BCX ENVIRONMENTAL CONSULTING

Air Quality Study for Nelson Aggregate Co. Burlington Quarry Extension

Prepared for: Nelson Aggregate Co.
2433 No. 2 Sideroad
Burlington, ON
L7P 0G8

Site Address: Burlington Quarry
2433 No. 2 Sideroad
Burlington, ON
L7P 0G8
MNR Site ID 5499

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Executive Summary

BCX Environmental Consulting (BCX) was retained by Nelson Aggregate Co. (Nelson) to prepare an Air Quality Study for its application to permit extensions to their existing Nelson Burlington Quarry (Burlington Quarry) operation (Site).

Nelson's existing Burlington Quarry is located 2433 No. 2 Side Road in Burlington, Ontario. The Site is currently approved to extract (drilling, blasting), process (crushing and screening), handle, stockpile and ship aggregate materials. There is also an existing hot mix asphalt (HMA) operation on Site.

The proposed extension areas are located on lands immediately south-east and south-west of the existing Burlington Quarry operation. Six extension phases are anticipated. The proposed extension areas will be operated in a similar manner to the existing Burlington Quarry. They will utilize the same types of equipment including rock trucks, front-end loaders, and drills.

This air quality study conservatively assessed five maximum emission operating scenarios (including a baseline operating scenario) to represent the six phases over the lifespan of the proposed project.

A series of emission inventories and air dispersion modelling exercises were completed to conservatively assess the potential for air quality impacts in the vicinity of the proposed Site from all significant on-site sources (both stationary and mobile sources) over all phases of the proposed extensions. Contaminants of Potential Concern (CoPCs) including total suspended particulate (PM), fine particulate ($PM_{2.5}$), respirable crystalline silica PM_{10} (RCS), combustion gases (nitrogen dioxide, sulphur dioxide and carbon monoxide), benzene, and benzo(a)pyrene (BaP) were evaluated according to the Ontario Ministry Environment, Conservation, and Parks (Ministry) guidelines.

Cumulative air quality impacts from the operating phases were estimated by incorporating representative background concentrations and comparing the total concentrations (modelled plus background) to applicable ambient air quality criteria for CoPCs.

With respect to potential health impacts, the study determined that no significant health impacts are expected:

- all CoPCs with the exception of BaP are below their respective air quality criteria under all scenarios at all sensitive receptors even when background concentrations are added.
- For BaP, the study demonstrates that over all phases of the proposed quarry extensions, concentrations at all sensitive receptors are below their respective criteria when considering Site operations alone. When the background concentration is added, the total BaP concentration is above the criteria. This is because the background concentration is the dominant contributor such that the Site and proposed extensions result in only a small incremental change in the local air quality.

With respect to potential nuisance impacts, the study determined that no significant nuisance impacts are expected:

- PM concentrations are below their respective air quality criteria under all scenarios at all sensitive receptors even when the background concentration is added.
- PM concentrations above the criteria are predicted along small portions of the property line in some extensions when background is added. These levels are infrequent and marginal. Since the assessment is based on very conservative modelling assumptions and the mitigating effect of planned physical berms is not accounted for in the modelling, any actual nuisance impacts are expected to be insignificant and unlikely.

The study recommends that Nelson (a) implements their Best Management Practice Plan for the control of fugitive dust in Appendix H; and (b) construct the noise berms specified in the Noise Impact Assessment supporting this Aggregate Resources Act license.

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1.0 INTRODUCTION

BCX Environmental Consulting (BCX) was retained by Nelson Aggregate Co. (Nelson) to prepare an Air Quality Study for its application for a license under the Aggregate Resources Act to permit extensions to their existing Nelson Burlington Quarry (Burlington Quarry) operation (Site).

1.1 Project Background

As shown in Figure 1-1, Nelson's existing Burlington Quarry is located 2433 No. 2 Side Road in Burlington, Ontario. Land-use outside of the Site consists of a mix of agricultural, rural residential and vacant land. There are a number of non-Nelson owned residences in the vicinity (within 1,000m) of the Site.

The Site is currently approved under Aggregate Resources Act to extract unlimited tonnes per year of limestone from their quarry. Current operations include extraction (drilling, blasting), processing (crushing and screening), aggregate recycling, handling, stockpiling and shipping of aggregate materials. There is also an existing hot mix asphalt (HMA) plant and associated potential third-party mobile crushing operation on Site.

1.1.1 Project Description

The proposed extension areas are located on lands immediately south-east and south-west of the existing Burlington Quarry operation. Figure 1-2 and Figure 1-3 details the proposed Site Plan and phasing, respectively. Six extension phases are anticipated.

1.1.2 Proposed Operations

In each phase, operations will take place in three stages consisting of site preparation; extraction and processing; and site rehabilitation. Site preparation is expected to be essentially completed prior to initiation of the extraction and processing operations in each phase. Once extraction is complete the site will be rehabilitated to a lake wetlands, ponds, islands and vegetated side slopes.

Extraction operations in the existing Burlington Quarry will not take place concurrently with extraction in the proposed extension.

