

ACOUSTIC ASSESSMENT REPORT - Project: 16411.00

12415 Coleraine Drive – Acoustic Assessment Report Bolton, Ontario

Prepared for:

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September 11, 2017



**Revision History** 

Version	Description	Date
1	Acoustic Assessment Report	September 11, 2017

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### 1 Introduction

Aercoustics Engineering Limited (Aercoustics) was retained by Dig-Con International Limited to prepare an Acoustic Assessment Report (AAR) for a proposed asphalt plant at 12415 Coleraine Drive in the town of Bolton, as required by the Ministry of the Environment and Climate Change (MOECC), to support an application for registration under the Environmental Activity and Sector Registry (EASR).

The purpose of this study is to assess the noise impact of proposed noise sources on the noise sensitive receptors in the area and to outline noise mitigation measures as required to satisfy the MOECC noise guidelines.

Sound level limits for the facility noise on the residential receptors were first established. These were based on the noise guidelines of the MOECC. Next, the noise predictions of the facility operations were performed at these receptors. Where the predicted levels were found to exceed the MOECC sound level limits, noise control measures are proposed to satisfy these limits.

This assessment has been conducted in compliance with the MOECC publication NPC-300.

An Acoustic Assessment Summary Table has been included in Appendix A, which summarizes the predicted noise impact.

An area location map is provided in Figure 1, indicating the location of the site and surrounding receptors. A scaled site plan is provided in Figure 2, indicating the locations of the noise sources. An AAR Checklist is provided in Appendix B and zoning maps are provided in Appendix C.

### **2** Facility Description

The facility is to be located at 12415 Coleraine Drive in the town of Bolton, Ontario. The proposed development area is currently zoned as agricultural, with surrounding land zoned as industrial and agricultural. The surrounding terrain is primarily flat developed land. There are several residences surrounding the proposed site to the immediate west, fronting Coleraine Drive, and to the north.

The applicable North American Industry Classification System (NAICS) code for this facility is 324121 (Asphalt Paving Mixture and Block Manufacturing). This NAICS code is not eligible for registration under the Prescribed EASR system.



### 2.1 Asphalt Plant Operation

The asphalt plant is scheduled to operate from 07:00 – 19:00 daily, with delivery of aggregate material occurring continuously throughout the day. The daily operation of the asphalt plant must abide by the operational restrictions listed in Table 1.

Liquid asphalt cement is delivered by tanker trucks to the storage tank in the middle of the proposed site. Trucks unload aggregate material into the stockpiles to the north of the yard and a front-end loader transfers the material to the cold feed bins located nearby to the east. A vibrating screen deck is used to sort the aggregate particulates into the desired sizes for the mixture. The material is then conveyed to the cylindrical dryer drum. The baghouse vacuum removes unwanted dust particles from the process. A natural gas fired burner is used to heat the aggregate material in the drum. The already-hot asphalt cement is added to the drum dryer where mixing occurs. Trucks are loaded with the final asphalt product.

Recycled Asphalt material (RAP) may also be added to the mixture described above in varying quantities. A front-end loader moves RAP from the RAP piles to the west of the plant to a Lump Breaker which reduces the material to smaller portions which are then sorted by an incorporated screen deck and conveyed to the drum dryer for mixing and extraction.

The major sources of noise associated with operation of the plant include the vibrating screen deck, the cold feed bins, the various trucking operations, the front-end loader, the dryer drum, and fans associated with the burner and its exhaust.

Table 1 Summary of Asphalt Plant Operations

	Daytime (07:00 – 19:00)	Duty	Night Time (19:00 – 07:00)	Duty
Hot Mix Asphalt Trucks	20 per hour	100%	20 per hour	100%
Aggregate Delivery Trucks	10 per hour	100%	0 per hour	0%
Asphalt Cement Truck	1 per hour	100%	0 per hour	0%
Aggregate Loader	1 per hour	50%	1 per hour	50%
RAP Loader	1 per hour	50%	1 per hour	50%

### 3 Noise Source Summary

The proposed noise sources of concern are summarized in Table 2 and the locations of these sources are identified in Figure 2.



Table 2 - Summary of Significant Noise Sources

Source ID	Source Description	Sound Power Level (dBA)	Source Location <sup>1</sup>	Sound Characteristic <sup>2</sup>	Noise Control Measures <sup>-</sup>
S01	Lump Breaker	100	0	S	U
S02	Vibrating Screen Deck	95	0	S	E
S03	Vibrating Screen Deck	95	0	S	Е
S04	Cold Feed Bins	103	0	S	U
S05	Baghouse Stack	101	0	S	S
S06	Exhaust Fan	97	0	S	S
S07	Drum Dryer	105	0	S	U
S08	Burner Fan	98	0	S	U
S09	AC Pump	99	0	S	U
S10	Air Compressor	95	0	S	U
S11	Idling HMA Truck	103	0	S	U
S12	Idling HMA Truck	103	0	S	U
S13	Idling HMA Truck	103	0	S	U
T01	Aggregate Delivery Truck Movements	99	0	S	U
T02	Asphalt Export Truck Movements	97	0	S	U
T03	Asphalt Cement Delivery Truck Movements	89	0	S	U
T03	Cold Feed Bin Loader	101	0	S	U
T04	Asphalt Breaker Loader	101	0	S	U

<sup>\*</sup>Includes attenuation due to silencing and/or penalty adjustment.

### 4 Points of Reception

The representative residences surrounding the proposed facility are identified on Figure 1 as R01 and R02. The houses situated immediately to the north of the proposed facility will be demolished and were not considered in the noise assessment. The receptor height and setback distance from the nearest source for each of the receptors are shown in Table 3.



<sup>1.</sup> O: located/installed outside the building, including on the roof, I: located/installed inside the building

<sup>2.</sup> S: Steady; Q: Quasi Steady Impulsive; I: Impulsive; B: Buzzing; T: Tonal; C: Cyclic

<sup>3.</sup> S: Silencer, Acoustic Louvre, Muffler; A: Acoustics lining, Plenum; B: Barrier, Berm, Screening;

L: Lagging; E: Acoustic Enclosure; O: Other; U: Uncontrolled R: Removed from Service

Table 3: Summary of Points of Reception

Receptor	Description	Height	Distance
R01	Existing 2-storey dwelling	4.5 m	148 m North
R02	Existing 2-storey dwelling	4.5 m	75 m Southwest

An area location map is provided in Figure 1, indicating the locations of the site and the surrounding receptors.

### 4.1 Zoning & Vacant Lots

The MOECC's NPC-300 document requires consideration for potential receptors on noise sensitive zoned lots. These are defined as a lot that has been zoned to permit a noise sensitive land use and that is either currently vacant or has an existing land use that is not a noise sensitive land use.

The land surrounding the proposed facility is zoned as industrial and agricultural. A zoning map is available for reference in Appendix C. There are no vacant lots allowing for development of a noise-sensitive point of reception in the vicinity of the proposed facility.

### 5 Noise Criteria

#### 5.1 Acoustic Environment

The appropriate noise criteria for the receptors in the vicinity of the facility were based on:

- MOECC Noise Pollution Control publication NPC-300 "Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning," (MOECC, August 2013); and
- 2) MOECC publication entitled "Environmental Activity and Sector Registry Limits and Other Requirements" or "EASR Publication", (MOECC, January 2017).

Points of reception R01 and R02 have an ambient acoustical environment consistent with the Class 1 (Urban) designation as defined by the MOECC Publication NPC-300. In a Class 1 area, the background sound levels during the daytime (07:00 to 19:00) and evening (19:00 to 23:00) are dominated by man-made noises, and nighttime (23:00 to 07:00) periods are defined by natural sounds. In this case, the man-made noise sources primarily include road traffic on surrounding streets.



#### 5.2 Sound Level Limits

The MOECC exclusion limits for each receptor are summarized in Table 4 below:

Table 4: Noise Exclusion Limits - Class 1

Time of Day	Sound Level Exclusion Limit* Plane of Window	Sound Level Exclusion Limit* Outdoors
Day (07:00 to 19:00)	50 dBA	50 dBA
Evening (19:00 to 23:00)	50 dBA	50 dBA
Night (23:00 to 07:00)	45 dBA	

<sup>\*</sup>or the minimum existing hourly background sound level Leq, whichever is higher

The MOECC sound level limit is determined by the exclusion limit listed above or the minimum hourly equivalent background sound level, whichever is higher. The background sound level may increase the sound level limit for some of the receptors in this study, particularly those near busy roads. For conservatism and simplicity, the exclusion limit was used for all receptors in this study.

The noise from a stationary noise source at a noise sensitive receptor should not exceed these values for any operational hour. For receptor R01 the ambient acoustical environment is such that the exclusion limits outlined above will be the applicable sound level limits for the asphalt plant.

For receptor R02, which fronts Coleraine Drive, the ambient acoustic environment will be elevated above the MOECC exclusion limits from the influence of road traffic. The applicable sound level exclusion limits are based on the worst-case (lowest-traffic) hour for both day and night-time and are posted in Table 5 below. A sample of this calculation is included in Appendix F.

Table 5 - Sound Level Limits for R02

Time of Day	Sound Level Limit (1h LEQ)
Day (07:00 to 19:00)	56 dBA
Evening (19:00 to 23:00)	56 dBA
Night (23:00 to 07:00)	49 dBA



### 6 Noise Controls

The noise controls summarised in this section have been determined through noise impact predictions to be effective in controlling the noise generated by the proposed facility, satisfying MOECC sound level limits.

It should be noted that there may be other effective noise controls that could replace or revise some of the controls outlined in this report. Prior to implementing any changes to noise controls, appropriate studies should be undertaken to demonstrate that the MOECC sound level limits will be satisfied and should be undertaken by a qualified acoustical engineer.

#### 6.1 Asphalt Plant Noise Controls

- <u>Upgrade privacy fence to acoustic barrier:</u> To the extents indicated in Figure 2, the privacy fence surrounding the facility must be upgraded to meet the requirements of an acoustic barrier (10 kg/m² surface density). The span of barrier labelled 'Barrier 1' must achieve a height of 3.0 meters and there must not be any gaps between this barrier and the aggregate pile barrier to the west. This shielding may be achieved by means of an acoustic fence, an earth berm, shipping containers, concrete blocks, or any other obstruction that meets the above definition for an acoustic barrier.
- Upgrade aggregate pile block height: The north-most portion of the concrete block assembly used to house aggregate piles must reach a height of 3.0 meters or greater. The west- and east-most extensions protruding from the 3.0 m portion may 'step down' to a height of 1.0 meters.
- Shielding of Noise Sources to R02: The line of sight between receptor R02 and the bulk of the asphalt plant shall be broken by the RAP piles, located as per Figure 2. These piles must reach a consistent minimum height of 3 meters and shall not be moved from the intended location or altered in any way. If changes to the size or orientation of the piles is desired, the noise controls should be reviewed by a qualified acoustical engineer.
- <u>Limit Sound Power of Equipment:</u> The sound power emitted from any significant noise-producing equipment such as those listed in Table 2 shall not exceed the values used in predictive modelling, as tabulated in Table 6 below. If the equipment is unable to achieve these levels without modifications, suitable modifications shall be made to reduce the noise emissions to the tabulated values. Means of achieving this noise reduction are included in Table 6.
- No Idling at Night-time: HMA Trucks shall not leave engines idling between the hours of 23:00 07:00 while on site.



- No Aggregate or AC delivery at Night-time: There shall be no delivery of aggregate materials or asphalt cement between the hours of 23:00 07:00.
- <u>Partial Shielding by On-Site Buildings:</u> The orientation of the proposed on-site buildings (office and operators control centre) provides partial shielding to both receptors R01 and R02. Relocation of these structures should be reviewed by a qualified acoustical consultant.

Table 6 - Equipment Noise Emission Limits

Equipment	Allowed Sound Power (dBA)	Sound Pressure Level* (Leq dBA)	Possible Noise Control	Expected Sound Power Reduction
Lump Breaker	100	59		
\/ibrating Caroon			Enclosure	5 dB
Vibrating Screen Deck	95	54	Rubber Screens	6 dB
Cold Feed Bins	103	62		
Air Compressor	101	60	Enclosure	5 dB
Exhaust Fan	97	56	Silencer	**
Drum Dryer	105	64		
Baghouse Stack	100	59	Silencer	**
Burner Fan	98	57		
AC Pump	99	58		

<sup>\*</sup> Overall A-Weighted Energy Equivalent Sound Pressure Level as measured at 1.5m height, 30m from the noise source.

\*\* Silencer performance is highly variable; silencer specifications should be made by a qualified acoustical engineer only after mechanical equipment specifications are available.

### 7 Noise Impact Assessment

The noise impact calculations were performed using DataKustik's CadnaA environmental noise prediction software. The calculations are based on established prediction methods including the standard ISO 9613-2: "A Standard for Outdoor Noise Propagation".

