      | S107  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Preheat tower - south side opening               |    | SP049        | 79.9         | 79.9             | 79.9           | Lw      | S108  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Transformer                                      |    | SP050        | 99.4         | 99.4             | 99.4           | Lw      | TS001 |                | 5.0          | 5.0              | 5.0            |                 |              |             |       |
| Kiln 4 - Fan 1                                   | ~  | !NC02!USP051 | 114.5        | 114.5            | 114.5          | Lw      | S113  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 2                                   | ~  | !NC02!USP052 | 112.9        | 112.9            | 112.9          | Lw      | S114  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 3                                   | ~  | !NC02!USP053 | 114.8        | 114.8            | 114.8          | Lw      | S115  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 4                                   |    | SP054        | 106.1        | 106.1            | 106.1          | Lw      | S116  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 5                                   |    | SP055        | 107.4        | 107.4            | 107.4          | Lw      | S117  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 6                                   |    | SP056        | 107.4        | 107.4            | 107.4          | Lw      | S117  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 7                                   |    | SP057        | 103.3        | 103.3            | 103.3          | Lw      | S119  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Fan 8                                   |    | SP058        | 101.4        | 101.4            | 101.4          | Lw      | S120  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Blue fan                                |    | SP059        | 105.8        | 105.8            | 105.8          | Lw      | S127  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - B fan 1                                 | ~  | !NC02!USP060 | 115.8        | 115.8            | 115.8          | Lw      | S127  |                | 10.0         | 10.0             | 10.0           |                 |              |             |       |
| Kiln 4 - B fan 2                                 | ~  | !NC02!USP061 | 115.8        | 115.8            | 115.8          | Lw      | S127  |                | 10.0         | 10.0             | 10.0           |                 |              |             |       |
| Kiln 4 - Shell fan 1                             |    | SP062        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 2                             |    | SP063        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 3                             |    | SP064        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 4                             |    | SP065        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 5                             |    | SP066        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 6                             |    | SP067        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 7                             |    | SP068        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 8                             |    | SP069        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 9                             |    | SP070        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 10                            |    | SP071        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 11                            |    | SP072        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 12                            |    | SP073        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 13                            |    | SP074        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 14                            |    | SP075        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 15                            |    | SP076        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 16                            |    | SP077        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 17                            |    | SP078        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 18                            |    | SP079        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 19                            |    | SP080        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Kiln 4 - Shell fan 20                            |    | SP081        | 97.8         | 97.8             | 97.8           | Lw      | S083  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (1 of 16 fans)                    |    | SP082        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (2 of 16 fans)                    |    | SP083        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (3 of 16 fans)                    |    | SP084        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (4 of 16 fans)                    |    | SP085        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (5 of 16 fans)                    |    | SP086        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (6 of 16 fans)                    |    | SP087        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (7 of 16 fans)                    |    | SP088        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (8 of 16 fans)                    |    | SP089        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (9 of 16 fans)                    |    | SP090        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (10 of 16 fans)                   |    | SP091        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (11 of 16 fans)                   |    | SP092        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (12 of 16 fans)                   |    | SP093        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (13 of 16 fans)                   |    | SP094        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (14 of 16 fans)                   |    | SP095        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (15 of 16 fans)                   |    | SP096        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Heat exchanger (16 of 16 fans)                   |    | SP097        | 85.3         | 85.3             | 85.3           | Lw      | S062  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Transformer                                      |    | SP098        | 99.4         | 99.4             | 99.4           | Lw      | TS001 |                | 5.0          | 5.0              | 5.0            |                 |              |             |       |
| Ship Genset (2000 kW)                            | -  | SP099        | 99.2         | 99.2             | 99.2           | Lw      | S700  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Ship Genset (300 kW)                             | -  | SP100        | 85.5         | 85.5             | 85.5           | Lw      | S701  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Clinker Ship Loading (5-27)                      |    | SP101        | 92.2         | 92.2             | 92.2           | Lw      | S124  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |
| Loader - quarry                                  |    | SP103        | 113.3        | 113.3            | 113.3          | Lw      | S060  |                | 0.0          | 0.0              | 0.0            |                 |              |             | 60.   |
| Loader - Coal pile                               | ~  | !NC02!USP105 | 113.3        | 113.3            | 113.3          | Lw      | S060  |                | 0.0          | 0.0              | 0.0            |                 |              |             | 60.   |
| Ball Mill 7 - outside                            |    | !CS04!MSP007 | 106.6        | 106.6            | 106.6          | Lw      | S112  |                | 0.0          | 0.0              | 0.0            |                 |              | Lag         |       |
| Mill 10 (5-49)                                   |    | !CS05!MSP008 | 94.9         | 94.9             | 94.9           | Lw      | S900  |                | 0.0          | 0.0              | 0.0            |                 |              |             |       |