1.1.2.1 Site Preparation/Rehabilitation

From an air quality perspective, site preparation and site rehabilitation are considered construction activities. These periodic activities typically take place away from the active extraction area and are short-lived. Nuisance fugitive dust from these activities can be managed through a best management practices plan for fugitive dust as per Environment Canada and Climate Change's (ECCC's) guidance document "*Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities*" dated March 2005 and therefore not typically assessed.

Notwithstanding, this study has conservatively included the trucking of fill material to the site for rehabilitation in all scenarios (i.e. emissions from paved/unpaved on-site road travel and tailpipe emissions) to allow Nelson the flexibility to deliver fill for rehabilitation at any time.

1.1.2.2 Extraction and Processing

The proposed extension areas will be operated in a similar manner to the existing Burlington Quarry. It will utilize the same type of equipment including rock trucks, front-end loaders, and drills.

As detailed in Section 4, aggregate will be extracted from the extension areas by blasting, after which it will be transferred using rock trucks to the portable crushing plants located inside the existing Burlington Quarry. The portable crushing plants will crush the oversized rock which will then be stored in the storage piles prior to being shipped off-site.

Aggregate from the extension areas will be extracted in a single bench extending approximately 20 metres below grade. The sequence of extraction in each phase is presented in Figure 1-2.

Process flow diagrams for various on site operations are presented as Figures 2-1A, 2-1B, 2-1C, etc.

1.2 Purpose of Air Quality Study (AQS)

The purpose of this air quality study is to conservatively assess the potential for air quality impacts from the proposed extension and to recommend mitigation if required. The study assesses emissions from the existing/on-going Burlington Quarry operations and the proposed extensions operations including both stationary and mobile air emission sources. Existing operations include extraction (drilling, blasting), processing (crushing and screening), aggregate recycling, handling, stockpiling and shipping of aggregate materials. It also includes common contaminants potentially emitted from the HMA plant operations on leased land inside the existing Burlington Quarry.

Cumulative effects are considered by selecting representative background concentrations for each Compound of Potential Concern (CoPCs). The modelled concentrations are added to the background concentrations and this result is compared to the applicable air quality criteria and standards.

2.0 STUDY SCOPE

2.1 Study Area and Sensitive Receptors

A study area with a 1km radius extending from the Site was used to assess potential off-site air quality impacts. Three hundred and twenty three representative receptors located around the Site were identified. As shown in Figure 2-2.

2.2 Compounds of Potential Concern (CoPCs) and Air Quality Criteria

For this air quality study Compounds of Potential Concern (CoPCs) are identified as total suspended particulate (PM), respirable particulate ($PM_{2.5}$); respirable crystalline silica PM_{10} (RCS), nitrogen dioxide (NO_2), sulphur dioxide (SO_2), carbon monoxide (CO), benzene and benzo(a)pyrene (BaP). Particulate matter arises from aggregate recycling/handing/processing operations; wind erosion of aggregate stockpiles; vehicle travel on unpaved roads/areas; from the combustion of fossil fuels in stationary and mobile equipment; and from HMA plant operations. Particulate generated from aggregate handling/processing operations may contain RCS. Nitrogen dioxide, sulphur dioxide, carbon monoxide, benzene and BaP emissions result from the use of fossil fuels in stationary and mobile equipment, and HMA plant operations. Nitrogen dioxide and carbon monoxide result from blasting.

The applicable air quality criteria for this study are Ontario Ministry of the Environment, Conservation and Parks (Ministry) Ambient Air Quality Criteria (AAQC) and, where applicable, Canadian Ambient Air Quality Standards (CAAQS). These are summarized in Tables 2-1.

AAQCs are described in the Ministry document "Ontario's Ambient Air Quality Criteria, dated December 23, 2016". An AAQC is a desirable concentration of a contaminant in air, established to protect against adverse effects on health or the environment. AAQCs are commonly used in environmental assessments, special studies using ambient air monitoring data, assessments of general air quality in a community and annual reporting on air quality across the province.

In the absence of provincial AAQCs, the study used CAAQs to assess the potential for air quality impacts. CAAQS are the driver for air quality management across Canada.

Table 2-1: Summary of Applicable Air Quality Criteria and Standards

Air Contaminant	PM		$PM_{2.5}$ *		RCS	NO_2		SO_2 *			Benzo(a)pyrene		Benzene		CO	
Averaging Period	**24-hr**	**Annual**	**24-hr**	**Annual**	**24-hr**	**1-hr**	**24-hr**	**1-hr**	**24-hr**	**Annual**	**24-hr**	**Annual**	**24-hr**	**Annual**	**1-hr**	**8-hr**
Current Standard ($\mu g/m^3$)	120	60	28	10	5	400	200	690	275	55	0.00005	0.00001	2.3	0.45	36,200	15,700
Future Standard ($\mu g/m^3$)			27	8.8				100	n/a	10						
Standard	AAQC	AAQC	CAAQS	CAAQS	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC

Notes:
CAAQS - Canadian Ambient Air Quality Standards; AAQC - Ontario Ambient Air Quality Criteria
RCS - Silica - respirable (<10 µm diameter)
** $PM_{2.5}$ future standard effective 2020. SO_2 future standard effective on July 1, 2023.*

2.2.1 Benzo(a)pyrene (BaP) AAQCs

New AAQCs for BaP were introduced by the Ministry as a surrogate to assess all PAHs as a group in 2016. These BaP criteria are very low [24-hr (0.00005 µg/m^3) and annual (0.00001 µg/m^3)] and are more than 20 times lower than the previous AAQC for BaP as an individual PAH. It is relevant to note that very small changes in BaP concentrations can result in significant relative changes when compared to these criteria.