Noise levels were predicted using flat topography under conditions of downwind propagation, generally with hard ground modelled in applicable areas such as paved roads, gravel lots, and open water and soft ground conditions elsewhere, including the open lands immediately to the north of the proposed facility. Shielding from existing buildings, wing walls, retaining walls and raised rooftops or parapets was modelled where applicable. Sound power data from equipment measured by Aercoustics staff at a comparable facility was used.

Appendix E contains sound power data. Appendix F contains Point of Reception (POR) tables and sample stationary source calculations.



The predicted worst-case hourly sound level at each receptor from stationary noise sources for the proposed asphalt plant equipment, including Lump Breaker operation during the daytime, is provided in Table 7 below. A more detailed Acoustic Assessment Summary Table, based on the template provided by the MOECC, is located in Appendix A.

Table 7: Abbreviated Acoustic Assessment Summary T	Table – Proposed Equipment
--	----------------------------

Receptor ID	Time Period	Sound Level at Point of Reception Leg (dBA)	Verified by Acoustic Audit (Yes/No)	Sound Level Limit (dBA)	Sound Level Satisfied (Yes/No)
R01	Daytime (07:00 – 23:00)	46	No	50	Yes
RUI	Nighttime (23:00 – 07:00)	45	No	45	Yes
R02	Daytime (07:00 – 23:00)	51	No	56	Yes
NU2	Nighttime (23:00 – 07:00)	48	No	49	Yes

Figure 3 includes an illustration of the noise impact contours at a height of 4.5 m for the proposed facility equipment operation.

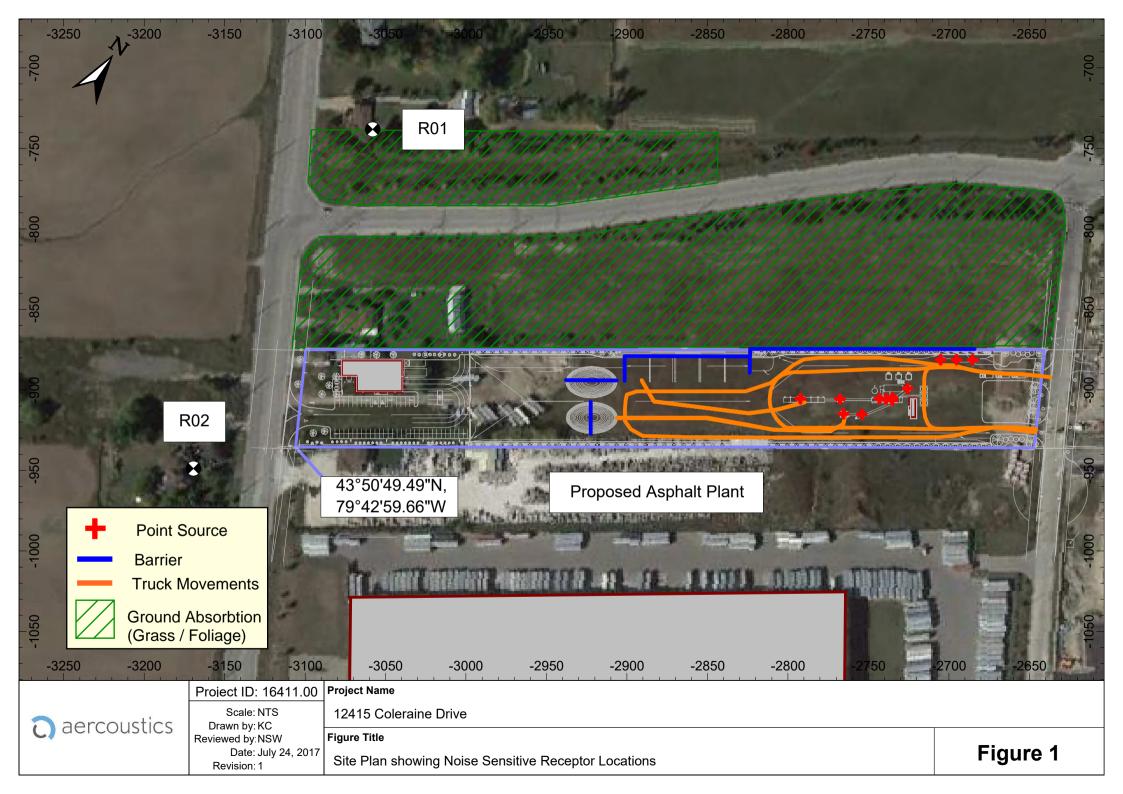
### 8 Conclusion

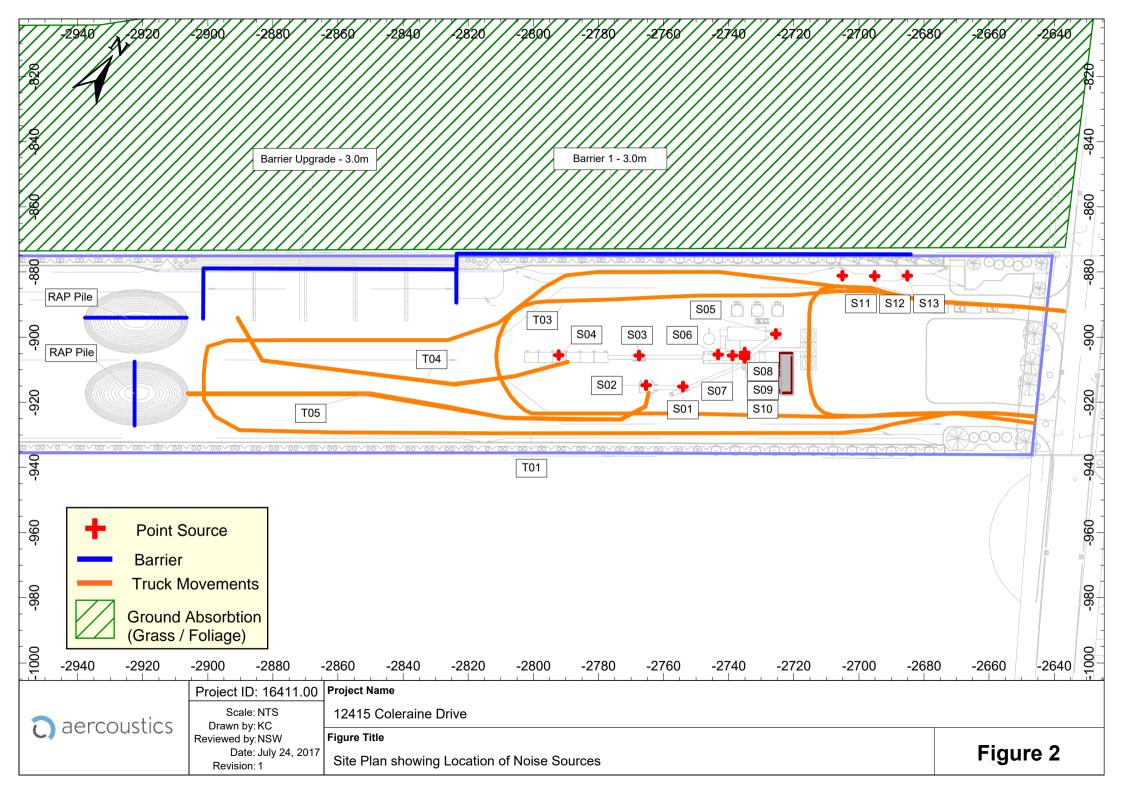
Aercoustics Engineering Limited was retained by Dig-Con International Limited to prepare an Acoustic Assessment Report for the proposed asphalt plant at 12415 Coleraine Drive, as required by the Ministry of the Environment and Climate Change (MOECC), to support an application for the noise impact requirements for the MOECC Environmental Compliance Approval (ECA) application.

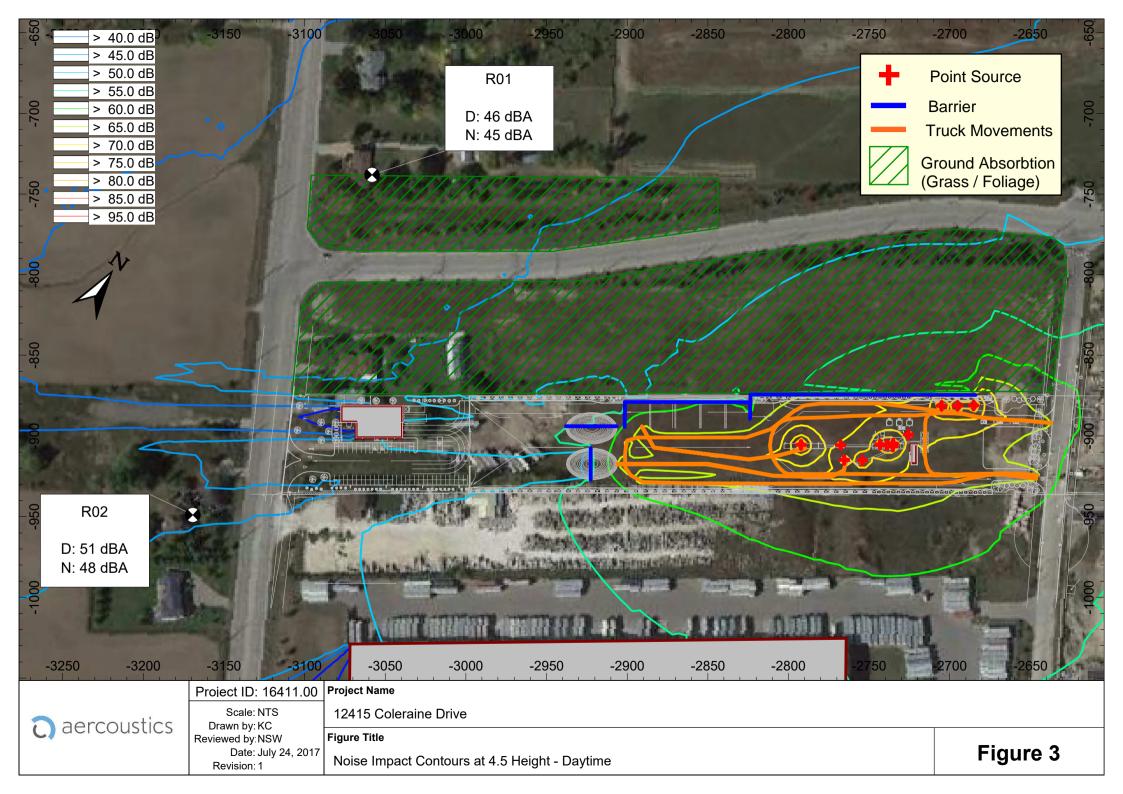
Based on the information available, the conclusions of this report are accurate as of the date it was signed and sealed. This report and associated calculations underwent a comprehensive internal review process to ensure minimization of errors and omissions.

With the noise controls outlined above, it was determined that the noise emissions from the station reconfiguration are predicted to be within the applicable sound level limits set out in NPC-300.









# **Dig-Con International Limited / Coleraine Dr** AAR *Appendices*

# Appendix A

Acoustic Assessment Summary Table



## Acoustic Assessment Summary Table

Project: 12415 Coleraine Drive Date: July-2017

POR ID	POR Description	Time of Day	Sound Level at POR (dBA(Leq) or (dBAI(LLM)	Sound Level Limit (dBA)(Leq) or (dBAI)(LLM)	Compliance with Sound Level Limit?	Class Number	Verified by Acoustic Audit
	Existing 2-storey dwelling	Day	46	50	Yes	Class 1	No
R01		Evening	46	50	Yes	Class 1	No
		Night	45	45	Yes	Class 1	No
	Existing 2-storey dwelling	Day	51	56	Yes	Class 1	No
R02		Evening	51	56	Yes	Class 1	No
		Night	48	49	Yes	Class 1	No

# **Appendix B**

MOECC Acoustic Assessment Report Checklist



Company Name:	Dig-Con International Ltd.
Company Address:	4 Holland Drive, Units 8 & 9
	Bolton, ON, L7E 1G1
Location of Facility:	12415 Coleraine Drive
	Bolton, ON,
document "Informatio	c Assessment Report was prepared in accordance with the guidance in the ministry n to be Submitted for Approval of Stationary Sources of Sound" (NPC 233) dated October m required information identified in the check-list on the reverse of this sheet has been
Company Contact:	
Name:	Sam Di Gregorio
Title:	President
Phone Number:	905 95/216/16
Signature:	
Date:	July 27/17
Technical Contact:	
Name:	Nicholas Sylvestre Williams, M.Eng., P.Eng.
Representing:	Aercoustics Engineering Limited
Phone Number:	(416) 249-3361
Signature:	- Nabels Eglithe - Will
Date:	2017-Sept-1