| Name                                             | M. | ID               | Result. PWL |         |       | Lw / Li |                |       | Correction |         |       | Sound Reduction |      | Attenuation | (   |
|--------------------------------------------------|----|------------------|-------------|---------|-------|---------|----------------|-------|------------|---------|-------|-----------------|------|-------------|-----|
|                                                  |    |                  | Day         | Evening | Night | Type    | Value          | norm. | Day        | Evening | Night | R               | Area |             |     |
|                                                  |    |                  | (dBA)       | (dBA)   | (dBA) |         |                |       | dB(A)      | dB(A)   | dB(A) |                 | (m²) |             | Day |
| Packaging Silo (Silo #4) - dust collector (5-19) | -  | !CS01!MSP010     | 101.6       | 101.6   | 101.6 | Lw      | S080           |       | 0.0        | 0.0     | 0.0   |                 |      | PSSIL       |     |
| Blend Silo 2 (5-10)                              |    | !CS01!MSP011     | 90.0        | 90.0    | 90.0  | Lw      | S010           |       | 0.0        | 0.0     | 0.0   |                 |      | BSSIL       |     |
| Blend Silo 4 (#3 Kiln Feed) (5-12)               |    | !CS01!MSP013     | 91.1        | 91.1    | 91.1  | Lw      | S012           |       | 0.0        | 0.0     | 0.0   |                 |      | BSSIL       |     |
| Blend Silo compressors - Louver                  | -  | !CS01!MSP016     | 96.5        | 96.5    | 96.5  | Lw      | S064           |       | 0.0        | 0.0     | 0.0   |                 |      | LS          |     |
| Blend Silo compressors - Louver                  | -  | !CS01!MSP017     | 93.5        | 96.5    | 96.5  | Lw      | S065           |       | -3.0       | 0.0     | 0.0   |                 |      | LS          |     |
| Loesch Bldg - Cooling radiator                   |    | !CS02!MSP020     | 93.5        | 93.5    | 93.5  | Lw      | S089           |       | 0.0        | 0.0     | 0.0   |                 |      | Lag         |     |
| S-2 to Crushed Limestone Conveyor (1-2)          |    | !CS03!MSP028     | 96.1        | 96.1    | 96.1  | Lw      | S051           |       | 0.0        | 0.0     | 0.0   |                 |      | 10          | 60. |
| Primary Crusher - Dust collector (5-7)           | -  | !CS01!MSP029     | 102.6       | 102.6   | 102.6 | Lw      | S007           |       | 0.0        | 0.0     | 0.0   |                 |      | BSSIL       |     |
| Secondary Crusher (FAM and Hammermill) (5-8)     |    | !CS03!MSP030     | 100.6       | 100.6   | 100.6 | Lw      | S008M          |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| North Fan Sources                                |    | !CS05!MSP043     | 97.3        | 97.3    | 97.3  | Lw      | S102           |       | 0.0        | 0.0     | 0.0   |                 |      | Lag         |     |
| Kiln 4 - Fan 1                                   |    | !CS03!MSP051     | 102.0       | 102.0   | 102.0 | Lw      | S113           |       | 0.0        | 0.0     | 0.0   |                 |      | Lag         |     |
| Kiln 4 - Fan 2                                   |    | !CS03!MSP052     | 100.4       | 100.4   | 100.4 | Lw      | S114           |       | 0.0        | 0.0     | 0.0   |                 |      | Lag         |     |
| Kiln 4 - Fan 3                                   |    | !CS03!MSP053     | 102.3       | 102.3   | 102.3 | Lw      | S115           |       | 0.0        | 0.0     | 0.0   |                 |      | Lag         |     |
| Kiln 4 - B fan 1                                 |    | !CS03!MSP060upd  | 102.7       | 102.7   | 102.7 | Lw      | S127           |       | 10.0       | 10.0    | 10.0  |                 |      | Lag         |     |
| Kiln 4 - B fan 2                                 |    | !CS03!MSP061upd  | 102.7       | 102.7   | 102.7 | Lw      | S127           |       | 10.0       | 10.0    | 10.0  |                 |      | Lag         |     |
| Loader - Coal pile                               |    | !CS03!MSP105     | 103.3       | 103.3   | 103.3 | Lw      | S060           |       | 0.0        | 0.0     | 0.0   |                 |      | 10          | 60. |
| Mill 10 Stack (5-49)                             | ~  | !INC04!USP008b   | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| Blend Silo 3 (5-11)                              | -  | !CS01!MSP012     | 93.4        | 93.4    | 93.4  | Lw      | S011           |       | 0.0        | 0.0     | 0.0   |                 |      | BSSIL       |     |
| #1 Mill Stack (5-1)                              |    | !CS04!MSP001     | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| #2 Mill Stack (5-2)                              |    | !CS04!MSP002     | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| #3 Mill Stack (5-3)                              |    | !CS04!MSP003     | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| #4 Mill Stack (5-4)                              |    | !CS04!MSP004     | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| #5 Mill Stack (5-5)                              |    | !CS04!MSP005     | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| #6 & #7 Mill Stack (5-6)                         |    | !CS04!MSP006     | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| Dock Silo 1 (5-20)                               | -  | !CS01!MSP031     | 91.7        | 91.7    | 91.7  | Lw      | S020           |       | 0.0        | 0.0     | 0.0   |                 |      | DSSIL       |     |
| Dock Silo 2 (5-21)                               | -  | !CS01!MSP032     | 91.7        | 91.7    | 91.7  | Lw      | S020           |       | 0.0        | 0.0     | 0.0   |                 |      | DSSIL       |     |
| Dock Silo 3 (5-22)                               | -  | !CS01!MSP033     | 96.8        | 96.8    | 96.8  | Lw      | S022           |       | 0.0        | 0.0     | 0.0   |                 |      | DSSIL       |     |
| Dock Silo 4 (5-23)                               |    | !CS01!MSP034upd  | 98.0        | 98.0    | 98.0  | Lw      | DS4_fan        |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Pan conveyor (5-43)                              |    | !CS03!MSP041     | 101.9       | 101.9   | 101.9 | Lw      | S043           |       | 0.0        | 0.0     | 0.0   |                 |      | Lag         |     |
| Mill 10 Stack (5-49)                             |    | !CS05!MSP008b    | 92.3        | 92.3    | 92.3  | Lw      | S800           |       | 0.0        | 0.0     | 0.0   |                 |      | MF+PSSIL    |     |
| Blend Silo compressors - Louver                  |    | !CS01!MSP016_upd | 93.3        | 93.3    | 93.3  | Lw      | Comp_louver    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  |    | !CS01!MSP017upd  | 93.3        | 93.3    | 93.3  | Lw      | Comp_louver    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  |    | SP018upd         | 93.3        | 93.3    | 93.3  | Lw      | Comp_louver    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Blend Silo compressors - Louver                  |    | SP019upd         | 93.3        | 93.3    | 93.3  | Lw      | Comp_louver    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Packaging Silo (Silo #4) - dust collector (5-19) |    | !CS01!MSP010upd  | 92.1        | 92.1    | 92.1  | Lw      | PS_DC5_19      |       | 0.0        | 0.0     | 0.0   |                 |      | PSSIL       |     |
| Blend Silo 6 (5-13) - Kiln 3                     | -  | SP015upd         | 99.5        | 99.5    | 99.5  | Lw      | BS6_5_13_Kiln3 |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Primary Crusher - Dust collector (5-7)           |    | !CS01!MSP029upd  | 97.8        | 97.8    | 97.8  | Lw      | PC_DC_5_7      |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Dock Silo 1 (5-20)                               |    | !CS01!MSP031upd  | 86.8        | 86.8    | 86.8  | Lw      | DS1_fan        |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Dock Silo 2 (5-21)                               |    | !CS01!MSP032upd  | 92.3        | 92.3    | 92.3  | Lw      | DS2_fan        |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Dock Silo 3 (5-22)                               |    | !CS01!MSP033upd  | 101.5       | 101.5   | 101.5 | Lw      | DS3_fan        |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Dock Silo 4 (5-23)                               | -  | !CS01!MSP034     | 96.8        | 96.8    | 96.8  | Lw      | S022           |       | 0.0        | 0.0     | 0.0   |                 |      | DSSIL       |     |
| Blend Silo 3 (5-11)                              |    | !CS01!MSP012upd  | 99.5        | 99.5    | 99.5  | Lw      | BS3_5_11       |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| LCFP blower                                      |    | !E01!LCFP_B      | 104.5       | 104.5   | 104.5 | Lw      | LCFP_B         |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| LCFP loader                                      |    | !E01!LCFP_L      | 103.1       | 103.1   | 103.1 | Lw      | LCFP_L         |       | -4.0       | -4.0    | -4.0  |                 |      |             | 45. |
| LCFP screen                                      |    | !E01!LCFP_S      | 99.7        | 99.7    | 99.7  | Lw      | LCFP_S         |       | -7.0       | -7.0    | -7.0  |                 |      |             |     |
| LCFP metal reject bin                            |    | !E01!LCFP_S      | 113.3       | 113.3   | 113.3 | Lw      | LCFP_MRB       |       | -7.0       | -7.0    | -7.0  |                 |      |             | 1.  |
| LCFP truck unloading                             |    | !E01!LCFP_TU     | 101.1       | 101.1   | 101.1 | Lw      | LCFP_TU        |       | -4.0       | -4.0    | -4.0  |                 |      |             | 5.  |
| LCFP truck idling                                |    | !E01!LCFP_TI     | 98.9        | 98.9    | 98.9  | Lw      | LCFP_TI        |       | -4.0       | -4.0    | -4.0  |                 |      |             | 5.  |
| CD Building 323-6 louver                         |    | !K02!BU_323_6_L  | 103.8       | 103.8   | 103.8 | Lw      | CD_BU323_6_L   |       | 0.0        | 0.0     | 0.0   |                 |      | AL          |     |
| CD Building 327-3 exhaust louver                 |    | !K02!BU_327_3_EL | 100.3       | 100.3   | 100.3 | Lw      | CD_BU327_3_LS  |       | 0.0        | 0.0     | 0.0   |                 |      | AL          |     |
| CD Building 327-3 intake louver                  |    | !K02!BU_327_3_IL | 100.2       | 100.2   | 100.2 | Lw      | CD_BU327_3_LN  |       | 0.0        | 0.0     | 0.0   |                 |      | AL          |     |
| CD dust collector fan                            |    | !K02!CD_DCF      | 99.7        | 99.7    | 99.7  | Lw      | CD_DC          |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| CDC Outdoor Blower                               |    | !K02!CDC_B       | 102.0       | 102.0   | 102.0 | Lw      | CDC_B          |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |

## Line Source(s)

| Name                                   | M. | ID          | Result. PWL |         |       | Result. PWL' |         |       | Lw / Li |         |       | Correction |         |       | Sound Reduction |      | Attenuation | O   |
|----------------------------------------|----|-------------|-------------|---------|-------|--------------|---------|-------|---------|---------|-------|------------|---------|-------|-----------------|------|-------------|-----|
|                                        |    |             | Day         | Evening | Night | Day          | Evening | Night | Type    | Value   | norm. | Day        | Evening | Night | R               | Area |             |     |
|                                        |    |             | (dBA)       | (dBA)   | (dBA) | (dBA)        | (dBA)   | (dBA) |         |         |       | dB(A)      | dB(A)   | dB(A) |                 | (m²) |             | Day |
| Haul truck to crusher - Quarry (1-1)   |    | SL001       | 113.8       | 3.8     | 3.8   | 82.1         | -27.9   | -27.9 | PWL-Pt  | S061    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Haul truck to crusher - Plant (1-1)    |    | SL002       | 110.8       | 0.8     | 0.8   | 82.1         | -27.9   | -27.9 | PWL-Pt  | S061    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Coal haul truck to Kiln4 (3-7)         |    | SL003       | 111.6       | 1.6     | 1.6   | 82.1         | -27.9   | -27.9 | PWL-Pt  | S061    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Highway truck - in                     |    | SL004       | 95.0        | 95.0    | 95.0  | 67.2         | 67.2    | 67.2  | PWL-Pt  | S999    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Highway truck - out                    |    | SL005       | 93.9        | 93.9    | 93.9  | 67.2         | 67.2    | 67.2  | PWL-Pt  | S999    |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |
| Low carbon fuel project delivery truck |    | !E01!LCFP_T | 91.0        | 91.0    | 91.0  | 62.0         | 62.0    | 62.0  | PWL-Pt  | LCFP_TI |       | 0.0        | 0.0     | 0.0   |                 |      |             |     |

## Vertical Area Source(s)

| Name                                 | M. | ID     | Result. PWL |         |       | Result. PWL" |         |       | Lw / Li |       |       | Correction |         |       | Sound Reduction |      | Attenuation | Opera |
|--------------------------------------|----|--------|-------------|---------|-------|--------------|---------|-------|---------|-------|-------|------------|---------|-------|-----------------|------|-------------|-------|
|                                      |    |        | Day         | Evening | Night | Day          | Evening | Night | Type    | Value | norm. | Day        | Evening | Night | R               | Area |             |       |
|                                      |    |        | (dBA)       | (dBA)   | (dBA) | (dBA)        | (dBA)   | (dBA) |         |       |       | dB(A)      | dB(A)   | dB(A) |                 | (m²) |             | Day   |
| Ball Mill - Door A                   | ~  | USV001 | 101.3       | 101.3   | 101.3 | 90.6         | 90.6    | 90.6  | Lw"     | S072  |       | 0.0        | 0.0     | 0.0   |                 |      |             |       |
| Ball Mill - Door B                   | ~  | USV002 | 97.2        | 97.2    | 97.2  | 86.4         | 86.4    | 86.4  | Lw"     | S073  |       | 0.0        | 0.0     | 0.0   |                 |      |             |       |
| Ball Mill - Door D                   | ~  | USV003 | 93.9        | 93.9    | 93.9  | 85.3         | 85.3    | 85.3  | Lw"     | S075  |       | 0.0        | 0.0     | 0.0   |                 |      |             |       |
| Ball Mill - Door C                   | ~  | USV004 | 95.8        | 95.8    | 95.8  | 87.1         | 87.1    | 87.1  | Lw"     | S074  |       | 0.0        | 0.0     | 0.0   |                 |      |             |       |
| Ball Mill - Door E                   | ~  | USV005 | 97.2        | 97.2    | 97.2  | 86.4         | 86.4    | 86.4  | Lw"     | S076  |       | 0.0        | 0.0     | 0.0   |                 |      |             |       |
| Ball Mill - Door F                   | ~  | USV006 | 99.0        | 99.0    | 99.0  | 88.2         | 88.2    | 88.2  | Lw"     | S077  |       | 0.0        | 0.0     | 0.0   |                 |      |             |       |
| Blend Silo compressors - Baydoor     | ~  | USV007 | 110.1       | 110.1   | 110.1 | 101.5        | 101.5   | 101.5 | Lw"     | S070  |       | 5.0        | 5.0     | 5.0   |                 |      |             |       |
| Blend Silo compressors - Baydoor     | ~  | USV008 | 101.1       | 101.1   | 101.1 | 92.5         | 92.5    | 92.5  | Lw"     | S071  |       | 5.0        | 5.0     | 5.0   |                 |      |             |       |
| Blend Silo compressors - Double door | ~  | USV009 | 122.3       | 122.3   | 122.3 | 111.4        | 111.4   | 111.4 | Lw"     | S063  |       | 5.0        | 5.0     | 5.0   |                 |      |             |       |