3.0 BACKGROUND CONCENTRATIONS

In order to determine overall (cumulative) air quality impacts in the vicinity of the Site, representative background concentrations must be added to the model-predicted air contaminant concentrations resulting from on-site activities.

The closest representative stations with recent available data (2016 and 2017) are Oakville and Brantford Ministry stations. These stations have historical monitoring data for fine particulate ($PM_{2.5}$) and nitrogen dioxide (NO_2) but not sulphur dioxide (SO_2). The Toronto West Ministry station was selected for background concentrations (2016 and 2017) for sulphur dioxide (SO_2). These Ministry stations do not provide monitoring data for benzene or benzo(a)pyrene, therefore the Newmarket and Simcoe NAPS stations were used for these contaminants. These NAPS stations do not have sufficient data for 2017, and therefore data from 2016 was used for benzene and benzo(a)pyrene. These stations are considered representative for this site.

Calculation of Background Concentrations

The background concentration for each CoPC under each applicable averaging period was calculated using the following steps:

1. The hourly data from the last two years (2016 to 2017) from each Ministry station were compiled, where applicable, to calculate hourly, 24-hour and annual averages.
2. The available data from the last two years (2016 to 2017) from each NAPS station were compiled, where available, to calculate 24-hour and annual averages.
3. For CoPCs with an hourly averaging period criterion, the 90th percentile[1] of the hourly data from each station was calculated.
4. For CoPCs with a 24-hour averaging period criterion, the 90th percentile[1] of the 24-hour average from each station was calculated.
5. For CoPCs with an annual averaging period criterion, the average[1] of the annual average from each station was calculated.
6. The average results (parameters calculated using Steps 3-5) for the two chosen stations were used as the background concentrations for this study.

The representative background concentrations are presented in Table 3-1. Notably the background concentration of $PM_{2.5}$ (24-hr and annual), NO_2 (annual), and benzene (annual) is high compared to the criteria and the background concentration of BaP (24-hr and annual) is above the criteria.

[1] The background concentration calculation methodology described above has been applied for various air quality studies supporting environmental assessments and has been accepted by the Ministry.

Table 3-1: Background Concentration Data

Contaminant	PM2.5				NO2						SO2			Benzene		Benzo(a)Pyrene [1]	
Averaging Period	24-HR		Annual		1-HR		24-HR		Annual		1-HR	24-HR	Annual	24-HR	Annual	24-HR	Annual
City	Oakville	Brantford	Oakville	Brantford	Oakville	Brantford	Oakville	Brantford	Oakville	Brantford	Toronto West	Toronto West	Toronto West	Newmarket		Simcoe	
Units	µg/m3				µg/m3						µg/m3			µg/m3		µg/m3	
AAQC	28		10		400		200		35		690	275	55	2.3	0.45	5.00E-05	1.00E-05
Mean (Annual)	-	-	7.4	8.1	-	-	-	-	17.1	10.3	-	-	1.1	-	0.3	-	2.92E-05
90th Percentile (1hr, 24hr)	12.1	12.0	-	-	37.0	20.6	29.6	17.6	-	-	2.9	3.5	1.4	0.5	-	7.75E-05	-
Percentage of 24hr Standard	43.3%	42.7%	-	-	9.3%	5.1%	14.8%	8.8%	-	-	0.7%	1.8%	-	23.9%	-	155.0%	-
Percentage of Annual Standard	-	-	73.9%	80.8%	-	-	-	-	48.9%	29.5%	-	-	2.0%	-	76.0%	-	292.5%
Standard	CAAQS	CAAQS	CAAQS	CAAQS	AAQC	AAQC	AAQC	AAQC	CAAQS	CAAQS	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC	AAQC

(1) Ambient background is above the respective criterion.
(2) Background concentration for PM is calculated using the 50:50:50 (PM2.5:PM10:PM) rule.

4.0 EMISSIONS SCENARIOS AND EMISSION ESTIMATION METHODOLOGIES

As applicable, the emission inventory has been completed in accordance with *s.26 of Ontario Regulation 419/05 and Ontario Ministry guidance documents Procedure for Preparing an Emission Summary and Dispersion Modelling Report (March 2018) (Ministry Procedure).*

4.1 Emission Scenarios

As described in Section 1.1.3 and illustrated in Figure 1-3, the proposed extension will take place in six phases.

A total of five maximum emission operating scenarios (including a baseline operating scenario) have, therefore, been developed to conservatively represent the phases over the lifespan of the proposed project. The traffic routes for each scenario are presented in Figure 4-1.