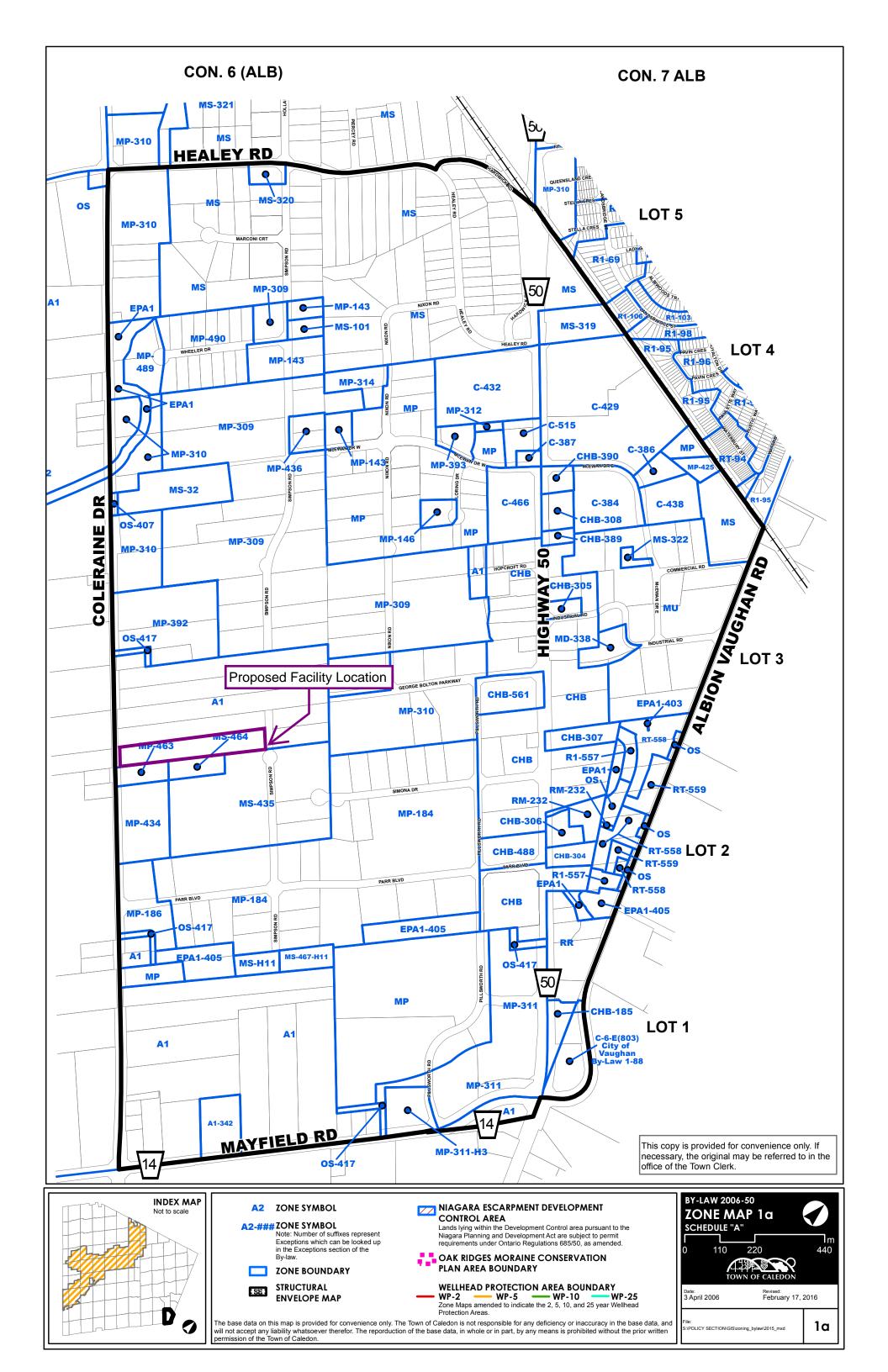
### **ACOUSTIC ASSESSMENT REPORT CHECKLIST**

	Required Information			1
<u> </u>			ubmitted	Explanation/Reference
1.0	Introduction (Project Background and Overview)	<b>√</b>	Yes	
2.0	Facility Description	<del>  _</del>		
	2.1 Operating hours of facility and significant Noise Sources	✓	Yes	
	2.2 Site Plan identifying all significant Noise Sources	V	Yes	
3.0	Naisa Cauras Cummans	+		
3.0	Noise Source Summary  3.1 Noise Source Summary Table		Voc	
		<b>√</b>	Yes	
	3.2 Source noise emissions specifications	✓	Yes	
	3.3 Source power/capacity ratings	<b>√</b>	Yes	
	3.4 Noise control equipment description and acoustical		Yes	
	specifications	-		
4.0	Point of Reception Noise Impact Calculations	+		
	4.1 Point of Reception Noise Impact Table	7	Yes	
	4.2 Point(s) of Reception (POR) list and description	7	Yes	Appendices
	4.3 Land-use Zoning Plan		Yes	
	4.4 Scaled Area Location Plan	17	Yes	
	4.5 Procedure used to assess noise impacts at each POR	7	Yes	
	4.6 List of parameters/assumptions used in calculations	17	Yes	
	Liot of parameter dead in parameter is	1 "	100	
5.0	Acoustic Assessment Summary			
	5.1 Acoustic Assessment Summary Table	<b>1</b>	Yes	
	5.2 Rationale for selecting applicable noise guideline limits	<b>√</b>	Yes	
	5.3 Predictable Worst Case Impacts Operating Scenario	7	Yes	
6.0	Conclusions			
	6.1 Statement of compliance with the selected noise	✓	Yes	
	performance limits			
7.0	A di (Didd-A-il		3/	
7.0	Appendices (Provide details such as)		Yes	1
	Listing of Insignificant Noise Sources	<b>√</b>	Yes	<u> </u>
	Manufacture's Noise Specifications	<b>✓</b>	Yes	
	Calculations	<b>✓</b>	Yes	
	Instrumentation		Yes	N/A
	Meteorology during Sound Level Measurements	14	Yes	N/A
	Raw Data from Measurements	$\perp$	Yes	N/A
	Drawings (Facility / Equipment)		Yes	N/A

# **Appendix C**

Zoning Maps





# SECTION 8 INDUSTRIAL ZONES

#### 8.1 GENERAL PROHIBITION

No *person* shall, within any **Industrial Zone**, use any land, or erect, *alter*, enlarge, use or maintain any *building* or *structure* for any *use* other than as permitted in **Table 8.1** of Subsection 8.2 and in accordance with the standards contained in **Table 8.2** of Subsection 8.3, the General Provisions contained in Section 4 and the Parking, Loading & Delivery Standards contained in Section 5.

#### 8.2 PERMITTED USES

Uses permitted in an **Industrial Zone** are noted by the symbol ' $\checkmark$ ' in the column applicable to that **Zone** and corresponding with the row for a specific permitted *use* in **Table 8.1**. A number(s) following the symbol ' $\checkmark$ ', *zone* heading or identified permitted *use*, indicates that one or more conditions apply to the *use* noted or, in some cases, to the entire **Zone**. Conditions are listed below the Permitted Use Table, **Table 8.1**.

The Industrial Zones established by this By-law are as follows:

MP Prestige Industrial
MS Serviced Industrial
MU Unserviced Industrial
MA Airport Industrial
MX Extractive Industrial
MD Waste Management

#### **TABLE 8.1**

	MP MS MU MA  V  V  V  Int  V  ZONES  MU MA  V  V  V  V  V  V  V  V  V  V  V  V  V									
USE	MP	MS	MU	MA	MX	MD				
Adult Video Store		✓								
Airport				✓						
Bulk Storage Facility		✓	✓							
Business Office	✓									
Contractor's Facility		✓	✓							
Dry Cleaning or Laundry Plant		✓								
Equipment Storage Building	✓	✓	✓							
Factory Outlet	✓	✓	✓							
Farm					✓					
Financial Institution	<b>√</b> (1)(2)									
Gasoline Pump Island, Accessory	✓	✓	✓	✓						
Gravel Pit					✓					
Industrial Use	✓	✓	✓							
Light Equipment Rental Establishment	✓	✓								

# SECTION 10 AGRICULTURAL AND RURAL ZONES

#### 10.1 GENERAL PROHIBITION

No *person* shall, within any **Agricultural** and **Rural** *Zone*, use any land, or erect, *alter*, enlarge, use or maintain any *building* or *structure* for any *use* other than as permitted in **Table 10.1** of Subsection 10.2 and in accordance with the standards contained in **Table 10.2** of Subsection 10.3, the General Provisions contained in Section 4 and the Parking, Loading & Delivery Standards contained in Section 5.

#### 10.2 PERMITTED USES

Uses permitted in an **Agricultural** or **Rural Zone** are noted by the symbol '✓' in the column applicable to that **Zone** and corresponding with the row for a specific permitted *use* in **Table 10.1**. A number(s) following the symbol '✓', *zone* heading or identified permitted *use*, indicates that one or more conditions apply to the *use* noted or, in some cases, to the entire **Zone**. Conditions are listed below the Permitted Use **Table, Table 10.1**.

The **Agricultural** and **Rural Zones** established by this By-law are as follows:

A1 Agricultural

A2 Rural

A3 Small Agricultural Holdings

A1-ORM Agricultural – Oak Ridges Moraine

A2-ORM Rural – Oak Ridges Moraine

A3-ORM Small Agricultural Holdings – Oak Ridges Moraine

#### **TABLE 10.1**

			ZO	NES		
USE	A1	A2	A3	A1-ORM	A2-ORM	A3-ORM
Agriculture-related Commercial Use	√(5)	<b>√</b> (5)	<b>√</b> (5)			
Agriculture-related Industrial Use	√(5)	<b>√</b> (5)	<b>√</b> (5)			
Agri-Tourism Use	√(6)	<b>√</b> (6)	√(6)			
Apartment, Accessory	✓	✓	✓			
Agricultural Uses (ORM)				✓	✓	✓
Animal Agriculture (ORM)				✓	✓	✓
Bed and Breakfast Establishment				√(3)	√(3)	√(3)
Bunkhouse, Accessory	√(2)	√(2)		√(2)	√(2)	
Dwelling, Accessory	✓	✓				
Dwelling, Accessory (ORM)				✓	✓	
Dwelling, Detached	✓	✓	✓	√(4)	√(4)	√(4)
Environmental Management				✓	✓	✓
Farm	✓	✓				
Farm-based Alcohol Production Facility	√(6)	√(6)	<b>√</b> (6)			

# **Appendix D**

Insignificant Noise Sources

### **Dig-Con International Limited / Coleraine Dr**

AAR Appendices

Acoustically Insignificant Noise Sources are summarized in Table A-1.

Table A-1: Insignificant Noise Sources

Source Description	Location	Reasoning
-	-	-

# **Dig-Con International Limited / Coleraine Dr** AAR *Appendices*

# Appendix E

Sound Power Data



### **Sound Power Data**

Source ID	63	125	250	500	1000	2000	4000	8000	Α	Lin
S01	125	113	109	108	105	102	99	95	110	126
S02, S03	110	110	102	95	94	92	92	82	101	116
S04	102	112	107	105	97	96	95	94	93	103
S05	106	115	100	93	101	97	93	85	105	116
S06	111	106	106	98	95	90	85	76	102	117
S07	110	117	105	99	95	93	91	91	105	118
S08	108	104	103	96	83	85	75	72	98	111
S09	109	108	102	94	93	88	82	73	99	114
S10	101	99	91	93	90	86	78	67	95	108
S11-S13, T01, T02	106	100	98	100	100	96	88	78	103	111
T03, T04	117	105	98	96	96	93	87	81	101	118

# **Appendix F**

Sample Calculations and Point of Reception Tables

# **Dig-Con International Limited / Coleraine Dr** AAR *Appendices*

STAMSON 5.0 NORMAL REPORT Date: 28-02-2017 18:15:01 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT Time Period: 1 hours Description: Impact of Coleraine on R02 - Daytime Road data, segment # 1: Coleraine Car traffic volume : 263 veh/TimePeriod Medium truck volume : 16 veh/TimePeriod Heavy truck volume : 20 veh/TimePeriod
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete) Data for Segment # 1: Coleraine Angle1 Angle2 : -45.00 deg 45.00 deg No of house rows : 0
Surface (No woods.) (Absorptive ground surface) Receiver source distance : 47.00 m
Receiver height : 4.50 m
Topography : 1 (Flat/gentle slope; no barrier) Reference angle : 0.00 Results segment # 1: Coleraine Source height = 1.61 m ROAD (0.00 + 56.17 + 0.00) = 56.17 dBAAngle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq -45 45 0.57 67.22 0.00 -7.77 -3.27 0.00 0.00 0.00 56.17 \_\_\_\_\_\_ Segment Leq: 56.17 dBA Total Leq All Segments: 56.17 dBA TOTAL Leq FROM ALL SOURCES: 56.17