| Name                                 | M. | ID           | Result. PWL  |                  |                | Result. PWL" |                  |                | Lw / Li |       | Correction     |              |                  | Sound Reduction |   | Attenuation  | Oper         |        |
|--------------------------------------|----|--------------|--------------|------------------|----------------|--------------|------------------|----------------|---------|-------|----------------|--------------|------------------|-----------------|---|--------------|--------------|--------|
|                                      |    |              | Day<br>(dBA) | Evening<br>(dBA) | Night<br>(dBA) | Day<br>(dBA) | Evening<br>(dBA) | Night<br>(dBA) | Type    | Value | norm.<br>dB(A) | Day<br>dB(A) | Evening<br>dB(A) | Night<br>dB(A)  | R | Area<br>(m²) | Day<br>(min) | S<br>( |
| Blend Silo compressors - Double door | ~  | USV010       | 120.0        | 120.0            | 120.0          | 111.4        | 111.4            | 111.4          | Lw"     | S063  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Blend Silo compressors - Baydoor     | ~  | USV011       | 121.9        | 121.9            | 121.9          | 113.4        | 113.4            | 113.4          | Lw"     | S064  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Blend Silo compressors - Baydoor     | ~  | USV012       | 101.8        | 101.8            | 101.8          | 95.6         | 95.6             | 95.6           | Lw"     | S072  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Blend Silo compressors - Baydoor     | ~  | USV013       | 97.7         | 97.7             | 97.7           | 91.4         | 91.4             | 91.4           | Lw"     | S073  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Loesch Bldg - Baydoor 1              | ~  | USV014       | 101.2        | 101.2            | 101.2          | 89.9         | 89.9             | 89.9           | Lw"     | S084  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| Loesch Bldg - Baydoor 2              | ~  | USV015       | 95.9         | 95.9             | 95.9           | 86.1         | 86.1             | 86.1           | Lw"     | S085  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| Loesch Bldg - Baydoor 3              | ~  | USV016       | 93.4         | 93.4             | 93.4           | 82.9         | 82.9             | 82.9           | Lw"     | S086  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| Loesch Bldg - Baydoor 4              | ~  | USV017       | 104.4        | 104.4            | 104.4          | 94.6         | 94.6             | 94.6           | Lw"     | S087  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Loesch Bldg - Baydoor 5              | ~  | USV018       | 110.7        | 110.7            | 110.7          | 100.9        | 100.9            | 100.9          | Lw"     | S088  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Loesch Bldg - Compressor door        | ~  | USV019       | 117.5        | 117.5            | 117.5          | 107.8        | 107.8            | 107.8          | Lw"     | S090  |                | 5.0          | 5.0              | 5.0             |   |              |              |        |
| Loesch 1792 Feed                     |    | SV020        | 103.5        | 103.5            | 103.5          | 90.8         | 90.8             | 90.8           | Lw"     | S121  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| 1792 Loesch Feed                     |    | SV021        | 103.5        | 103.5            | 103.5          | 90.8         | 90.8             | 90.8           | Lw"     | S121  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| Screenhouse                          | ~  | !NC02!USV022 | 101.5        | 101.5            | 101.5          | 91.9         | 91.9             | 91.9           | Lw"     | S009  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| Coal System - Baydoor                | ~  | USV023       | 104.2        | 104.2            | 104.2          | 94.8         | 94.8             | 94.8           | Lw"     | S123  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| North Fan duct work                  | ~  | !NC04!USV024 | 103.0        | 103.0            | 103.0          | 85.0         | 85.0             | 85.0           | Lw"     | S100  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan duct work                  | ~  | !NC04!USV025 | 101.1        | 101.1            | 101.1          | 83.4         | 83.4             | 83.4           | Lw"     | S096  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - motor 1                  | ~  | !NC04!USV027 | 92.4         | 92.4             | 92.4           | 91.4         | 91.4             | 91.4           | Lw"     | S094  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - motor 2                  | ~  | !NC04!USV028 | 92.4         | 92.4             | 92.4           | 91.4         | 91.4             | 91.4           | Lw"     | S094  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - motor 3                  | ~  | !NC04!USV029 | 92.4         | 92.4             | 92.4           | 91.4         | 91.4             | 91.4           | Lw"     | S094  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - connection 1             | ~  | !NC04!USV030 | 97.4         | 97.4             | 97.4           | 99.9         | 99.9             | 99.9           | Lw"     | S095  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - connection 2             | ~  | !NC04!USV031 | 97.4         | 97.4             | 97.4           | 99.9         | 99.9             | 99.9           | Lw"     | S095  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - duct 1                   | ~  | !NC04!USV032 | 104.6        | 104.6            | 104.6          | 91.1         | 91.1             | 91.1           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - duct 2                   | ~  | !NC04!USV033 | 104.6        | 104.6            | 104.6          | 91.1         | 91.1             | 91.1           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - duct 3                   | ~  | !NC04!USV034 | 104.1        | 104.1            | 104.1          | 91.1         | 91.1             | 91.1           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - duct 4                   | ~  | !NC04!USV035 | 104.6        | 104.6            | 104.6          | 91.1         | 91.1             | 91.1           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| South Fan - fan bearing              | ~  | !NC04!USV036 | 101.9        | 101.9            | 101.9          | 104.4        | 104.4            | 104.4          | Lw"     | S097  |                | 0.0          | 0.0              | 0.0             |   |              |              |        |
| Ball Mill - Door A                   |    | !CS01!MSV001 | 81.3         | 81.3             | 81.3           | 70.6         | 70.6             | 70.6           | Lw"     | S072  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Ball Mill - Door B                   |    | !CS01!MSV002 | 77.2         | 77.2             | 77.2           | 66.4         | 66.4             | 66.4           | Lw"     | S073  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Ball Mill - Door D                   |    | !CS01!MSV003 | 73.9         | 73.9             | 73.9           | 65.3         | 65.3             | 65.3           | Lw"     | S075  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Ball Mill - Door C                   |    | !CS01!MSV004 | 75.8         | 75.8             | 75.8           | 67.1         | 67.1             | 67.1           | Lw"     | S074  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Ball Mill - Door E                   |    | !CS01!MSV005 | 77.2         | 77.2             | 77.2           | 66.4         | 66.4             | 66.4           | Lw"     | S076  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Ball Mill - Door F                   |    | !CS01!MSV006 | 79.0         | 79.0             | 79.0           | 68.2         | 68.2             | 68.2           | Lw"     | S077  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Baydoor     |    | !CS01!MSV007 | 85.1         | 85.1             | 85.1           | 76.5         | 76.5             | 76.5           | Lw"     | S070  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Baydoor     |    | !CS01!MSV008 | 76.1         | 76.1             | 76.1           | 67.5         | 67.5             | 67.5           | Lw"     | S071  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Double door |    | !CS01!MSV009 | 97.3         | 97.3             | 97.3           | 86.4         | 86.4             | 86.4           | Lw"     | S063  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Double door |    | !CS01!MSV010 | 95.0         | 95.0             | 95.0           | 86.4         | 86.4             | 86.4           | Lw"     | S063  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Baydoor     |    | !CS01!MSV011 | 96.9         | 96.9             | 96.9           | 88.4         | 88.4             | 88.4           | Lw"     | S064  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Baydoor     |    | !CS01!MSV012 | 76.8         | 76.8             | 76.8           | 70.6         | 70.6             | 70.6           | Lw"     | S072  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Blend Silo compressors - Baydoor     |    | !CS01!MSV013 | 72.7         | 72.7             | 72.7           | 66.4         | 66.4             | 66.4           | Lw"     | S073  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Loesch Bldg - Baydoor 1              |    | !CS01!MSV014 | 81.2         | 81.2             | 81.2           | 69.9         | 69.9             | 69.9           | Lw"     | S084  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Loesch Bldg - Baydoor 2              |    | !CS01!MSV015 | 75.9         | 75.9             | 75.9           | 66.1         | 66.1             | 66.1           | Lw"     | S085  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Loesch Bldg - Baydoor 3              |    | !CS01!MSV016 | 73.4         | 73.4             | 73.4           | 62.9         | 62.9             | 62.9           | Lw"     | S086  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Loesch Bldg - Baydoor 4              |    | !CS01!MSV017 | 79.4         | 79.4             | 79.4           | 69.6         | 69.6             | 69.6           | Lw"     | S087  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Loesch Bldg - Baydoor 5              |    | !CS01!MSV018 | 85.7         | 85.7             | 85.7           | 75.9         | 75.9             | 75.9           | Lw"     | S088  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Loesch Bldg - Compressor door        |    | !CS01!MSV019 | 92.5         | 92.5             | 92.5           | 82.8         | 82.8             | 82.8           | Lw"     | S090  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| Screenhouse                          |    | !CS03!MSV022 | 89.8         | 89.8             | 89.8           | 80.2         | 80.2             | 80.2           | Lw"     | S009  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| Coal System - Baydoor                |    | !CS01!MSV023 | 84.2         | 84.2             | 84.2           | 74.8         | 74.8             | 74.8           | Lw"     | S123  |                | 0.0          | 0.0              | 0.0             |   | 20           |              |        |
| North Fan duct work                  |    | !CS05!MSV024 | 92.3         | 92.3             | 92.3           | 74.3         | 74.3             | 74.3           | Lw"     | S100  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan duct work                  |    | !CS05!MSV025 | 90.7         | 90.7             | 90.7           | 73.0         | 73.0             | 73.0           | Lw"     | S096  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - motor 1                  |    | !CS05!MSV027 | 79.9         | 79.9             | 79.9           | 79.0         | 79.0             | 79.0           | Lw"     | S094  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - motor 2                  |    | !CS05!MSV028 | 79.9         | 79.9             | 79.9           | 79.0         | 79.0             | 79.0           | Lw"     | S094  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - motor 3                  |    | !CS05!MSV029 | 79.9         | 79.9             | 79.9           | 79.0         | 79.0             | 79.0           | Lw"     | S094  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - connection 1             |    | !CS05!MSV030 | 85.0         | 85.0             | 85.0           | 87.5         | 87.5             | 87.5           | Lw"     | S095  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - connection 2             |    | !CS05!MSV031 | 85.0         | 85.0             | 85.0           | 87.5         | 87.5             | 87.5           | Lw"     | S095  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - duct 1                   |    | !CS05!MSV032 | 92.8         | 92.8             | 92.8           | 79.3         | 79.3             | 79.3           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - duct 2                   |    | !CS05!MSV033 | 92.8         | 92.8             | 92.8           | 79.3         | 79.3             | 79.3           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - duct 3                   |    | !CS05!MSV034 | 92.3         | 92.3             | 92.3           | 79.3         | 79.3             | 79.3           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - duct 4                   |    | !CS05!MSV035 | 92.8         | 92.8             | 92.8           | 79.3         | 79.3             | 79.3           | Lw"     | S098  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |
| South Fan - fan bearing              |    | !CS05!MSV036 | 89.7         | 89.7             | 89.7           | 92.2         | 92.2             | 92.2           | Lw"     | S097  |                | 0.0          | 0.0              | 0.0             |   | Lag          |              |        |