The study assessed the maximum emissions scenarios based on conservative operating scenarios as summarized in Table 4-1. The maximum operating rates and schedules are tabulated in Appendix B. The worst case emission scenario occurs when the crushing plants crush extracted limestone. The crushing rate will be lower if a crushing plant is used to occasionally crush recycled aggregate materials. These operating rates and schedules are based on extracting 2 million tonnes per year of aggregate. The actual expected extraction rate will be significantly lower at 1 million tonnes per year.

In addition to conservatively assuming a very high extraction rate, the maximum operating conditions assume hourly, daily, and annual rates, occur continuously and simultaneously (where possible) for their maximum operating times. These conditions also represent very conservative maximum worst-case scenarios. Actual operating conditions are not expected to approach these conditions due to material and equipment scheduling logistics.

Table 4-1: Emission Scenarios

Scenario	Representative Condition	Description
Scenario Existing (E)	Existing Burlington Quarry Operations (baseline operating scenario)	• Continued operations in the **existing Burlington Quarry** including drilling, blasting, and operations associated with the portable crusher/screen plants (including aggregate material handling/processing/recycling) and movement of mobile equipment on unpaved/paved roads) • Operation of the HMA Plant in the existing Burlington Quarry • Traffic associated with the receipt of rehabilitation material
Scenario A	Extraction in Phases 1&2 Extension Area	• Drilling, blasting, and movement of mobile equipment on unpaved/paved roads in **Extension Area** • Modified operations in the **existing Burlington Quarry** including operations associated with the portable crusher/screen plants (including aggregate material handling/processing/recycling) and movement of mobile equipment on unpaved/paved roads) • Operation of the HMA Plant in the existing Burlington Quarry • Traffic associated with the receipt of rehabilitation material
Scenario B	Extraction in Phase 3 Extension Area	• Drilling, blasting, and movement of mobile equipment on unpaved/paved roads in **Extension Area** • Modified operations in the **existing Burlington Quarry** including operations associated with the portable crusher/screen plants (including aggregate material handling/processing/recycling) and movement of mobile equipment on unpaved/paved roads) • Operation of the HMA Plant in the existing Burlington Quarry • Traffic associated with the receipt of rehabilitation material

Table 4-1: Emission Scenarios Cont'd

Scenario	Representative Condition	Description
Scenario C	Extraction in Extension Phase 4&6 Extension Area	• Drilling, blasting, and movement of mobile equipment on unpaved/paved roads in **Extension Area** • Modified operations in the **existing Burlington Quarry** including operations associated with the portable crusher/screen plants (including aggregate material handling/processing/recycling) and movement of mobile equipment on unpaved/paved roads) • Operation of the HMA Plant in the existing Burlington Quarry • Traffic associated with the receipt of rehabilitation material
Scenario D	Extraction in Phase 5 Extension Area	• Drilling, blasting, and movement of mobile equipment on unpaved/paved roads in **Extension Area** • Modified operations in the **existing Burlington Quarry** including operations associated with the portable crusher/screen plants (including aggregate material handling/processing/recycling) and movement of mobile equipment on unpaved/paved roads) • Operation of the HMA Plant in the existing Burlington Quarry • Traffic associated with the receipt of rehabilitation material

4.2 Identification of Significant Emission Sources

The primary air emission sources for CoPCs identified in Section 2 at the Site are expected to be:

- Limestone Extraction (including blasting preparation, blasting and extraction);
- Aggregate Processing (including the crushing, screening, material handling and stockpiling);
- Truck travel along onsite paved and unpaved areas/roads and tailpipe emissions; and
- Diesel-fired generators powering the aggregate processing equipment.

Table 4-2 provides a summary of significant emission sources and CoPCs emitted from each source at the Site.

Several air emission sources were considered to be negligible/insignificant as follows:

- *V*ehicle fueling and vehicle maintenance were considered to be negligible per the Ministry Procedure;
- Emissions from the delivery (material transfer) of rehabilitation material were considered to be negligible due to the high moisture content of the material; and
- Wind erosion was calculated to be insignificant.

These emission sources are therefore excluded from the modelling exercise.