# **Dig-Con International Limited / Coleraine Dr** AAR *Appendices*

STAMSON 5.0 NORMAL REPORT Date: 02-03-2017 15:25:38 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT Time Period: 1 hours Description: Nighttime Impact of Coleraine Dr on R02 - Nighttime Road data, segment # 1: Coleraine Car traffic volume : 54 veh/TimePeriod Medium truck volume : 3 veh/TimePeriod Medium truck volume: 4 veh/TimePeriod
Posted speed limit: 70 km/h
Road gradient: 0 %
Road pavement: 1 (Typical asphalt or concrete) Data for Segment # 1: Coleraine Angle1 Angle2 : -45.00 deg 45.00 deg No of house rows : 0
Surface (No woods.) (Absorptive ground surface) Receiver source distance : 47.00 m
Receiver height : 4.50 m
Topography : 1 (Flat/gentle slope; no barrier) Reference angle : 0.00 Results segment # 1: Coleraine Source height = 1.60 mROAD (0.00 + 49.16 + 0.00) = 49.16 dBAAngle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq -45 45 0.57 60.21 0.00 -7.77 -3.27 0.00 0.00 0.00 49.16 \_\_\_\_\_ Segment Leq: 49.16 dBA Total Leq All Segments: 49.16 dBA TOTAL Leq FROM ALL SOURCES: 49.16



# Point of Reception Table

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Project: 12415 Coleraine Drive - Night

		Point of	Reception R02	Point of	Reception R01
Source ID	Source Name	Distance to POR (m)	Sound Level at POR (dBA) Night	Distance to POR (m)	Sound Level at POR (dBA) Night
T03	AC Delivery	413	0	345	0
S09	ACPump	436	30	364	31
T01	Agg Delivery	388	0	327	0
S10	AirComp	436	25	364	26
T01	Asph. Extraction	479	36	403	29
S05	Baghouse Stack	447	37	369	37
S08	BurnerFan	436	38	363	30
S04	ColdFeedBins	380	34	314	37
S01	Crusher	417	40	352	32
S07	Dryer	433	44	360	37
S06	ExhaustFan	428	27	356	29
S11	Idling Truck 1	469	0	381	0
S12	Idling Truck 2	479	0	390	0
S13	Idling Truck 3	489	0	399	0
T04	Loader from Ag piles to CFB	326	36	280	36
T05	Loader from RAP pile to Breaker	360	36	298	34
S02	Screen Deck	405	35	342	32
S03	ScreenDeck	404	33	335	33
Total L	evel [dBA]		48		45



Project: 12415 Coleraine Drive - Night

Time Period	Total (dBA)
Night	45

Receiver Name	Receiver ID			
R01	R01	-3058.0	-738.3	4.5

Source ID	Source Name	X	Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Crusher	S01	-2754.1	-915.2	2.5	0	100	0.0	A	61.9	0.0	-2.8	7.6	1.6	0.0	0.0	0.0	0.0	0.0	32
Screen Deck	S02	-2765.3	-913.2	1.5	0	95	0.0	A	61.7	0.0	-2.6	3.0	1.7	0.0	0.0	0.0	0.0	0.0	32
ScreenDeck	S03	-2767.5	-905.7	12.0	0	95	0.0	A	61.5	0.0	-1.2	0.0	1.6	0.0	0.0	0.0	0.0	0.0	33
ColdFeedBins	\$03 \$04	-2707.3	-905.7	1.5	0	103	0.0	A	60.9	0.0	-2.6	5.9	2.1	0.0	0.0	0.0	0.0	0.0	37
Baghouse Stack	S05	-2732.2	-899.0	13.1	0	100	0.0	A	62.3	0.0	-1.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	37
ExhaustFan	\$05 \$06	-2723.3	-905.4	1.5	0	97	0.0	A	62.0	0.0	-2.6	7.4	0.9	0.0	0.0	0.0	0.0	0.0	29
Dryer	S07	-2738.8	-905.7	2.0	0	105	0.0	A	62.1	0.0	-2.0	6.7	1.0	0.0	0.0	0.0	0.0	0.0	37
BurnerFan	S08	-2735.1	-903.7	2.0	0	98	0.0	A	62.2	0.0	-2.4	7.2	0.7	0.0	0.0	0.0	0.0	0.0	30
ACPump	S09	-2735.1	-904.7	1.5	0	99	0.0	A	62.2	0.0	-2.4	7.3	0.7	0.0	0.0	0.0	0.0	0.0	31
AirComp	S10	-2735.1	-905.7	1.5	0	95	0.0	A	62.2	0.0	-2.8	7.6	1.4	0.0	0.0	0.0	0.0	0.0	26
Asph. Extraction	T01	-2735.1	-909.6	2.4	0	77	6.3	A	62.7	0.0	-2.8	7.9	1.8	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2715.4	-909.6	2.4	0	77	11.8	A	62.6	0.0	-2.6	7.9	1.8	0.0	0.0	0.0	0.0	0.0	19
Asph. Extraction	T01	-2715.3	-889.5	2.4	0	77	11.0	A	63.4	0.0	-2.0	7.4	1.9	0.0	0.0	0.0	0.0	0.0	17
Asph. Extraction	T01	-2670.3	-923.9	2.4	0	77	10.2	A	63.2	0.0	-2.9	7.7	1.9	0.0	0.0	0.0	0.0	0.0	17
Asph. Extraction	T01	-2658.8	-890.2	2.4	0	77	10.2	A	63.6	0.0	-2.3	7.0	1.9	0.0	0.0	0.0	0.0	0.0	17
	T01	-2658.8 -2703.2	-890.2 -924.1	2.4	0	77	9.8		63.1	0.0	-2.3 -2.9	7.0	1.8	0.0	0.0	0.0	0.0	0.0	17
Asph. Extraction	T01	-2703.2 -2680.5	-924.1 -923.4		_	77	7.1	A	63.5	0.0	-3.0	7.1	1.8					0.0	13
Asph. Extraction	T01			2.4	0	77	7.1	A	63.4	0.0	-3.0	7.7	1.9	0.0	0.0	0.0	0.0		13
Asph. Extraction	T01	-2685.6	-923.5		0			A						0.0		0.0		0.0	
Asph. Extraction	-	-2647.9	-890.9	2.4	0	77	10.4	A	63.8	0.0	-2.4	4.9	2.0	0.0	0.0	0.0	0.0	0.0	18
Asph. Extraction	T01	-2672.8	-923.3	2.4	0	77	10.1	A	63.6	0.0	-3.0	7.8	1.9	0.0	0.0	0.0	0.0	0.0	16
Asph. Extraction	T01 T01	-2662.5 -2688.1	-923.4 -887.1	2.4	0	77	10.2	A	63.8	0.0	-3.0	7.8 6.8	2.0	0.0	0.0	0.0	0.0	0.0	16
Asph. Extraction	-			2.4	0	77	9.4	A	63.0		-2.1		1.8	0.0	0.0	0.0	0.0	0.0	16
Asph. Extraction	T01	-2680.3	-888.6	2.4	0	77	8.6	Α	63.2	0.0	-2.1	6.9	1.9	0.0	0.0	0.0	0.0	0.0	15
Asph. Extraction	T01	-2699.2	-884.8	2.4	0	77	7.8	Α	62.8	0.0	-1.9	6.7	1.8	0.0	0.0	0.0	0.0	0.0	15
Asph. Extraction	T01	-2708.8	-884.9	2.4	0	77	7.2	Α	62.6	0.0	-1.9	6.7	1.8	0.0	0.0	0.0	0.0	0.0	15
Asph. Extraction	T01	-2715.0	-914.4	2.4	0	77	7.3	Α	62.7	0.0	-2.8	7.8	1.8	0.0	0.0	0.0	0.0	0.0	14
Asph. Extraction	T01	-2649.2	-924.1	2.4	0	77	8.1	Α	64.0	0.0	-3.0	7.8	2.0	0.0	0.0	0.0	0.0	0.0	14
Asph. Extraction	T01	-2713.9	-919.1	2.4	0	77	6.3	Α	62.8	0.0	-2.9	7.8	1.8	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2704.2	-884.6	2.4	0	77	6.0	Α	62.7	0.0	-1.9	6.7	1.8	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2694.3	-885.5	2.4	0	77	6.1	Α	62.9	0.0	-2.0	6.7	1.8	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2654.8	-923.6	2.4	0	77	6.8	Α	63.9	0.0	-3.0	7.8	2.0	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2715.0	-890.9	2.4	0	77	5.0	Α	62.5	0.0	-2.2	7.0	1.7	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2712.0	-922.1	2.4	0	77	4.9	Α	62.9	0.0	-2.9	7.7	1.8	0.0	0.0	0.0	0.0	0.0	12
Asph. Extraction	T01	-2709.4	-923.6	2.4	0	77	4.7	Α	62.9	0.0	-2.9	7.7	1.8	0.0	0.0	0.0	0.0	0.0	12
Asph. Extraction	T01	-2714.0	-888.2	2.4	0	77	4.2	Α	62.5	0.0	-2.1	6.9	1.7	0.0	0.0	0.0	0.0	0.0	12
Asph. Extraction	T01	-2712.3	-886.2	2.4	0	77	4.1	Α	62.5	0.0	-2.0	6.8	1.7	0.0	0.0	0.0	0.0	0.0	12
Loader from Ag piles to CFB	T04	-2875.6	-908.1	2.4	0	77	11.9	Α	58.9	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
Loader from Ag piles to CFB	T04	-2846.1	-911.8	2.4	0	77	16.4	Α	59.8	0.0	-2.3	7.1	1.2	0.0	0.0	0.0	0.0	0.0	25



Project: 12415 Coleraine Drive - Night

Time Period	Total (dBA)
Night	45

Receiver Name	Receiver ID	Х	Υ	Z
R01	R01	-3058.0	-738.3	4.5
Source ID	Source Name			
Loader from Ag piles to CFB	T04	-2846.2	-911.8	2.4

Source ID	Source Name		Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Loader from Ag piles to CFB	T04	-2846.2	-911.8	2.4	0	77	16.4	Α	59.7	0.0	-2.3	7.1	1.2	0.0	0.0	0.0	0.0	0.0	25
Loader from Ag piles to CFB	T04	-2875.5	-908.1	2.4	0	77	11.9	Α	58.9	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
Loader from Ag piles to CFB	T04	-2887.0	-900.6	2.4	0	77	11.8	Α	58.4	0.0	-1.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	29
Loader from Ag piles to CFB	T04	-2887.0	-900.8	2.4	0	77	11.7	Α	58.5	0.0	-1.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
Loader from Ag piles to CFB	T04	-2815.3	-913.2	2.4	0	77	12.7	Α	60.5	0.0	-2.6	7.4	1.3	0.0	0.0	0.0	0.0	0.0	21
Loader from Ag piles to CFB	T04	-2815.0	-913.3	2.4	0	77	12.7	Α	60.5	0.0	-2.6	7.4	1.3	0.0	0.0	0.0	0.0	0.0	21
Loader from Ag piles to CFB	T04	-2791.5	-908.2	2.4	0	77	6.5	Α	61.0	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	14
Loader from Ag piles to CFB	T04	-2799.9	-910.4	2.4	0	77	11.0	Α	60.8	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	19
Loader from Ag piles to CFB	T04	-2799.8	-910.4	2.4	0	77	11.0	Α	60.8	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	18
Loader from Ag piles to CFB	T04	-2791.5	-908.2	2.4	0	77	6.5	Α	61.0	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	14
Loader from RAP pile to Breaker	T05	-2895.0	-917.3	2.4	0	76	13.5	Α	58.7	0.0	-2.2	6.9	1.1	0.0	0.0	0.0	0.0	0.0	22
Loader from RAP pile to Breaker	T05	-2881.2	-917.3	2.4	0	76	7.4	Α	59.0	0.0	-2.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	23
Loader from RAP pile to Breaker	T05	-2868.6	-917.3	2.4	0	76	12.9	Α	59.3	0.0	-2.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	28
Loader from RAP pile to Breaker	T05	-2854.5	-917.3	2.4	0	76	9.3	Α	59.7	0.0	-2.4	7.2	1.2	0.0	0.0	0.0	0.0	0.0	17
Loader from RAP pile to Breaker	T05	-2854.7	-917.5	2.4	0	76	8.8	Α	59.7	0.0	-2.4	7.2	1.2	0.0	0.0	0.0	0.0	0.0	16
Loader from RAP pile to Breaker	T05	-2868.3	-917.5	2.4	0	76	13.0	Α	59.3	0.0	-2.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	28
Loader from RAP pile to Breaker	T05	-2880.9	-917.5	2.4	0	76	7.4	Α	59.0	0.0	-2.3	0.0	1.1	0.0	0.0	0.0	0.0	0.0	23
Loader from RAP pile to Breaker	T05	-2894.8	-917.5	2.4	0	76	13.5	Α	58.7	0.0	-2.2	6.9	1.1	0.0	0.0	0.0	0.0	0.0	22
Loader from RAP pile to Breaker	T05	-2830.4	-921.0	2.4	0	76	16.2	Α	60.3	0.0	-2.6	7.4	1.3	0.0	0.0	0.0	0.0	0.0	23
Loader from RAP pile to Breaker	T05	-2788.7	-925.1	2.4	0	76	15.0	Α	61.3	0.0	-2.8	7.6	1.4	0.0	0.0	0.0	0.0	0.0	21
Loader from RAP pile to Breaker	T05	-2838.7	-919.2	2.4	0	76	13.7	Α	60.1	0.0	-2.6	7.3	1.3	0.0	0.0	0.0	0.0	0.0	21
Loader from RAP pile to Breaker	T05	-2818.1	-923.0	2.4	0	76	12.8	Α	60.6	0.0	-2.7	7.5	1.3	0.0	0.0	0.0	0.0	0.0	19
Loader from RAP pile to Breaker	T05	-2798.5	-925.1	2.4	0	76	13.2	Α	61.1	0.0	-2.8	7.6	1.4	0.0	0.0	0.0	0.0	0.0	19
Loader from RAP pile to Breaker	T05	-2780.7	-925.3	2.4	0	76	11.7	Α	61.5	0.0	-2.9	7.6	1.4	0.0	0.0	0.0	0.0	0.0	17
Loader from RAP pile to Breaker	T05	-2771.9	-924.5	2.4	0	76	5.1	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	10