## Barrier(s)

| Name                          | M. | ID          | Absorption |       | Z-Ext. | Cantilever |       | Height |     |
|-------------------------------|----|-------------|------------|-------|--------|------------|-------|--------|-----|
|                               |    |             | left       | right |        | horz.      | vert. | Begin  | End |
|                               |    |             |            |       | (m)    | (m)        | (m)   | (m)    | (m) |
| Berm 1                        | ~  | !B01!Berm 1 | 0.60       | 0.60  |        |            |       | 2.50   | r   |
| Berm 2                        | ~  | !B01!Berm 2 | 0.60       | 0.60  |        |            |       | 4.50   | r   |
| Berm 3                        | ~  | !B01!Berm 3 | 0.60       | 0.60  |        |            |       | 3.00   | r   |
| Berm 4                        |    | Berm 4      | 0.60       | 0.60  |        |            |       | 8.00   | r   |
| Barrier (Primary Crusher)     |    | Barrier 1   | 0.21       | 0.21  |        |            |       | 4.00   | r   |
| Kiln 4                        |    | Barrier 2   | 0.21       | 0.21  | 4.00   |            |       | 14.00  | r   |
| Kiln 3                        |    | Barrier 3   | 0.21       | 0.21  | 4.00   |            |       | 14.00  | r   |
| Screenhouse 1                 |    | Barrier 4   | 0.37       | 0.37  | 3.00   |            |       | 9.40   | r   |
| Screenhouse 2                 |    | Barrier 5   | 0.37       | 0.37  | 3.00   |            |       | 2.00   | r   |
| Screenhouse 3                 |    | Barrier 6   | 0.37       | 0.37  | 3.00   |            |       | 2.00   | r   |
| Berm 1                        |    | !B02!Berm 1 | 0.60       | 0.60  |        |            |       | 8.00   | r   |
| Berm 2                        |    | !B02!Berm 2 | 0.60       | 0.60  |        |            |       | 8.00   | r   |
| Berm 3                        |    | !B02!Berm 3 | 0.60       | 0.60  |        |            |       | 8.00   | r   |
| Berm South                    | -  | Berm_S      | 0.84       | 0.84  |        |            |       | 6.00   | r   |
| Enclosure of loading material | -  | Berm_S      | 0.84       | 0.84  |        |            |       | 10.00  | r   |
| clading                       | -  | !E01Berm_S  | 0.21       | 0.21  |        |            |       | 10.00  | r   |
| enclosing clading             | -  | !E01Berm_S  | 0.21       | 0.21  |        |            |       | 2.00   | r   |