Table 4-2: Source and Contaminant Identification Summary

Source Information			Expected Contaminants	Included in Modelling?	Modelling Source ID
Source I.D.	Scenario	Source Description		Significant? (Yes or No)	
Hot Mix Asphalt (HMA) Plant					
SP1A	HMA	Delivery truck(s) to stockpiles	PM, PM2.5, RCS	Yes	PTDR_HMA
SP1B	HMA	Delivery truck(s) to stockpiles	PM, PM2.5	Yes	PTDR_HMA
B1A	HMA	Front-end loader material drop to cold feed bins	PM, PM2.5, RCS	Yes	PTDR_HMA
B1B	HMA	Front-end loader material drop to cold feed bins	PM, PM2.5	Yes	PTDR_HMA
B2	HMA	Front-end loader material drop to cold feed bins	PM, PM2.5	Yes	PTDR_HMA
BT1A	HMA	Material transfer from cold feed bins to conveyor [C1]	PM, PM2.5, RCS	No - enclosed	PTOS_HMA
BT1B	HMA	Material transfer from cold feed bins to conveyor [C1]	PM, PM2.5	No - enclosed	PTOS_HMA
BT2	HMA	Material transfer from RAP bins to conveyor [C2]	PM, PM2.5	Yes	PTOS_HMA
SC	HMA	Screening	PM, PM2.5	Yes	PTOS_HMA
CT1A	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	PM, PM2.5, RCS	Yes	PTOS_HMA
CT1B	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	PM, PM2.5	Yes	PTOS_HMA
CT2	HMA	Material transfer from inclined conveyor [C3] to rotary drum dryer/mixer	PM, PM2.5	Yes	PTOS_HMA
AC1	HMA	AC storage tank 1	PM, PAH, VOC	Yes	PTOS_HMA
AC2	HMA	AC storage tank 2	PM, PAH, VOC	Yes	PTOS_HMA
HOH1	HMA	Natural gas-fired hot-oil heaters, servicing the AC storage tanks	NO2	Yes	PTOS_HMA
HOH2	HMA	Natural gas-fired hot-oil heaters, servicing the AC storage tanks	NO2	Yes	PTOS_HMA
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	PM, NO_x, SO_2, CO, PAH, VOC, Metals	Yes	BH_HMA
SF	HMA	HMA Silo Filling	PM, PAH, VOC, CO	Yes	n/a
LO	HMA	HMA truck loadout from HMA batch mix tower	PM, PAH, VOC, CO	Yes	PTOS_HMA
RU1	HMA	Road dust emissions from aggregate delivery trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_HMA
RU2	HMA	Road dust emissions from aggregate front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_HMA
RU3	HMA	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_HMA
RU4	HMA	Road dust emissions from AC trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_HMA
RU5	HMA	Road dust emissions from HMA trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_HMA
RP1	HMA	Road dust emissions from aggregate delivery trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_HMA
RP2	HMA	Road dust emissions from AC trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_HMA
RP3	HMA	Road dust emissions from HMA trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_HMA
TP1T	HMA	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP2T	HMA	Tailpipe emissions from AC delivery trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP3T	HMA	Tailpipe emissions from HMA trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP1I	HMA	Tailpipe emissions from aggregate delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP2I	HMA	Tailpipe emissions from AC delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP3I	HMA	Tailpipe emissions from HMA trucks idling during loading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP1F	HMA	Tailpipe emissions from aggregate front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA
TP2F	HMA	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_HMA

Table 4-2: Source and Contaminant Identification Summary (Continued)

HMA Plant Third Party Mobile Crushing Operations					
CR1	HMA	Delivery truck(s) to stockpiles	PM, PM2.5	Yes	PTDR_HMA
CR2	HMA	Front-end loader transfer to crusher feed hopper	PM, PM2.5	Yes	PTDR_HMA
CR3-1	HMA	Crushing	PM, PM2.5	Yes	PTOS_HMA
CR3-2	HMA	Screening	PM, PM2.5	Yes	PTOS_HMA
CR3-3	HMA	Material transfer from screening discharge conveyor to stacker	PM, PM2.5	Yes	PTOS_HMA
CR4-1	HMA	Material drop from stacker to product stockpile	PM, PM2.5	Yes	PTDR_HMA
CR4-2	HMA	Material transfer from product pile to shipping truck	PM, PM2.5	Yes	PTDR_HMA
CR5	HMA	Diesel-fired engine for HMA crushing operations	PM, NOX, SO2, CO, B(a)P	Yes	GEN_HMA
CR1Ru	HMA	Road dust emissions from RAP delivery trucks travelling on onsite unpaved road	PM, $PM_{2.5}$	Yes	PTOS_HMA
CR2Ru	HMA	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM, $PM_{2.5}$	Yes	PTOS_HMA
CR1Rp	HMA	Road dust emissions from RAP delivery trucks travelling on onsite paved road	PM, $PM_{2.5}$	Yes	PTOS_HMA
CR1Tt	HMA	Tailpipe emissions from RAP delivery trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_HMA
CR1Ti	HMA	Tailpipe emissions from RAP delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_HMA
CRTF	HMA	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_HMA
Existing Quarry Operations - Crushing Operations					
QB	SE	Blasting	PM, PM2.5, RCS, NO2, CO	Yes	PTOS_QE
QD	SE	Drilling	PM, PM2.5, RCS	Yes	PTOS_QE
QD-DC1	SE	Drilling - Dust Collector 1	PM, PM2.5, RCS	Yes	PTOS_QE
Q1	SE	Front-end loader(s) to hoppers (Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q2	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q3	SE	Screening - screen 1 (Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q4	SE	Crushing - crusher 2 (Cone Crushers, Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q5	SE	Screening - screen 2 (Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q6	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q7	SE	Material transfer from stacker 1 to stacker 2 (Crushing Plant 1)	PM, PM2.5, RCS	Yes	PTOS_QE
Q8	SE	Front-end loader(s) to hoppers (Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q9	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q10	SE	Material transfer from discharge conveyor to conveyor 1 (Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q11	SE	Material transfer from conveyor 1 to conveyor 2 (Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q12	SE	Crushing - crusher 2 (Cone Crusher, Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q13	SE	Screening - screen 1 (Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q14	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 2)	PM, PM2.5, RCS	Yes	PTOS_QE
Q15	SE	Material transfer from stacker to product piles (Crushing Plant 1 & 2)	PM, PM2.5, RCS	Yes	PTDR_QE
Q16	SE	Material transfer to shipping trucks (Crushing Plant 1 & 2)	PM, PM2.5, RCS	Yes	PTDR_QE
Q17A	SE	Diesel-fired engines for quarry crushing operations (Crushing Plant 1)	PM, NOX, SO2, CO, B(a)P	Yes	GEN1_QE
Q17B	SE	Diesel-fired engines for quarry crushing operations (Crushing Plant 2)	PM, NOX, SO2, CO, B(a)P	Yes	GEN2_QE
Q1Ru	SE	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
Q2Ru	SE	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
Q1Rp	SE	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
Q1Tt	SE	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
Q1Ti	SE	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
Q1FL	SE	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
QRu-FILL	SE	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
QRp-FILL	SE	Road dust emissions from rehab delivery trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
QTt-FILL	SE	Tailpipe emissions from rehab delivery trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QE
QTi-FILL	SE	Tailpipe emissions from rehab delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QE