Project: 12415 Coleraine Drive - Night

Time Period	Total (dBA)
Night	45

Receiver Name	Receiver ID			Z
R01	R01	-3058.0	-738.3	4.5

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Loader from RAP pile to Breaker	T05	-2768.0	-922.5	2.4	0	76	7.5	Α	61.7	0.0	-2.9	7.7	1.5	0.0	0.0	0.0	0.0	0.0	13
Loader from RAP pile to Breaker	T05	-2767.9	-922.6	2.4	0	76	7.3	Α	61.7	0.0	-2.9	7.7	1.5	0.0	0.0	0.0	0.0	0.0	13
Loader from RAP pile to Breaker	T05	-2771.7	-924.6	2.4	0	76	4.9	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	10
Loader from RAP pile to Breaker	T05	-2807.1	-924.7	2.4	0	76	7.3	Α	60.9	0.0	-2.8	7.5	1.4	0.0	0.0	0.0	0.0	0.0	13
Loader from RAP pile to Breaker	T05	-2765.0	-919.2	2.4	0	76	6.5	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	12
Loader from RAP pile to Breaker	T05	-2765.0	-919.1	2.4	0	76	6.3	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	12



Project: 12415 Coleraine Drive - Night Project Number: 16411

Time Period	Total (dBA)
Night	48

Receiver Name	Receiver ID			
R02	R02	-3169.3	-948.8	4.5

Source ID	Source Name	X	Υ	Z	Refl.	Lw	L/A	Гион	Adiv	K0	Λ αν π	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Crusher	S01	-2754.1	-915.2	2.5	Reil.	100	0.0	Freq A	63.4	0.0	Agr -4.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	40
Screen Deck	S02	-2765.3	-915.2 -914.8	1.5	0	95	0.0	A	63.2	0.0	-4.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	35
ScreenDeck	S02 S03	-2765.5 -2767.5	-914.6	12.0	0	95	0.0	A	63.1	0.0	-3.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	33
ColdFeedBins	S04	-2792.2	-905.7 -905.5		-				62.6			9.3	2.3						34
	S05	-2792.2	-905.5 -899.0	1.5 13.1	0	103 100	0.0	A	64.0	0.0	-4.6 -3.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	37
Baghouse Stack				1.5	0			A			-3.0 -4.7					0.0			_
ExhaustFan	\$06 \$07	-2743.2 -2738.8	-905.4 -905.7	2.0	0	97 105	0.0	A	63.6	0.0	-4.7	9.5	1.1	0.0	0.0	0.0	0.0	0.0	27 44
Dryer	* *				0		0.0	A	63.7			0.0		0.0	0.0	0.0	0.0		
BurnerFan	S08	-2735.1	-904.7	2.0	0	98	0.0	A	63.8	0.0	-4.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	38
ACPump	S09	-2735.1	-905.7	1.5	0	99	0.0	A	63.8	0.0	-4.8	9.5	1.1	0.0	0.0	0.0	0.0	0.0	30
AirComp	\$10	-2735.1	-906.5	1.5	0	95	0.0	Α	63.8	0.0	-4.8	9.5	1.6	0.0	0.0	0.0	0.0	0.0	25
Asph. Extraction	T01	-2715.3	-906.6	2.4	0	77	6.9	Α	64.2	0.0	-4.6	8.6	2.1	0.0	0.0	0.0	0.0	0.0	13
Asph. Extraction	T01	-2715.3	-898.3	2.4	0	77	10.7	A	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	26
Asph. Extraction	T01	-2670.5	-889.5	2.4	0	77	11.0	Α	65.0	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	25
Asph. Extraction	T01	-2693.2	-923.9	2.4	0	77	10.2	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25
Asph. Extraction	T01	-2703.2	-924.1	2.4	0	77	9.8	Α	64.4	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25
Asph. Extraction	T01	-2683.0	-923.4	2.4	0	77	10.1	Α	64.8	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
Asph. Extraction	T01	-2658.8	-890.2	2.4	0	77	10.4	Α	65.2	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
Asph. Extraction	T01	-2662.5	-923.4	2.4	0	77	10.2	Α	65.1	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
Asph. Extraction	T01	-2672.8	-923.3	2.4	0	77	10.1	Α	64.9	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
Asph. Extraction	T01	-2647.9	-890.9	2.4	0	77	10.4	Α	65.4	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
Asph. Extraction	T01	-2688.1	-887.1	2.4	0	77	9.4	Α	64.7	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
Asph. Extraction	T01	-2680.3	-888.6	2.4	0	77	8.6	Α	64.9	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
Asph. Extraction	T01	-2699.2	-884.8	2.4	0	77	7.8	Α	64.5	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	22
Asph. Extraction	T01	-2715.0	-914.4	2.4	0	77	7.3	Α	64.2	0.0	-4.6	8.1	2.1	0.0	0.0	0.0	0.0	0.0	14
Asph. Extraction	T01	-2708.8	-884.9	2.4	0	77	7.2	Α	64.3	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	22
Asph. Extraction	T01	-2649.2	-924.1	2.4	0	77	8.1	Α	65.3	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
Asph. Extraction	T01	-2713.9	-919.1	2.4	0	77	6.3	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
Asph. Extraction	T01	-2654.8	-923.6	2.4	0	77	6.8	Α	65.2	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	21
Asph. Extraction	T01	-2704.2	-884.6	2.4	0	77	6.0	Α	64.4	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
Asph. Extraction	T01	-2694.3	-885.5	2.4	0	77	6.1	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
Asph. Extraction	T01	-2715.0	-890.9	2.4	0	77	5.0	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
Asph. Extraction	T01	-2712.0	-922.1	2.4	0	77	4.9	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
Asph. Extraction	T01	-2709.4	-923.6	2.4	0	77	4.7	Α	64.3	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	19
Asph. Extraction	T01	-2714.0	-888.2	2.4	0	77	4.2	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	19
Asph. Extraction	T01	-2712.3	-886.2	2.4	0	77	4.1	Α	64.3	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	19
Loader from Ag piles to CFB	T04	-2853.8	-910.8	2.4	0	77	17.8	Α	61.0	0.0	-4.0	8.8	1.4	0.0	0.0	0.0	0.0	0.0	25
Loader from Ag piles to CFB	T04	-2853.9	-910.8	2.4	0	77	17.7	Α	61.0	0.0	-4.0	8.8	1.4	0.0	0.0	0.0	0.0	0.0	25
Loader from Ag piles to CFB	T04	-2884.8	-904.3	2.4	0	77	8.2	Α	60.2	0.0	-3.8	8.6	1.3	0.0	0.0	0.0	0.0	0.0	16



Project: 12415 Coleraine Drive - Night

Receiver ID

T05

T05

T05

-2807.1

-2765.0

-2765.0

-924.7

-919.2

-919.1

Project Number: 16411

Time Period	Total (dBA)
Night	48

1 (COCOTYOT 1 (CITTO																			
R02	R02	-3169.3	-948.8	4.5															
Source ID	Source Name	Χ	Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Loader from Ag piles to CFB	T04	-2888.7	-897.7	2.4	0	77	9.4	Α	60.1	0.0	-3.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	26
Loader from Ag piles to CFB	T04	-2888.7	-898.0	2.4	0	77	9.1	Α	60.1	0.0	-3.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	26
Loader from Ag piles to CFB	T04	-2885.0	-904.3	2.4	0	77	8.1	Α	60.2	0.0	-3.8	8.6	1.3	0.0	0.0	0.0	0.0	0.0	16
Loader from Ag piles to CFB	T04	-2814.9	-913.2	2.4	0	77	12.5	Α	62.0	0.0	-4.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
Loader from Ag piles to CFB	T04	-2815.0	-913.3	2.4	0	77	12.7	Α	62.0	0.0	-4.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
Loader from Ag piles to CFB	T04	-2797.7	-909.8	2.4	0	77	12.4	Α	62.4	0.0	-4.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
Loader from Ag piles to CFB	T04	-2797.6	-909.8	2.4	0	77	12.3	Α	62.5	0.0	-4.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
Loader from RAP pile to Breaker	T05	-2878.2	-917.3	2.4	0	76	17.5	Α	60.3	0.0	-3.9	8.7	1.3	0.0	0.0	0.0	0.0	0.0	24
Loader from RAP pile to Breaker	T05	-2878.4	-917.5	2.4	0	76	17.4	Α	60.3	0.0	-3.9	8.6	1.3	0.0	0.0	0.0	0.0	0.0	24
Loader from RAP pile to Breaker	T05	-2823.8	-922.2	2.4	0	76	14.5	Α	61.8	0.0	-4.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	29
Loader from RAP pile to Breaker	T05	-2844.4	-918.6	2.4	0	76	11.2	Α	61.3	0.0	-4.1	8.9	1.4	0.0	0.0	0.0	0.0	0.0	17
Loader from RAP pile to Breaker	T05	-2788.7	-925.1	2.4	0	76	15.0	Α	62.6	0.0	-4.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	28
Loader from RAP pile to Breaker	T05	-2843.3	-918.5	2.4	0	76	11.5	Α	61.3	0.0	-4.1	8.9	1.4	0.0	0.0	0.0	0.0	0.0	17
Loader from RAP pile to Breaker	T05	-2831.8	-920.4	2.4	0	76	9.6	Α	61.6	0.0	-4.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	24
Loader from RAP pile to Breaker	T05	-2818.1	-923.0	2.4	0	76	12.8	Α	61.9	0.0	-4.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
Loader from RAP pile to Breaker	T05	-2798.5	-925.1	2.4	0	76	13.2	Α	62.4	0.0	-4.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
Loader from RAP pile to Breaker	T05	-2780.7	-925.3	2.4	0	76	11.7	Α	62.8	0.0	-4.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	25
Loader from RAP pile to Breaker	T05	-2769.4	-923.2	2.4	0	76	9.5	Α	63.1	0.0	-4.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22
Loader from RAP pile to Breaker	T05	-2769.3	-923.4	2.4	0	76	9.3	Α	63.1	0.0	-4.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22

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Loader from RAP pile to Breaker

Loader from RAP pile to Breaker

Loader from RAP pile to Breaker

Project: 12415 Coleraine Drive - Day Project Number: 16411

		Point of	Reception R02	Point of	Reception R01
Source ID	Source Name	Distance to POR (m)	Sound Level at POR (dBA) Day	Distance to POR (m)	Sound Level at POR (dBA) Day
T03	AC Delivery	413	28	345	21
S09	ACPump	436	30	364	31
T01	Agg Delivery	388	40	327	36
S10	AirComp	436	25	364	26
T01	Asph. Extraction	479	36	403	29
S05	Baghouse Stack	447	37	369	37
S08	BurnerFan	436	38	363	30
S04	ColdFeedBins	380	34	314	37
S01	Crusher	417	40	352	32
S07	Dryer	433	44	360	37
S06	ExhaustFan	428	27	356	29
S11	Idling Truck 1	469	42	381	34
S12	Idling Truck 2	479	41	390	34
S13	Idling Truck 3	489	41	399	34
T04	Loader from Ag piles to CFB	326	36	280	36
T05	Loader from RAP pile to Breaker	360	36	298	34
S02	Screen Deck	405	35	342	32
S03	ScreenDeck	404	33	335	33
Total L	evel [dBA]		51		46