## Building(s)

| Name                                        | M. | ID            | RB | Residents | Absorption | Height  |
|---------------------------------------------|----|---------------|----|-----------|------------|---------|
|                                             |    |               |    |           |            | Begin   |
|                                             |    |               |    |           |            | (m)     |
| Kiln Firing Building BU_3                   |    | BU_3          |    | 0         | 0.21       | 17.20 r |
| Mill Building BU1                           |    | BU_1          |    | 0         | 0.21       | 21.00 r |
| Pack House BU_17                            |    | BU_17         |    | 0         | 0.21       | 12.00 r |
| Kiln #4 Firing BU_18                        |    | BU_18         |    | 0         | 0.21       | 21.00 r |
| Warehouse BU_07                             |    | BU_07         |    | 0         | 0.21       | 5.80 r  |
| Machine Shop BU_09                          |    | BU_09         |    | 0         | 0.21       | 8.40 r  |
| Loeshe Mills BU_11                          |    | BU_11         |    | 0         | 0.21       | 20.00 r |
| Warehouse BU_10                             |    | BU_10         |    | 0         | 0.21       | 4.00 r  |
| Garage BU_13                                |    | BU_13         |    | 0         | 0.21       | 8.50 r  |
| Main Office BU_06                           |    | BU_06         |    | 0         | 0.21       | 4.00 r  |
| Baghouse BU_05                              |    | BU_05         |    | 0         | 0.21       | 19.00 r |
| BUILDING                                    |    | BUILDING00013 |    | 0         | 0.21       | 5.00 r  |
| Blend Silos S_11                            |    | BS_11         |    | 0         | 0.21       | 34.60 r |
| Blend Silos S_12                            |    | BS_12         |    | 0         | 0.21       | 34.60 r |
| Blend Silos S_10                            |    | BS_10         |    | 0         | 0.21       | 34.60 r |
| Blend Silos S_09                            |    | BS_09         |    | 0         | 0.21       | 34.60 r |
| Blend Silos S_08                            |    | BS_08         |    | 0         | 0.21       | 34.60 r |
| Blend Silos S_07                            |    | BS_07         |    | 0         | 0.21       | 34.60 r |
| BUILDING                                    |    | BUILDING00020 |    | 0         | 0.21       | 16.00 r |
| PH Silos S_03                               |    | BS_03         |    | 0         | 0.21       | 36.00 r |
| Kiln #3 BU_4                                |    | BU_04         |    | 0         | 0.21       | 35.00 r |
| PH Silos S_05                               |    | BS_05         |    | 0         | 0.21       | 36.00 r |
| PH Silos S_01                               |    | BS_01         |    | 0         | 0.21       | 36.00 r |
| PH Silos S_06                               |    | BS_06         |    | 0         | 0.21       | 36.00 r |
| PH Silos S_04                               |    | BS_04         |    | 0         | 0.21       | 36.00 r |
| PH Silos S_02                               |    | BS_02         |    | 0         | 0.21       | 36.00 r |
| Baghouse BU_18                              |    | BU_18         |    | 0         | 0.21       | 14.30 r |
| Clinker Dome BU_25                          |    | BU_25         |    | 0         | 0.37       | 20.00 r |
| Pirmary crusher BU 030                      |    | BU_030        |    | 0         | 0.21       | 12.00 r |
| BUILDING                                    |    | BUILDING00035 |    | 0         | 0.21       | 3.00 r  |
| Hammer Mill BU_15                           |    | BU_15         |    | 0         | 0.21       | 9.40 r  |
| Secondary Crusher BU_16                     |    | BU_16         |    | 0         | 0.21       | 24.30 r |
| BUILDING                                    |    | BUILDING00038 |    | 0         | 0.21       | 3.50 r  |
| BUILDING                                    |    | BUILDING00040 |    | 0         | 0.21       | 28.00 r |
| Clinker Storage Hall BU_02                  |    | BU_02B        |    | 0         | 0.21       | 28.00 r |
| Dock Silos S_16                             |    | BS_16         |    | 0         | 0.21       | 48.10 r |
| Dock Silos S_15                             |    | BS_15         |    | 0         | 0.21       | 48.10 r |
| Dock Silos S_14                             |    | BS_14         |    | 0         | 0.21       | 48.10 r |
| Dock Silos S_13                             |    | BS_13         |    | 0         | 0.21       | 48.10 r |
| BUILDING                                    |    | BUILDING00059 |    | 0         | 0.21       | 3.00 r  |
| Service Station BU_14                       |    | BU_14         |    | 0         | 0.21       | 4.50 r  |
| Stores BU_08                                |    | BU_08         |    | 0         | 0.21       | 5.80 r  |
| Lab BU_12                                   |    | BU_12         |    | 0         | 0.21       | 4.00 r  |
| Kiln Firing Building BU_03                  |    | BU_03A        |    | 0         | 0.21       | 17.20 r |
| PREC                                        |    | BUILDING00068 |    | 0         | 0.21       | 1.00 r  |
| Preheat Tower BU_26                         |    | BU_26         |    | 0         | 0.21       | 81.50 r |
| Kiln #4 Firing BU_22                        |    | BU_22         |    | 0         | 0.21       | 19.00 r |
| Clinker Storage Hall BU_02                  |    | BU_02         |    | 0         | 0.37       | 28.00 r |
| Kiln #4 Firing BU_24                        |    | BU_24         |    | 0         | 0.21       | 19.00 r |
| Heat Exchanger BU_19                        |    | BU_19         |    | 0         | 0.21       | 27.00 r |
| Cooler BU_20                                |    | BU_20         |    | 0         | 0.21       | 20.00 r |
| Kiln #4 Firing BU_23                        |    | BU_23         |    | 0         | 0.21       | 35.00 r |
| Kiln #3 Firing BU_29                        |    | BU_29         |    | 0         | 0.21       | 20.00 r |
| Blend Silos Compressor Building BU 31       |    | BU_031        |    | 0         | 0.21       | 3.50 r  |
| Blend Silos Shore Compressor Building BU 32 |    | BU_032        |    | 0         | 0.21       | 3.50 r  |
| Clinker Dome BU_25                          |    | BU_25         |    | 0         | 0.21       |         |
| Clinker Dome BU_25                          |    | BU_25         |    | 0         | 0.21       |         |
| Clinker Dome BU_25                          |    | BU_25         |    | 0         | 0.21       |         |
| Clinker Dome BU_25                          |    | BU_25         |    | 0         | 0.21       |         |
| Kiln #4 Firing BU_18                        |    | BU_18         |    | 0         | 0.21       | 21.00 r |
| BU_extra                                    |    | BU_1X         |    | 0         | 0.21       | 10.00 r |
| BU_South Fan Motor                          |    | BU_SFM        |    | 0         |            | 2.50 r  |
| BU_South Fan Duct Casing                    |    | BU_SFDC       |    | 0         |            | 18.00 r |
| Blower tower ALFC Proj                      | -  | BU_SFDC       |    | 0         |            | 33.60 r |
| Blower tower ALFC Proj                      | -  | BU_SFDC       |    | 0         |            | 14.00 r |
| Blower tower ALFC Proj                      | -  | BU_SFDC       |    | 0         |            | 8.00 r  |
| Cement Dome BU-323-6                        |    | !K02!BU_SFDC  |    | 0         | 0.37       | 4.00 r  |
| Cement Dome BU-327-3                        |    | !K02!BU_SFDC  |    | 0         | 0.37       | 8.80 r  |

## Ground Absorption Area(s)

| Name             | M. | ID             | G   | height |
|------------------|----|----------------|-----|--------|
| WATERBODY - LAKE |    | WATERBODY00006 | 0.0 |        |
| Site             |    | Site           | 0.2 |        |
| Quarry           |    | Site 3         | 0.5 |        |
| Onsite waterbody |    | Site 2         | 0.0 |        |