Table 4-2: Source and Contaminant Identification Summary (Continued)

Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)					
P1-QB	SA	Blasting	PM, PM2.5, NO2, SO2, CO	Yes	PTOS_QA
P1-QD	SA	Drilling	PM, PM2.5	Yes	PTOS_QA
P1-QD-DC1	SA	Drilling - Dust Collector 1	PM, PM2.5	Yes	PTOS_QA
P1-Q1	SA	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QA
P1-Q2	SA	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q3	SA	Front-end loader(s) to hoppers (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q4	SA	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q5	SA	Screening - screen 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q6	SA	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q7	SA	Screening - screen 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q8	SA	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q9	SA	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P1-Q10	SA	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P1-Q11	SA	Material transfer to shipping trucks (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P1-Q12A	SA	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN1_QEX
P1-Q12B	SA	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN2_QEX
P1-Q1Ru	SA	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P1-Q2Ru	SA	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QA
P1-Q3Ru	SA	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P1-Q4Ru	SA	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P1-Q1Rp	SA	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P1-Q1Tt	SA	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P1-Q1Ti	SA	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P1-Q1F	SA	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P1-Q1H	SA	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P1-Q2H	SA	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QA
P1-Q1Ru-FILL	SA	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P1-Q2Ru-FILL	SA	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QA
P1-QRp-FILL	SA	Road dust emissions from rehab delivery trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P1-Q1Tt-FILL	SA	Tailpipe emissions from rehab delivery trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QE
P1-Q2Tt-FILL	SA	Tailpipe emissions from rehab delivery trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QA
P1-QTi-FILL	SA	Tailpipe emissions from rehab delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QA

Table 4-2: Source and Contaminant Identification Summary (Continued)

Quarry Operations - Scenario B (Phase 3)					
P2-QB	SB	Blasting	PM, PM2.5, NO2, SO2, CO	Yes	PTOS_QB
P2-QD	SB	Drilling	PM, PM2.5	Yes	PTOS_QB
P2-QD-DC1	SB	Drilling - Dust Collector 1	PM, PM2.5	Yes	PTOS_QB
P2-Q1	SB	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QB
P2-Q2	SB	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q3	SB	Front-end loader(s) to hoppers (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q4	SB	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q5	SB	Screening - screen 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q6	SB	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q7	SB	Screening - screen 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q8	SB	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q9	SB	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P2-Q10	SB	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P2-Q11	SB	Material transfer to shipping trucks (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P2-Q12A	SB	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN1_QEX
P2-Q12B	SB	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN2_QEX
P2-Q1Ru	SB	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P2-Q2Ru	SB	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QB
P2-Q3Ru	SB	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P2-Q4Ru	SB	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P2-Q1Rp	SB	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P2-Q1Tt	SB	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P2-Q1Ti	SB	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P2-Q1F	SB	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P2-Q1H	SB	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P2-Q2H	SB	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QB
P2-Q1Ru-FILL	SB	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P2-Q2Ru-FILL	SB	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QB
P2-QRp-FILL	SB	Road dust emissions from rehab delivery trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P2-Q1Tt-FILL	SB	Tailpipe emissions from rehab delivery trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QE
P2-Q2Tt-FILL	SB	Tailpipe emissions from rehab delivery trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QB
P2-QTi-FILL	SB	Tailpipe emissions from rehab delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QB

Table 4-2: Source and Contaminant Identification Summary (Continued)