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18

Receiver: R01

Project: 12415 Coleraine Drive - Day

Project Number: 16411

Time Period	Total (dBA)
Day	46

Receiver Name	Receiver ID			Z						
R01	R01	-3058.0	-738.3	4.5						
					•					
Source ID	Source Name				Refl.	Lw	L/A	Freq	Adiv	K0
T03	AC Delivery	-2785.7	-923.5	2.4	0	63	14.7	Α	61.4	0.0
T03	AC Delivery	-2730.2	-924.0	2.4	0	63	16.0	Α	62.5	0.0
S09	ACPump	-2735.1	-905.7	1.5	0	99	0.0	Α	62.2	0.0
T01	Agg Delivery	-2786.6	-929.5	2.4	0	73	17.0	Α	61.4	0.0
T01	Agg Delivery	-2750.9	-929.4	2.4	0	73	13.3	Α	62.2	0.0
T01	Agg Delivery	-2735.0	-929.4	2.4	0	73	10.2	Α	62.5	0.0
T01	Agg Delivery	-2717.7	-929.4	2.4	0	73	13.8	Α	62.8	0.0
T01	Agg Delivery	-2853.4	-929.3	2.4	0	73	12.1	Α	59.9	0.0
T01	Agg Delivery	-2828.4	-929.4	2.4	0	73	15.3	Α	60.5	0.0
T01	Agg Delivery	-2881.3	-928.8	2.4	0	73	12.5	Α	59.3	0.0
T01	Agg Delivery	-2869.5	-929.1	2.4	0	73	7.8	Α	59.6	0.0
T01	Agg Delivery	-2864.0	-929.2	2.4	0	73	7.1	Α	59.7	0.0

0.0 15 -2.9 7.7 1.7 0.0 0.0 0.0 0.0 0.0 0.0 -3.0 0.0 1.8 0.0 0.0 0.0 0.0 0.0 26 0.0 -2.5 0.0 1.4 0.0 0.0 0.0 0.0 0.0 27 0.0 -2.6 7.4 1.4 0.0 0.0 0.0 0.0 0.0 22 0.0 -2.4 7.2 1.3 0.0 0.0 0.0 0.0 0.0 21 0.0 -2.5 0.0 1.3 0.0 0.0 0.0 0.0 0.0 23 0.0 -2.5 0.0 1.3 0.0 0.0 0.0 0.0 0.0 22 T01 -2875.1 -901.0 2.4 73 58.8 0.0 -1.9 3.3 1.2 0.0 18 Agg Delivery 0 5.4 Α 0.0 0.0 0.0 0.0 T01 Agg Delivery -2885.3 -901.0 2.4 0 73 12.3 Α 58.5 0.0 -1.8 0.0 1.2 0.0 0.0 0.0 0.0 0.0 28 T01 Agg Delivery -2761.6 -880.0 2.4 0 73 15.7 Α 61.3 0.0 -1.7 6.5 1.6 0.0 0.0 0.0 0.0 0.0 21 T01 -2838.9 -900.9 2.4 0 73 14.0 Α 59.7 0.0 -2.1 6.8 1.3 0.0 0.0 0.0 0.0 0.0 22 Agg Delivery T01 -2862.4 -901.0 2.4 0 73 13.4 Α 59.1 0.0 -1.9 6.6 1.2 0.0 0.0 0.0 0.0 0.0 22 Agg Delivery T01 Agg Delivery -2800.4 -887.7 2.4 0 73 9.8 Α 60.5 0.0 -1.8 6.6 1.4 0.0 0.0 0.0 0.0 0.0 17 T01 -2.0 Agg Delivery -2807.5 -893.2 2.4 0 73 9.2 Α 60.4 0.0 6.8 1.4 0.0 0.0 0.0 0.0 0.0 16 T01 73 0.0 0.0 Agg Delivery -2811.8 -896.1 2.4 0 3.4 Α 60.3 0.0 -2.1 6.8 1.4 0.0 0.0 0.0 10 T01 -2819.5 73 Agg Delivery -898.7 2.4 0 11.5 Α 60.2 0.0 -2.1 6.9 1.4 0.0 0.0 0.0 0.0 0.0 19 T01 Agg Delivery -2734.1 -881.0 2.4 0 73 12.7 Α 62.0 0.0 -1.8 6.5 1.7 0.0 0.0 0.0 0.0 0.0 18 -2715.5 73 Α -1.8 T01 Agg Delivery -883.3 2.4 0 12.7 62.4 0.0 6.6 1.7 0.0 0.0 0.0 0.0 0.0 17 T01 Agg Delivery -2894.0 -926.5 2.4 0 73 9.3 Α 58.9 0.0 -2.3 7.1 1.2 0.0 0.0 0.0 0.0 0.0 18 T01 Agg Delivery -2901.2 -915.5 2.4 0 73 8.9 Α 58.5 0.0 -2.0 6.8 1.2 0.0 0.0 0.0 0.0 0.0 18 T01 Agg Delivery -2896.1 -901.7 73 6.8 Α 58.2 0.0 -1.7 1.1 0.0 23 2.4 0 0.0 0.0 0.0 0.0 0.0 T01 Agg Delivery -2899.2 -902.6 2.4 0 73 2.2 Α 58.2 0.0 -1.7 3.4 1.1 0.0 0.0 0.0 0.0 0.0 15 T01 -2785.0 -880.5 2.4 0 73 10.0 Α 60.8 0.0 -1.6 1.5 0.0 0.0 0.0 17 Agg Delivery 6.4 0.0 0.0 T01 -2899.4 0 73 7.9 0.0 -2.2 1.2 0.0 Agg Delivery -921.9 2.4 Α 58.7 7.0 0.0 0.0 0.0 0.0 17 -2684.4 -925.8 73 Α T01 Agg Delivery 2.4 0 9.5 63.4 0.0 -3.0 7.7 1.9 0.0 0.0 0.0 0.0 0.0 13 0.0 T01 Agg Delivery -2675.5 -924.1 2.4 0 73 9.6 Α 63.6 0.0 -3.0 7.8 1.9 0.0 0.0 0.0 0.0 13 T01 Agg Delivery -2901.0 -909.0 2.4 0 73 7.1 Α 58.3 0.0 -1.9 6.7 1.1 0.0 0.0 0.0 0.0 0.0 16 -2793.3 T01 Agg Delivery -882.9 2.4 0 73 8.7 Α 60.6 0.0 -1.7 6.5 1.4 0.0 0.0 0.0 0.0 0.0 15 T01 Agg Delivery -2658.1 -890.3 2.4 0 73 11.6 Α 63.6 0.0 -2.3 7.0 1.9 0.0 0.0 0.0 0.0 0.0 15 T01 Agg Delivery -2643.9 -891.4 2.4 0 73 11.5 Α 63.9 0.0 -2.4 4.1 2.0 0.0 0.0 0.0 0.0 0.0 17 -2664.4 73 14 T01 Agg Delivery -923.3 2.4 0 11.2 Α 63.8 0.0 -3.0 7.8 2.0 0.0 0.0 0.0 0.0 0.0 T01 -2900.4 73 58.2 Agg Delivery -904.7 2.4 0 5.6 Α 0.0 -1.8 5.7 1.1 0.0 0.0 0.0 0.0 0.0 16 T01 -2701.2 -884.7 2.4 73 10.1 Α 62.7 -1.9 6.7 1.8 0.0 0.0 0.0 14 Agg Delivery 0 0.0 0.0 0.0



Project: 12415 Coleraine Drive - Day

Project Number: 16411

Time Period	Total (dBA)
Day	46

R01	R01	-3058.0	-738.3	4.5															
Source ID	Source Name				Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc		Lr
T01	Agg Delivery	-2670.6	-889.5	2.4	0	73	10.3	Α	63.4	0.0	-2.3	7.0	1.9	0.0	0.0	0.0	0.0	0.0	14
T01	Agg Delivery	-2651.8	-923.8	2.4	0	73	10.9	Α	64.0	0.0	-3.0	7.8	2.0	0.0	0.0	0.0	0.0	0.0	14
T01	Agg Delivery	-2703.8	-929.2	2.4	0	73	5.7	Α	63.1	0.0	-3.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	17
T01	Agg Delivery	-2698.5	-928.6	2.4	0	73	6.1	Α	63.2	0.0	-3.0	4.8	1.9	0.0	0.0	0.0	0.0	0.0	13
T01	Agg Delivery	-2687.9	-887.2	2.4	0	73	9.3	Α	63.0	0.0	-2.1	6.8	1.8	0.0	0.0	0.0	0.0	0.0	13
T01	Agg Delivery	-2679.8	-888.6	2.4	0	73	8.9	Α	63.2	0.0	-2.2	6.9	1.9	0.0	0.0	0.0	0.0	0.0	13
T01	Agg Delivery	-2692.6	-927.5	2.4	0	73	8.9	Α	63.3	0.0	-3.0	7.7	1.9	0.0	0.0	0.0	0.0	0.0	12
T01	Agg Delivery	-2694.1	-885.5	2.4	0	73	6.3	Α	62.9	0.0	-2.0	6.8	1.8	0.0	0.0	0.0	0.0	0.0	10
S10	AirComp	-2735.1	-906.5	1.5	0	95	0.0	Α	62.2	0.0	-2.8	7.6	1.4	0.0	0.0	0.0	0.0	0.0	26
T01	Asph. Extraction	-2715.4	-909.6	2.4	0	77	6.3	Α	62.7	0.0	-2.8	7.9	1.8	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2715.3	-900.0	2.4	0	77	11.8	Α	62.6	0.0	-2.6	7.4	1.8	0.0	0.0	0.0	0.0	0.0	19
T01	Asph. Extraction	-2670.5	-889.5	2.4	0	77	11.0	Α	63.4	0.0	-2.3	7.0	1.9	0.0	0.0	0.0	0.0	0.0	17
T01	Asph. Extraction	-2693.2	-923.9	2.4	0	77	10.2	Α	63.2	0.0	-2.9	7.7	1.9	0.0	0.0	0.0	0.0	0.0	17
T01	Asph. Extraction	-2658.8	-890.2	2.4	0	77	10.4	Α	63.6	0.0	-2.3	7.0	1.9	0.0	0.0	0.0	0.0	0.0	17
T01	Asph. Extraction	-2703.2	-924.1	2.4	0	77	9.8	Α	63.1	0.0	-2.9	7.1	1.8	0.0	0.0	0.0	0.0	0.0	17
T01	Asph. Extraction	-2680.5	-923.4	2.4	0	77	7.1	Α	63.5	0.0	-3.0	7.8	1.9	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2685.6	-923.5	2.4	0	77	7.0	Α	63.4	0.0	-3.0	7.7	1.9	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2647.9	-890.9	2.4	0	77	10.4	Α	63.8	0.0	-2.4	4.9	2.0	0.0	0.0	0.0	0.0	0.0	18
T01	Asph. Extraction	-2672.8	-923.3	2.4	0	77	10.1	Α	63.6	0.0	-3.0	7.8	1.9	0.0	0.0	0.0	0.0	0.0	16
T01	Asph. Extraction	-2662.5	-923.4	2.4	0	77	10.2	Α	63.8	0.0	-3.0	7.8	2.0	0.0	0.0	0.0	0.0	0.0	16
T01	Asph. Extraction	-2688.1	-887.1	2.4	0	77	9.4	Α	63.0	0.0	-2.1	6.8	1.8	0.0	0.0	0.0	0.0	0.0	16
T01	Asph. Extraction	-2680.3	-888.6	2.4	0	77	8.6	Α	63.2	0.0	-2.1	6.9	1.9	0.0	0.0	0.0	0.0	0.0	15
T01	Asph. Extraction	-2699.2	-884.8	2.4	0	77	7.8	Α	62.8	0.0	-1.9	6.7	1.8	0.0	0.0	0.0	0.0	0.0	15
T01	Asph. Extraction	-2708.8	-884.9	2.4	0	77	7.2	Α	62.6	0.0	-1.9	6.7	1.8	0.0	0.0	0.0	0.0	0.0	15
T01	Asph. Extraction	-2715.0	-914.4	2.4	0	77	7.3	Α	62.7	0.0	-2.8	7.8	1.8	0.0	0.0	0.0	0.0	0.0	14
T01	Asph. Extraction	-2649.2	-924.1	2.4	0	77	8.1	Α	64.0	0.0	-3.0	7.8	2.0	0.0	0.0	0.0	0.0	0.0	14
T01	Asph. Extraction	-2713.9	-919.1	2.4	0	77	6.3	Α	62.8	0.0	-2.9	7.8	1.8	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2704.2	-884.6	2.4	0	77	6.0	Α	62.7	0.0	-1.9	6.7	1.8	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2694.3	-885.5	2.4	0	77	6.1	Α	62.9	0.0	-2.0	6.7	1.8	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2654.8	-923.6	2.4	0	77	6.8	Α	63.9	0.0	-3.0	7.8	2.0	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2715.0	-890.9	2.4	0	77	5.0	Α	62.5	0.0	-2.2	7.0	1.7	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2712.0	-922.1	2.4	0	77	4.9	Α	62.9	0.0	-2.9	7.7	1.8	0.0	0.0	0.0	0.0	0.0	12
T01	Asph. Extraction	-2709.4	-923.6	2.4	0	77	4.7	Α	62.9	0.0	-2.9	7.7	1.8	0.0	0.0	0.0	0.0	0.0	12
T01	Asph. Extraction	-2714.0	-888.2	2.4	0	77	4.2	Α	62.5	0.0	-2.1	6.9	1.7	0.0	0.0	0.0	0.0	0.0	12
T01	Asph. Extraction	-2712.3	-886.2	2.4	0	77	4.1	Α	62.5	0.0	-2.0	6.8	1.7	0.0	0.0	0.0	0.0	0.0	12
S05	Baghouse Stack	-2725.5	-899.0	13.1	0	100	0.0	Α	62.3	0.0	-1.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	37