# Receptor Noise Impact Level(s)

| Name                        | M. | ID      | Level Lr     |                  |                | Limit. Value |                  |                | Land Use |      |            | Height | Coordinates |           |            |        |
|-----------------------------|----|---------|--------------|------------------|----------------|--------------|------------------|----------------|----------|------|------------|--------|-------------|-----------|------------|--------|
|                             |    |         | Day<br>(dBA) | Evening<br>(dBA) | Night<br>(dBA) | Day<br>(dBA) | Evening<br>(dBA) | Night<br>(dBA) | Type     | Auto | Noise Type | (m)    | X<br>(m)    | Y<br>(m)  | Z<br>(m)   |        |
| POR 003 Elmbrook RD #57     | +  | POR003  | 41.2         | 33.5             | 33.3           | 45.4         | 40.4             | 40.4           |          |      |            | 4.50   | r           | 328535.58 | 4880423.90 | 109.24 |
| OPOR 003 Elmbrook RD #57    | +  | POR003A | 40.6         | 29.8             | 29.6           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 328552.07 | 4880416.97 | 105.76 |
| M_POR 006 Elmbrook RD #134  | +  | POR006  | 39.9         | 32.4             | 32.3           | 45.4         | 40.4             | 40.4           |          |      |            | 1.50   | r           | 328771.22 | 4880730.48 | 109.96 |
| M_OPOR 006 Elmbrook RD #134 | +  | POR006A | 40.0         | 31.9             | 31.9           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 328786.30 | 4880720.95 | 109.52 |
| M_POR 016                   | +  | POR016  | 39.6         | 38.7             | 38.7           | 45.4         | 40.4             | 40.4           |          |      |            | 1.50   | r           | 331029.80 | 4881218.19 | 102.22 |
| M_OPOR 016                  | +  | POR016A | 39.9         | 39.0             | 39.0           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 331010.25 | 4881195.85 | 102.41 |
| M_POR 020                   | +  | POR020  | 40.6         | 37.2             | 36.5           | 45.4         | 40.4             | 40.4           |          |      |            | 4.50   | r           | 329458.76 | 4878991.19 | 106.16 |
| M_OPOR 020                  | +  | POR020A | 39.2         | 35.8             | 35.2           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 329474.10 | 4879016.69 | 103.11 |
| M_POR 037                   | +  | POR037  | 41.7         | 39.8             | 39.8           | 45.4         | 40.4             | 40.4           |          |      |            | 1.50   | r           | 331013.75 | 4878781.30 | 79.72  |
| M_OPOR 037                  | +  | POR037A | 42.2         | 40.2             | 40.2           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 331012.33 | 4878786.29 | 78.21  |
| M_POR 044                   | +  | POR044  | 41.0         | 39.3             | 39.3           | 45.4         | 40.4             | 40.4           |          |      |            | 4.50   | r           | 331528.78 | 4878973.24 | 82.79  |
| M_OPOR 044                  | +  | POR044A | 40.5         | 38.9             | 38.9           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 331516.66 | 4878980.18 | 78.46  |
| M_POR 061                   | +  | POR061  | 42.1         | 39.9             | 39.9           | 45.4         | 40.4             | 40.4           |          |      |            | 4.50   | r           | 330615.78 | 4878478.22 | 83.92  |
| M_OPOR 061                  | +  | POR061A | 41.6         | 39.3             | 39.3           | 45.4         | 40.4             | 0.0            |          |      |            | 1.50   | r           | 330608.58 | 4878489.78 | 78.18  |

**APPENDIX I**

# Noise Abatement Action Plan

## **NOISE ABATEMENT ACTION PLAN**

Based on the results presented in the Acoustic Assessment Report (AAR), the implementation of noise controls will be required to demonstrate compliance with the Ministry of Environment, Conservation and Parks (MECP) noise guidelines. To mitigate the effects of the significant primary noise sources, an option to comply is described below. Other mitigation measure options that are acoustically equivalent may be possible.

### **Mitigation Summary**

Table I-1 outlines the proposed mitigation, associated implementation schedule and implementation status. Noise verification measurements will be carried out periodically during the implementation of the Noise Abatement Action Plan (NAAP) to determine the performance of the noise controls. Upon completion of the verification, the NAAP may be modified accordingly.

**Table I-1 Noise Sources - Mitigation**

| Noise Source (ESDM ID) (Noise Source ID)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mitigation                              | Proposed Timing                                    | Completion Status |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------|-------------------|
| Baydoors<br>Ball Mill - Door A (MSV001)<br>Ball Mill - Door B (MSV002)<br>Ball Mill - Door D (MSV003)<br>Ball Mill - Door C (MSV004)<br>Ball Mill - Door E (MSV005)<br>Ball Mill - Door F (MSV006)<br>Blend Silo compressors - Baydoor (MSV007)<br>Blend Silo compressors - Baydoor (MSV008)<br>Blend Silo compressors - Double door (MSV009)<br>Blend Silo compressors - Double door (MSV010)<br>Blend Silo compressors - Baydoor (MSV011)<br>Blend Silo compressors - Baydoor (MSV012)<br>Blend Silo compressors - Baydoor (MSV013)<br>Loesch Bldg - Baydoor 1 (MSV014)<br>Loesch Bldg - Baydoor 2 (MSV015)<br>Loesch Bldg - Baydoor 3 (MSV016)<br>Loesch Bldg - Baydoor 4 (MSV017)<br>Loesch Bldg - Baydoor 5 (MSV018)<br>Loesch Bldg - Compressor door (MSV019)<br>Coal System - Baydoor (MSV023) | Admin. control – doors to remain closed | One year after approval granted – assess as needed |                   |
| Quarry noise sources                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Berms – increase height to 8 m          | One year after approval granted                    | Completed         |
| Packaging Silo (Silo #4) - dust collector (5-19) (MSP010)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Silencer                                | One year after approval granted                    | Completed         |
| Blend Silo compressors - Louver (MSP016)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Acoustic louver                         | One year after approval granted                    | Completed         |
| Blend Silo compressors - Louver (MSP017)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |                                                    |                   |
| Primary Crusher – Dust collector (5-7) (MSP029)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Silencer                                | One year after approval granted                    | Completed         |
| Dock Silo 1 (5-20) (MSP031)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                    |                   |
| Dock Silo 2 (5-21) (MSP032)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Silencer                                | One year after approval                            | Completed         |
| Dock Silo 3 (5-22) (MSP033)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                    |                   |
| Dock Silo 4 (5-23) (MSP034)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                    |                   |
| Blend Silo 2 (5-10) (MSP011)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |                                                    |                   |
| Blend Silo 3 (5-11) (MSP012)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Silencer                                | One year after approval granted                    | Completed         |
| Blend Silo 4 (#3 Kiln Feed) (5-12) (MSP013)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                                    |                   |

| Noise Source (ESDM ID) (Noise Source ID)                                                                                                                                                                                    | Mitigation                                       | Proposed Timing                                    | Completion Status                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------|
| Loesch Bldg – Cooling radiator (MSP020)                                                                                                                                                                                     | Enclosure                                        | Two years after approval granted                   | Relocated inside of the building – no longer required as part of the NAAP |
| Loader - Coal pile (MSP105)                                                                                                                                                                                                 | Quieter equipment or silence equipment           | Three years after approval granted                 | TBC                                                                       |
| Screenhouse (MSV022)                                                                                                                                                                                                        | Lagging                                          | Three years after approval granted                 | TBC                                                                       |
| S-2 to Crushed Limestone Conveyor (1-2) (MSP028)                                                                                                                                                                            | Administrative control (i.e., lower drop height) | Three years after approval granted                 | TBC                                                                       |
| Secondary Crusher (FAM and Hammermill) (5-8) (MSP030)                                                                                                                                                                       | Lagging                                          | Three years after approval granted                 | TBC                                                                       |
| Pan Conveyor (5-43) (MSP041)                                                                                                                                                                                                | Enclosure                                        | Three years after approval                         | TBC                                                                       |
| Kiln 4 – Fan 1 (MSP051)                                                                                                                                                                                                     | Enclosure                                        | Three years after approval granted                 | TBC                                                                       |
| Kiln 4 – Fan 2 (MSP052)                                                                                                                                                                                                     |                                                  |                                                    |                                                                           |
| Kiln 4 – Fan 3 (MSP053)                                                                                                                                                                                                     |                                                  |                                                    |                                                                           |
| Kiln 4 – B fan 1 (MSP060)                                                                                                                                                                                                   | Enclosure                                        | Three years after approval granted                 | TBC                                                                       |
| Kiln 4 – B fan 2 (MSP061)                                                                                                                                                                                                   |                                                  |                                                    |                                                                           |
| Mill Stacks (MSP001 – MSP006)                                                                                                                                                                                               | Silencer                                         | Four years after approval                          | TBC                                                                       |
| Ball Mill 7 - outside (MSP007)                                                                                                                                                                                              | Lagging                                          | Four years after approval granted                  | TBC                                                                       |
| North Fan duct work (MSV024)                                                                                                                                                                                                | Lagging                                          | Five years after approval granted                  | TBC                                                                       |
| South Fan duct work (MSV025)                                                                                                                                                                                                | Lagging                                          | Five years after approval granted                  | TBC                                                                       |
| South Fan<br>Motor 1 (MSV027)<br>Motor 2 (MSV028)<br>Motor 3 (MSV029)<br>Connection 1 (MSV030)<br>Connection 2 (MSV031)<br>Duct 1 (MSV032)<br>Duct 2 (MSV033)<br>Duct 3 (MSV034)<br>Duct 4 (MSV035)<br>Fan bearing (MSV036) | Lagging                                          | Five years after approval granted                  | TBC                                                                       |
| North Fan Sources (MSP043)                                                                                                                                                                                                  | Lagging / Enclosure                              | Five years after approval granted                  | TBC                                                                       |
| Mill 10 – Vertical Roller Mill (5-49) (MSP008)                                                                                                                                                                              | Maximum design PWL                               | Prior to procurement or commissioning of equipment | TBC                                                                       |
| Mill 10 stack (5-49) (MSP008b)                                                                                                                                                                                              |                                                  |                                                    |                                                                           |