Quarry Operations - Scenario C (Phase 4 & 6)					
P3-QB	SC	Blasting	PM, PM2.5, NO2, SO2, CO	Yes	PTOS_QC
P3-QD	SC	Drilling	PM, PM2.5	Yes	PTOS_QC
P3-QD-DC1	SC	Drilling - Dust Collector 1	PM, PM2.5	Yes	PTOS_QC
P3-Q1	SC	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QC
P3-Q2	SC	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q3	SC	Front-end loader(s) to hoppers (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q4	SC	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q5	SC	Screening - screen 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q6	SC	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q7	SC	Screening - screen 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q8	SC	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q9	SC	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P3-Q10	SC	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P3-Q11	SC	Material transfer to shipping trucks (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P3-Q12A	SC	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN1_QEX
P3-Q12B	SC	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN2_QEX
P3-Q1Ru	SC	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P3-Q2Ru	SC	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QC
P3-Q3Ru	SC	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P3-Q4Ru	SC	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P3-Q1Rp	SC	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P3-Q1Tt	SC	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P3-Q1Ti	SC	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P3-Q1F	SC	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P3-Q1H	SC	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P3-Q2H	SC	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QC
P3-Q1Ru-FILL	SC	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P3-Q2Ru-FILL	SC	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QC
P3-QRp-FILL	SC	Road dust emissions from rehab delivery trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P3-Q1Tt-FILL	SC	Tailpipe emissions from rehab delivery trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QE
P3-Q2Tt-FILL	SC	Tailpipe emissions from rehab delivery trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QC
P3-QTi-FILL	SC	Tailpipe emissions from rehab delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QC

Table 4-2: Source and Contaminant Identification Summary (Continued)

Quarry Operations - Scenario D (Phase 5)					
P4-QB	SD	Blasting	PM, PM2.5, NO2, SO2, CO	Yes	PTOS_QD
P4-QD	SD	Drilling	PM, PM2.5	Yes	PTOS_QD
P4-QD-DC1	SD	Drilling - Dust Collector 1	PM, PM2.5	Yes	PTOS_QD
P4-Q1	SD	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QD
P4-Q2	SD	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q3	SD	Front-end loader(s) to hoppers (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q4	SD	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q5	SD	Screening - screen 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q6	SD	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q7	SD	Screening - screen 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q8	SD	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q9	SD	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTOS_QE
P4-Q10	SD	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P4-Q11	SD	Material transfer to shipping trucks (Crushing Plants 1&2)	PM, PM2.5, RCS	Yes	PTDR_QE
P4-Q12A	SD	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN1_QEX
P4-Q13B	SD	Diesel-fired engines for quarry crushing operations (limestone)	PM, NOX, SO2, CO, B(a)P	Yes	GEN2_QEX
P4-Q1Ru	SD	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P4-Q2Ru	SD	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QD
P4-Q3Ru	SD	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P4-Q4Ru	SD	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM, PM2.5	Yes	PTOS_QE
P4-Q1Rp	SD	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P4-Q1Tt	SD	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P4-Q2Ti	SD	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P4-Q1F	SD	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P4-Q1H	SD	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QE
P4-Q2H	SD	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P, CO	Yes	PTOS_QD
P4-Q1Ru-FILL	SD	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (existing quarry road)	PM, PM2.5	Yes	PTOS_QE
P4-Q2Ru-FILL	SD	Road dust emissions from rehab delivery trucks travelling on onsite unpaved road (extension quarry road)	PM, PM2.5	Yes	PTOS_QD
P4-QRp-FILL	SD	Road dust emissions from rehab delivery trucks travelling on onsite paved road	PM, PM2.5	Yes	PTOS_QE
P4-Q1Tt-FILL	SD	Tailpipe emissions from rehab delivery trucks travelling on onsite road (existing quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QE
P4-Q2Tt-FILL	SD	Tailpipe emissions from rehab delivery trucks travelling on onsite road (extension quarry road)	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QD
P4-QTi-FILL	SD	Tailpipe emissions from rehab delivery trucks idling during unloading	PM, PM2.5, NO2, Benzene, B(a)P	Yes	PTOS_QD

Notes: PM = Particulate Matter, RCS = Respirable Crystalline Silica (quartz) (PM10), PAHs = Polyaromatic Hydrocarbons, B(a)P = Benzo(a)Pyrene, VOCs = Volatile Organic Compounds, NO_2 = Nitrogen Dioxide, SO_2 = Sulphur Dioxide, CO = Carbon Monoxide
RAP = reclaimed asphalt paving

4.3 Emissions Estimation Methodologies

BCX assessed potential air emissions using the practices set out in the Ontario Ministry of the Environment, Conservation, and Parks (Ministry) guidance documents under Ontario Regulation 419/05 (the regulation that governs air quality in Ontario).

Emissions of CoPCs were estimated using the published emission factors (US Environmental Protection Agency) and manufacturer's performance specifications. The emission calculation sheets detailing the assumptions and methodologies are presented in Appendix B.

For emissions of nitrogen oxides, this assessment conservatively assumes 100 percent conversion of nitrogen monoxide to nitrogen dioxide. As such, the naming was used interchangeable in the Appendices.