S08

S04

BurnerFan

ColdFeedBins

-2735.1

-2792.2

-904.7

-905.5

2.0

1.5

0

0

98

103

0.0

0.0

Α

Α

62.2

60.9

0.0 -2.4

-2.6

0.0

7.2

5.9

0.7

2.1

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

30

37

Project: 12415 Coleraine Drive - Day

Time Period	Total (dBA)
Day	46

Receiver Name	Receiver ID			
R01	R01	-3058.0	-738.3	4.5

Source ID	Source Name	X	Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S01	Crusher	-2754.1	-915.2	2.5	0	100	0.0	Α	61.9	0.0	-2.8	7.6	1.6	0.0	0.0	0.0	0.0	0.0	32
S07	Dryer	-2738.8	-905.7	2.0	0	105	0.0	Α	62.1	0.0	-2.0	6.7	1.0	0.0	0.0	0.0	0.0	0.0	37
S06	ExhaustFan	-2743.2	-905.4	1.5	0	97	0.0	Α	62.0	0.0	-2.6	7.4	0.9	0.0	0.0	0.0	0.0	0.0	29
S11	Idling Truck 1	-2705.0	-881.2	2.4	0	103	0.0	Α	62.6	0.0	-1.8	6.5	1.8	0.0	0.0	0.0	0.0	0.0	34
S12	Idling Truck 2	-2695.1	-881.2	2.4	0	103	0.0	Α	62.8	0.0	-1.8	6.5	1.8	0.0	0.0	0.0	0.0	0.0	34
S13	Idling Truck 3	-2685.1	-881.2	2.4	0	103	0.0	Α	63.0	0.0	-1.8	6.6	1.8	0.0	0.0	0.0	0.0	0.0	34
T04	Loader from Ag piles to CFB	-2875.6	-908.1	2.4	0	77	11.9	Α	58.9	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
T04	Loader from Ag piles to CFB	-2846.1	-911.8	2.4	0	77	16.4	Α	59.8	0.0	-2.3	7.1	1.2	0.0	0.0	0.0	0.0	0.0	25
T04	Loader from Ag piles to CFB	-2846.2	-911.8	2.4	0	77	16.4	Α	59.7	0.0	-2.3	7.1	1.2	0.0	0.0	0.0	0.0	0.0	25
T04	Loader from Ag piles to CFB	-2875.5	-908.1	2.4	0	77	11.9	Α	58.9	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
T04	Loader from Ag piles to CFB	-2887.0	-900.6	2.4	0	77	11.8	Α	58.4	0.0	-1.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	29
T04	Loader from Ag piles to CFB	-2887.0	-900.8	2.4	0	77	11.7	Α	58.5	0.0	-1.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
T04	Loader from Ag piles to CFB	-2815.3	-913.2	2.4	0	77	12.7	Α	60.5	0.0	-2.6	7.4	1.3	0.0	0.0	0.0	0.0	0.0	21
T04	Loader from Ag piles to CFB	-2815.0	-913.3	2.4	0	77	12.7	Α	60.5	0.0	-2.6	7.4	1.3	0.0	0.0	0.0	0.0	0.0	21
T04	Loader from Ag piles to CFB	-2791.5	-908.2	2.4	0	77	6.5	Α	61.0	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	14
T04	Loader from Ag piles to CFB	-2799.9	-910.4	2.4	0	77	11.0	Α	60.8	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	19
T04	Loader from Ag piles to CFB	-2799.8	-910.4	2.4	0	77	11.0	Α	60.8	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	18
T04	Loader from Ag piles to CFB	-2791.5	-908.2	2.4	0	77	6.5	Α	61.0	0.0	-2.6	7.4	1.4	0.0	0.0	0.0	0.0	0.0	14
T05	Loader from RAP pile to Breaker	-2895.0	-917.3	2.4	0	76	13.5	Α	58.7	0.0	-2.2	6.9	1.1	0.0	0.0	0.0	0.0	0.0	22
T05	Loader from RAP pile to Breaker	-2881.2	-917.3	2.4	0	76	7.4	Α	59.0	0.0	-2.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	23
T05	Loader from RAP pile to Breaker	-2868.6	-917.3	2.4	0	76	12.9	Α	59.3	0.0	-2.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	28
T05	Loader from RAP pile to Breaker	-2854.5	-917.3	2.4	0	76	9.3	Α	59.7	0.0	-2.4	7.2	1.2	0.0	0.0	0.0	0.0	0.0	17
T05	Loader from RAP pile to Breaker	-2854.7	-917.5	2.4	0	76	8.8	Α	59.7	0.0	-2.4	7.2	1.2	0.0	0.0	0.0	0.0	0.0	16
T05	Loader from RAP pile to Breaker	-2868.3	-917.5	2.4	0	76	13.0	Α	59.3	0.0	-2.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	28
T05	Loader from RAP pile to Breaker	-2880.9	-917.5	2.4	0	76	7.4	Α	59.0	0.0	-2.3	0.0	1.1	0.0	0.0	0.0	0.0	0.0	23
T05	Loader from RAP pile to Breaker	-2894.8	-917.5	2.4	0	76	13.5	Α	58.7	0.0	-2.2	6.9	1.1	0.0	0.0	0.0	0.0	0.0	22
T05	Loader from RAP pile to Breaker	-2830.4	-921.0	2.4	0	76	16.2	Α	60.3	0.0	-2.6	7.4	1.3	0.0	0.0	0.0	0.0	0.0	23
T05	Loader from RAP pile to Breaker	-2788.7	-925.1	2.4	0	76	15.0	Α	61.3	0.0	-2.8	7.6	1.4	0.0	0.0	0.0	0.0	0.0	21
T05	Loader from RAP pile to Breaker	-2838.7	-919.2	2.4	0	76	13.7	Α	60.1	0.0	-2.6	7.3	1.3	0.0	0.0	0.0	0.0	0.0	21
T05	Loader from RAP pile to Breaker	-2818.1	-923.0	2.4	0	76	12.8	Α	60.6	0.0	-2.7	7.5	1.3	0.0	0.0	0.0	0.0	0.0	19
T05	Loader from RAP pile to Breaker	-2798.5	-925.1	2.4	0	76	13.2	Α	61.1	0.0	-2.8	7.6	1.4	0.0	0.0	0.0	0.0	0.0	19
T05	Loader from RAP pile to Breaker	-2780.7	-925.3	2.4	0	76	11.7	Α	61.5	0.0	-2.9	7.6	1.4	0.0	0.0	0.0	0.0	0.0	17
T05	Loader from RAP pile to Breaker	-2771.9	-924.5	2.4	0	76	5.1	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	10
T05	Loader from RAP pile to Breaker	-2768.0	-922.5	2.4	0	76	7.5	Α	61.7	0.0	-2.9	7.7	1.5	0.0	0.0	0.0	0.0	0.0	13
T05	Loader from RAP pile to Breaker	-2767.9	-922.6	2.4	0	76	7.3	Α	61.7	0.0	-2.9	7.7	1.5	0.0	0.0	0.0	0.0	0.0	13
T05	Loader from RAP pile to Breaker	-2771.7	-924.6	2.4	0	76	4.9	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	10
T05	Loader from RAP pile to Breaker	-2807.1	-924.7	2.4	0	76	7.3	Α	60.9	0.0	-2.8	7.5	1.4	0.0	0.0	0.0	0.0	0.0	13
T05	Loader from RAP pile to Breaker	-2765.0	-919.2	2.4	0	76	6.5	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	12



Project: 12415 Coleraine Drive - Day

Time Period	Total (dBA)
Day	46

R	eceiver Name	Receiver ID			Z
	R01	R01	-3058.0	-738.3	4.5

Source ID	Source Name	X	Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T05	Loader from RAP pile to Breaker	-2765.0	-919.1	2.4	0	76	6.3	Α	61.7	0.0	-2.9	7.6	1.5	0.0	0.0	0.0	0.0	0.0	12
S02	Screen Deck	-2765.3	-914.8	1.5	0	95	0.0	Α	61.7	0.0	-2.6	3.0	1.7	0.0	0.0	0.0	0.0	0.0	32
S03	ScreenDeck	-2767.5	-905.7	12.0	0	95	0.0	Α	61.5	0.0	-1.2	0.0	1.6	0.0	0.0	0.0	0.0	0.0	33

0.0 0.0 0.0 0.0 0.0 22

Receiver: R02

Project: 12415 Coleraine Drive - Day

Agg Delivery

-2895.8

-901.6

2.4

0

73

6.1 A

Project Number: 16411

Time Period	Total (dBA)
Day	51

Receiver marrie	Receiver ID																		
R02	R02	-3169.3	-948.8	4.5															
Source ID	Source Name	X	Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T03	AC Delivery	-2777.5	-923.5	2.4	0	63	16.6	Α	62.9	0.0	-4.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	20
T03	AC Delivery	-2731.2	-924.0	2.4	0	63	16.7	Α	63.8	0.0	-4.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	19
T03	AC Delivery	-2688.7	-924.0	2.4	0	63	15.8	Α	64.6	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	17
T03	AC Delivery	-2734.8	-887.2	2.4	0	63	14.5	Α	63.8	0.0	-4.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	17
T03	AC Delivery	-2783.4	-888.7	2.4	0	63	12.0	Α	62.8	0.0	-4.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	15
T03	AC Delivery	-2657.9	-925.0	2.4	0	63	13.7	Α	65.2	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	15
T03	AC Delivery	-2768.5	-888.1	2.4	0	63	11.4	Α	63.2	0.0	-4.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	14
T03	AC Delivery	-2755.2	-887.5	2.4	0	63	11.0	Α	63.4	0.0	-4.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	14
T03	AC Delivery	-2713.7	-886.6	2.4	0	63	11.4	Α	64.3	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	13
T03	AC Delivery	-2660.3	-890.1	2.4	0	63	12.3	Α	65.2	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	13
T03	AC Delivery	-2644.6	-891.3	2.4	0	63	11.7	Α	65.5	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	12
T03	AC Delivery	-2685.7	-887.6	2.4	0	63	10.8	Α	64.8	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	12
T03	AC Delivery	-2701.8	-885.9	2.4	0	63	10.0	Α	64.5	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	12
T03	AC Delivery	-2674.3	-889.1	2.4	0	63	10.5	Α	65.0	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	12
T03	AC Delivery	-2811.0	-903.0	2.4	0	63	7.4	Α	62.2	0.0	-4.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	11
T03	AC Delivery	-2809.8	-898.2	2.4	0	63	6.6	Α	62.2	0.0	-4.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	10
S09	ACPump	-2735.1	-905.7	1.5	0	99	0.0	Α	63.8	0.0	-4.8	9.5	1.1	0.0	0.0	0.0	0.0	0.0	30
T01	Agg Delivery	-2758.6	-929.5	2.4	0	73	20.3	Α	63.3	0.0	-4.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	33
T01	Agg Delivery	-2836.5	-929.4	2.4	0	73	17.0	Α	61.5	0.0	-4.1	0.0	1.6	0.0	0.0	0.0	0.0	0.0	32
T01	Agg Delivery	-2875.8	-928.9	2.4	0	73	14.6	Α	60.4	0.0	-3.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	30
T01	Agg Delivery	-2878.4	-901.0	2.4	0	73	10.1	Α	60.4	0.0	-3.9	3.9	1.4	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2888.6	-901.0	2.4	0	73	10.1	Α	60.1	0.0	-3.8	0.0	1.4	0.0	0.0	0.0	0.0	0.0	26
T01	Agg Delivery	-2838.9	-900.9	2.4	0	73	14.0	Α	61.5	0.0	-4.1	8.9	1.6	0.0	0.0	0.0	0.0	0.0	20
T01	Agg Delivery	-2862.4	-901.0	2.4	0	73	13.4	Α	60.8	0.0	-4.0	8.8	1.5	0.0	0.0	0.0	0.0	0.0	20
T01	Agg Delivery	-2750.6	-880.0	2.4	0	73	11.7	Α	63.6	0.0	-4.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
T01	Agg Delivery	-2763.2	-880.0	2.4	0	73	10.2	Α	63.3	0.0	-4.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	23
T01	Agg Delivery	-2774.2	-880.0	2.4	0	73	10.6	Α	63.1	0.0	-4.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
T01	Agg Delivery	-2798.0	-885.8	2.4	0	73	5.6	Α	62.5	0.0	-4.4	0.0	1.7	0.0	0.0	0.0	0.0	0.0	19
T01	Agg Delivery	-2803.7	-890.2	2.4	0	73	10.3	Α	62.4	0.0	-4.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	24
T01	Agg Delivery	-2809.3	-894.6	2.4	0	73	5.6	Α	62.2	0.0	-4.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	19
T01	Agg Delivery	-2817.2	-897.9	2.4	0	73	11.4	Α	62.0	0.0	-4.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
T01	Agg Delivery	-2897.3	-924.7	2.4	0	73	0.1	Α	59.7	0.0	-3.7	3.7	1.3	0.0	0.0	0.0	0.0	0.0	13
T01	Agg Delivery	-2893.5	-926.8	2.4	0	73	8.8	Α	59.8	0.0	-3.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	25
T01	Agg Delivery	-2901.2	-915.5	2.4	0	73	8.9	Α	59.6	0.0	-3.7	8.5	1.3	0.0	0.0	0.0	0.0	0.0	17
T01	Agg Delivery	-2727.3	-881.8	2.4	0	73	6.8	Α	64.0	0.0	-4.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	19
T01	Agg Delivery	-2736.4	-880.8	2.4	0	73	11.4	Α	63.8	0.0	-4.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
T01	Agg Delivery	-2715.5	-883.3	2.4	0	73	12.7	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25