Notes:

TBC - to be completed

## DESCRIPTION OF NOISE CONTROLS

### Silencers – Dust Collectors / Silos / Kiln Fan Exhausts

To demonstrate compliance, various dust collector, silo and kiln fan exhausts will be equipped with exhaust silencers with the minimum dynamic insertion loss (DIL) performance presented in the table below.

**Table I-2 Silencer Minimum Dynamic Insertion Loss (DIL)<sup>1,2</sup>**

| Source ID                                                                                                                | Octave Band Centre Frequency (Hz) |    |     |     |     |      |      |      |      |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----|-----|-----|-----|------|------|------|------|
|                                                                                                                          | 31.5                              | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Mill Stacks (MSP001 – MSP006)                                                                                            |                                   |    |     |     |     |      |      |      |      |
| Packaging Silo (Silo #4) - dust collector (5-19) (MSP010)                                                                | 0                                 | 10 | 20  | 15  | 15  | 10   | 0    | 0    | 0    |
| Primary Crusher - Dust collector (5-7) (MSP029)                                                                          |                                   |    |     |     |     |      |      |      |      |
| Blend Silo 2 (5-10) (MSP011)<br>Blend Silo 3 (5-11) (MSP012)<br>Blend Silo 4 (#3 Kiln Feed) (5-12) (MSP013)              | 0                                 | 6  | 8   | 19  | 20  | 10   | 0    | 0    | 0    |
| Dock Silo 1 (5-20) (MSP031)<br>Dock Silo 2 (5-21) (MSP032)<br>Dock Silo 3 (5-22) (MSP033)<br>Dock Silo 4 (5-23) (MSP034) |                                   |    |     |     |     |      |      |      |      |

Notes:

1 - Or acoustically equivalent

2 - The exhaust silencers will need to be designed to remove or not create a tonal characteristic.

### Acoustic Louver

The Blend Silo compressor building louvers require the installation of acoustic louvers. These louvers will be designed in combination with the noise controls for the various baydoors around the site (see Administrative Control section below).

The acoustic louvers will require a minimum dynamic insertion loss (DIL) as identified in the table below.

**Table I-3 Acoustic Louver Minimum Dynamic Insertion Loss (DIL)<sup>1,2</sup>**

| Source ID                                | Octave Band Centre Frequency (Hz) |    |     |     |     |      |      |      |      |
|------------------------------------------|-----------------------------------|----|-----|-----|-----|------|------|------|------|
|                                          | 31.5                              | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Blend Silo compressors - Louver (MSP016) | 0                                 | 10 | 10  | 11  | 11  | 12   | 12   | 13   | 13   |
| Blend Silo compressors - Louver (MSP017) |                                   |    |     |     |     |      |      |      |      |

Notes:

1 - Or acoustically equivalent

2 - The louvers will need to be designed to remove or not create a tonal characteristic.

## Berms – Quarry Perimeter

To demonstrate compliance along Elmwood Road, the perimeter berms are to be increased from the current heights of 2.5 m, 3 m and 4.5 m to a height of 8 m, as illustrated in Figure 3. The lengths of the berms are approximately 175 m (Berm 1) and 400 m (Berm 2), respectively.

## Mill 10 – Vertical Roller Mill Design

The Mill 10 noise sources are to be designed to meet the maximum sound power level requirements for the equipment as identified in the table below. During the design stage of Mill 10, when detailed information is available Lehigh Hanson Materials Limited (Lehigh Hanson) will review the equipment specific sound power levels of the equipment and design the equipment accordingly.

**Table I-4 Mill 10 Preliminary Maximum Sound Power Design Specification<sup>1</sup>**

| Source ID                                      | Maximum Overall Sound Power Level (dBA) |
|------------------------------------------------|-----------------------------------------|
| Mill 10 – Vertical Roller Mill (5-49) (MSP008) | 95                                      |
| Mill 10 stack (5-49) (MSP008b)                 | 93                                      |

Note:

1 - Or acoustically equivalent

## Lagging / Enclosure

To demonstrate compliance, lagging or an enclosure (or acoustically equivalent) is required for various noise sources identified in Table I-1 including; MSP007, MSP030, MSP041, MSP043, MSP051 – MSP053, MSP060, MSP061, MSV022 and MSV024 – MSV036.

The table below provides the minimum transmission loss performance requirements for the lagging / enclosure. The transmission loss values shall not be less than the listed values.

**Table I-5 Lagging Minimum Transmission Loss Performance<sup>1,2</sup>**

| Octave Band Centre Frequency (Hz) |    |     |     |     |      |      |      |      |
|-----------------------------------|----|-----|-----|-----|------|------|------|------|
| 31.5                              | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 4                                 | 4  | 7   | 11  | 13  | 14   | 14   | 13   | 10   |

Notes:

1 - Or acoustically equivalent

2 - The lagging will need to be designed to remove or not create a tonal characteristic.

## Loader

Loader - Coal pile (MSP105) will require mitigation, which could be achieved by use of quieter equipment. The mitigated model assumed a 10 dB reduction. Lehigh Hanson plans to implement this change when the Loader requires replacement.

## ADMINISTRATIVE CONTROLS

### Bay Doors

During the site visit, it was observed many bay doors remained open during operations. To demonstrate compliance, the identified bay doors in Table I-1 are to be closed. The mitigated model assumed a 20 dB reduction with closing the bay doors. Lehigh Hanson plans to carry out an assessment of the bay doors to determine the performance of the actual doors and the affects on operations with doors closed, and then address the doors as needed (e.g., upgrade doors, modify operations).

### S-2 Crusher Limestone Conveyor

The Crusher Limestone Conveyor will require mitigation, which could be achieved by reducing material drop heights. The mitigated model assumed a 10 dB reduction with reducing the material drop height. The reduction will be verified upon implementation of the change.

## SUMMARY

Table 4 and Table 5 summarize the predicted sound levels from the Facility with the implementation of the controls described.

It is expected that controls will be implemented within five years from the date of the approval as identified in the Table I-1. With the implementation of these mitigative measures, it is expected the Facility can demonstrate compliance with MECP sound level limits.



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