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Receiver: R02

Project: 12415 Coleraine Drive - Day

Project Number: 16411

Time Period	Total (dBA)
Day	51

R02	R02	-3169.3	-948.8	4.5	1														
		•			-														
Source ID	Source Name				Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc		Lr
T01	Agg Delivery	-2898.9	-902.5	2.4	0	73	3.7	Α	59.8	0.0	-3.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	20
T01	Agg Delivery	-2899.4	-921.9	2.4	0	73	7.9	Α	59.7	0.0	-3.7	6.5	1.3	0.0	0.0	0.0	0.0	0.0	18
T01	Agg Delivery	-2679.9	-924.9	2.4	0	73	12.6	Α	64.8	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
T01	Agg Delivery	-2901.0	-909.0	2.4	0	73	7.1	Α	59.7	0.0	-3.7	8.5	1.3	0.0	0.0	0.0	0.0	0.0	15
T01	Agg Delivery	-2785.0	-880.5	2.4	0	73	10.0	Α	62.8	0.0	-4.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	23
T01	Agg Delivery	-2658.1	-890.3	2.4	0	73	11.6	Α	65.2	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2664.4	-923.3	2.4	0	73	11.2	Α	65.1	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2793.3	-882.9	2.4	0	73	8.7	Α	62.6	0.0	-4.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2643.9	-891.4	2.4	0	73	11.5	Α	65.5	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2900.4	-904.7	2.4	0	73	5.6	Α	59.7	0.0	-3.7	4.0	1.3	0.0	0.0	0.0	0.0	0.0	18
T01	Agg Delivery	-2651.8	-923.8	2.4	0	73	10.9	Α	65.3	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2701.2	-884.7	2.4	0	73	10.1	Α	64.5	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	22
T01	Agg Delivery	-2670.6	-889.5	2.4	0	73	10.3	Α	65.0	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	21
T01	Agg Delivery	-2701.0	-928.9	2.4	0	73	9.7	Α	64.4	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
T01	Agg Delivery	-2687.9	-887.2	2.4	0	73	9.3	Α	64.7	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	21
T01	Agg Delivery	-2692.6	-927.5	2.4	0	73	8.9	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
T01	Agg Delivery	-2679.8	-888.6	2.4	0	73	8.9	Α	64.9	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	20
T01	Agg Delivery	-2694.1	-885.5	2.4	0	73	6.3	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	18
S10	AirComp	-2735.1	-906.5	1.5	0	95	0.0	Α	63.8	0.0	-4.8	9.5	1.6	0.0	0.0	0.0	0.0	0.0	25
T01	Asph. Extraction	-2715.3	-906.6	2.4	0	77	6.9	Α	64.2	0.0	-4.6	8.6	2.1	0.0	0.0	0.0	0.0	0.0	13
T01	Asph. Extraction	-2715.3	-898.3	2.4	0	77	10.7	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	26
T01	Asph. Extraction	-2670.5	-889.5	2.4	0	77	11.0	Α	65.0	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	25
T01	Asph. Extraction	-2693.2	-923.9	2.4	0	77	10.2	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25
T01	Asph. Extraction	-2703.2	-924.1	2.4	0	77	9.8	Α	64.4	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25
T01	Asph. Extraction	-2683.0	-923.4	2.4	0	77	10.1	Α	64.8	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
T01	Asph. Extraction	-2658.8	-890.2	2.4	0	77	10.4	Α	65.2	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
T01	Asph. Extraction	-2662.5	-923.4	2.4	0	77	10.2	Α	65.1	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
T01	Asph. Extraction	-2672.8	-923.3	2.4	0	77	10.1	Α	64.9	0.0	-4.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
T01	Asph. Extraction	-2647.9	-890.9	2.4	0	77	10.4	Α	65.4	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
T01	Asph. Extraction	-2688.1	-887.1	2.4	0	77	9.4	Α	64.7	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
T01	Asph. Extraction	-2680.3	-888.6	2.4	0	77	8.6	Α	64.9	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
T01	Asph. Extraction	-2699.2	-884.8	2.4	0	77	7.8	Α	64.5	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	22
T01	Asph. Extraction	-2715.0	-914.4	2.4	0	77	7.3	Α	64.2	0.0	-4.6	8.1	2.1	0.0	0.0	0.0	0.0	0.0	14
T01	Asph. Extraction	-2708.8	-884.9	2.4	0	77	7.2	Α	64.3	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	22
T01	Asph. Extraction	-2649.2	-924.1	2.4	0	77	8.1	Α	65.3	0.0	-4.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22



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Asph. Extraction

Asph. Extraction

Asph. Extraction

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-2654.8

-2704.2

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Project: 12415 Coleraine Drive - Day

Time Period	Total (dBA)
Day	51

Receiver Name	Receiver ID			
R02	R02	-3169.3	-948.8	4.5

Source ID	Source Name			Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T01	Asph. Extraction	-2694.3	-885.5	2.4	0	77	6.1	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	21
T01	Asph. Extraction	-2715.0	-890.9	2.4	0	77	5.0	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
T01	Asph. Extraction	-2712.0	-922.1	2.4	0	77	4.9	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	20
T01	Asph. Extraction	-2709.4	-923.6	2.4	0	77	4.7	Α	64.3	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	19
T01	Asph. Extraction	-2714.0	-888.2	2.4	0	77	4.2	Α	64.2	0.0	-4.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	19
T01	Asph. Extraction	-2712.3	-886.2	2.4	0	77	4.1	Α	64.3	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	19
S05	Baghouse Stack	-2725.5	-899.0	13.1	0	100	0.0	Α	64.0	0.0	-3.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	37
S08	BurnerFan	-2735.1	-904.7	2.0	0	98	0.0	Α	63.8	0.0	-4.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	38
S04	ColdFeedBins	-2792.2	-905.5	1.5	0	103	0.0	Α	62.6	0.0	-4.6	9.3	2.3	0.0	0.0	0.0	0.0	0.0	34
S01	Crusher	-2754.1	-915.2	2.5	0	100	0.0	Α	63.4	0.0	-4.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	40
S07	Dryer	-2738.8	-905.7	2.0	0	105	0.0	Α	63.7	0.0	-4.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	44
S06	ExhaustFan	-2743.2	-905.4	1.5	0	97	0.0	Α	63.6	0.0	-4.7	9.5	1.1	0.0	0.0	0.0	0.0	0.0	27
S11	Idling Truck 1	-2705.0	-881.2	2.4	0	103	0.0	Α	64.4	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	42
S12	Idling Truck 2	-2695.1	-881.2	2.4	0	103	0.0	Α	64.6	0.0	-4.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	41
S13	Idling Truck 3	-2685.1	-881.2	2.4	0	103	0.0	Α	64.8	0.0	-4.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	41
T04	Loader from Ag piles to CFB	-2853.8	-910.8	2.4	0	77	17.8	Α	61.0	0.0	-4.0	8.8	1.4	0.0	0.0	0.0	0.0	0.0	25
T04	Loader from Ag piles to CFB	-2853.9	-910.8	2.4	0	77	17.7	Α	61.0	0.0	-4.0	8.8	1.4	0.0	0.0	0.0	0.0	0.0	25
T04	Loader from Ag piles to CFB	-2884.8	-904.3	2.4	0	77	8.2	Α	60.2	0.0	-3.8	8.6	1.3	0.0	0.0	0.0	0.0	0.0	16
T04	Loader from Ag piles to CFB	-2888.7	-897.7	2.4	0	77	9.4	Α	60.1	0.0	-3.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	26
T04	Loader from Ag piles to CFB	-2888.7	-898.0	2.4	0	77	9.1	Α	60.1	0.0	-3.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	26
T04	Loader from Ag piles to CFB	-2885.0	-904.3	2.4	0	77	8.1	Α	60.2	0.0	-3.8	8.6	1.3	0.0	0.0	0.0	0.0	0.0	16
T04	Loader from Ag piles to CFB	-2814.9	-913.2	2.4	0	77	12.5	Α	62.0	0.0	-4.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
T04	Loader from Ag piles to CFB	-2815.0	-913.3	2.4	0	77	12.7	Α	62.0	0.0	-4.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
T04	Loader from Ag piles to CFB	-2797.7	-909.8	2.4	0	77	12.4	Α	62.4	0.0	-4.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
T04	Loader from Ag piles to CFB	-2797.6	-909.8	2.4	0	77	12.3	Α	62.5	0.0	-4.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
T05	Loader from RAP pile to Breaker	-2878.2	-917.3	2.4	0	76	17.5	Α	60.3	0.0	-3.9	8.7	1.3	0.0	0.0	0.0	0.0	0.0	24
T05	Loader from RAP pile to Breaker	-2878.4	-917.5	2.4	0	76	17.4	Α	60.3	0.0	-3.9	8.6	1.3	0.0	0.0	0.0	0.0	0.0	24
T05	Loader from RAP pile to Breaker	-2823.8	-922.2	2.4	0	76	14.5	Α	61.8	0.0	-4.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	29
T05	Loader from RAP pile to Breaker	-2844.4	-918.6	2.4	0	76	11.2	Α	61.3	0.0	-4.1	8.9	1.4	0.0	0.0	0.0	0.0	0.0	17
T05	Loader from RAP pile to Breaker	-2788.7	-925.1	2.4	0	76	15.0	Α	62.6	0.0	-4.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	28
T05	Loader from RAP pile to Breaker	-2843.3	-918.5	2.4	0	76	11.5	Α	61.3	0.0	-4.1	8.9	1.4	0.0	0.0	0.0	0.0	0.0	17
T05	Loader from RAP pile to Breaker	-2831.8	-920.4	2.4	0	76	9.6	Α	61.6	0.0	-4.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	24
T05	Loader from RAP pile to Breaker	-2818.1	-923.0	2.4	0	76	12.8	Α	61.9	0.0	-4.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
T05	Loader from RAP pile to Breaker	-2798.5	-925.1	2.4	0	76	13.2	Α	62.4	0.0	-4.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
T05	Loader from RAP pile to Breaker	-2780.7	-925.3	2.4	0	76	11.7	Α	62.8	0.0	-4.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	25
T05	Loader from RAP pile to Breaker	-2769.4	-923.2	2.4	0	76	9.5	Α	63.1	0.0	-4.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22
T05	Loader from RAP pile to Breaker	-2769.3	-923.4	2.4	0	76	9.3	Α	63.1	0.0	-4.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22
T05	Loader from RAP pile to Breaker	-2807.1	-924.7	2.4	0	76	7.3	Α	62.2	0.0	-4.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	21



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Receiver: R02

Project: 12415 Coleraine Drive - Day

Time Period	Total (dBA)
Day	51

Receiver Name	Receiver ID	Χ	Υ	Z
R02	R02	-3169.3	-948.8	4.5

Source ID	Source Name	Х	Υ	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T05	Loader from RAP pile to Breaker	-2765.0	-919.2	2.4	0	76	6.5	Α	63.2	0.0	-4.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	19
T05	Loader from RAP pile to Breaker	-2765.0	-919.1	2.4	0	76	6.3	Α	63.2	0.0	-4.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	19
S02	Screen Deck	-2765.3	-914.8	1.5	0	95	0.0	Α	63.2	0.0	-4.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0	35
S03	ScreenDeck	-2767.5	-905.7	12.0	0	95	0.0	Α	63.1	0.0	-3.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	33