For emissions of carbon monoxide, the assessment conservatively assumes emissions from blasting (dominant source of carbon monoxide) can occur at any hour. Typically blasting only occurs at mid-day when dispersion is normally better. The 1-hour averaging results were conservatively used to generate the 8-hour averaging results using the Ministry Procedure's time averaging conversion factor.

4.3.1 Limestone Extraction

Individual operations associated with limestone extraction include: blasting preparation; blasting; material handling (i.e., transfer of material at the blast face into the on-site trucks); and mobile equipment (i.e., movement of front-end loaders and on-site trucks along the on-site unpaved areas/roads and tailpipe emissions from this equipment).

4.3.1.1 Blasting Preparation

Emissions from drilling were estimated using emission factors from US EPA AP-42.

4.3.1.2 Blasting

Emissions from blasting were estimated using emission factors from US EPA AP-42.

4.3.1.3 Material Handling

Extraction operations include material handling (i.e. transfer of fragmented rock into the on-site rock trucks) and movement of mobile equipment (i.e. rock trucks from the blast face to the crushers).

Emissions from material handling were estimated using emission factors from US EPA AP-42.

4.3.2 Processing, Storage, and Shipping

Individual operations associated with aggregate processing include: crushing, screening, and material handling (i.e. transfer of material onto various stockpiles after crushing). Aggregate material from the stockpiles are transferred into shipping trucks.

4.3.2.1 Crushing

Emissions from crushing were estimated using emission factors from US EPA AP-42.

4.3.2.2 Screening

Emissions from screening were estimated using emission factors from US EPA AP-42.

4.3.2.3 Material Handling

Emissions from material handling were estimated using emission factors from US EPA AP-42.

4.3.2.4 Diesel Generators

Electricity to power the processing equipment (e.g. crushers, screeners, conveyors, stackers, etc.) are provided by a diesel generators.

Emissions from the diesel generators were estimated using emission factors from US EPA AP-42 and/or manufacturer's performance specifications (e.g. US EPA Tiered emission standards).

4.3.3 Road Dust Emissions from Vehicle Traveling on Unpaved Roads

Road dust emissions associated with vehicle travel on Site unpaved roads were estimated using emission factors from US EPA AP-42.

4.3.4 Road Dust Emissions from Vehicle Traveling on Paved Roads

Road dust emissions associated with vehicle travel on paved roads were estimated using emission factors from US EPA AP-42. Paved roads considered for the study area are presented in Figure 4-1.

4.3.5 Tailpipe Emissions from On-Road Vehicles

Tailpipe emissions including travelling exhaust, brake wear, tire wear, start up and idling for trucks associated with the Site operations were obtained using US EPA's Motor Vehicle Simulator (MOVES 2014a). A summary of the MOVES input assumptions is presented in the table below. The tailpipe emission factors are presented in Appendix C.

Parameter	Input Description
Scale/Geographic Bounds	Custom County Domain
Year	2019
Meteorological Data	Toronto Pearson International Airport
Vehicles	Short/Long-Haul Trucks
Fuel Type	Diesel
Road Type	Rural Unrestricted
Speed	< 2.5mph (idling), 7.5mph <= speed < 12.5mph
Pollutants	PM_{10} (representing PM), $PM_{2.5}$, NO_2, SO_2, Benzene, Benzo(a)pyrene

4.3.6 Tailpipe Emissions for Non-Road Vehicles

The tailpipe emissions for non-road vehicles including quarry haul trucks and front-end loaders were considered for this study. Particulate, NO_2 and SO_2 emissions were estimated using US EPA tiered emission standards/factors from the document "Nonroad Compression-Ignition Engines: Exhaust Emission Standards", March 2016.

Emission standards/factors for benzene and BaP were not available and, therefore, emissions of benzene and BaP were estimated using speciation profiles from the MOVES document "Speciation Profiles and Toxic Emission Factors for Non-road Engines", November 2015. Specifically:

- Benzene emissions were calculated using the ratio of VOC/NMHC, applied to the non-methane hydrocarbons (NMHC) emission standard from the "Nonroad Compression-Ignition Engines: Exhaust Emission Standards" document; and
- BaP emissions were calculated using the ratio of BaP/PM, applied to the PM emission standard from the "Nonroad Compression-Ignition Engines: Exhaust Emission Standards" document.

These calculations are presented in Appendix C.

4.3.7 HMA Plant Operations

Emissions from HMA Plant operations were estimated using emission factors from US EPA AP-42.

5.0 ATMOSPHERIC DISPERSION MODELLING

As applicable, the modelling exercises have been completed in accordance with *s.26 of Ontario Regulation 419/05 and the Air Dispersion Modelling Guideline for Ontario (February 2017) (Ministry ADMGO).*

5.1 Model Selection and Use

Air dispersion modelling for this air quality study was undertaken using the Ministry's approved AERMOD model (version 16216r).

AERMOD is a Ministry approved steady-state Gaussian plume dispersion modelling system that can be used to assess pollutant concentrations from a wide variety of complex industrial settings including multiple stacks, fugitive emissions, building wake effects and roads[2]. The AERMOD modelling system was developed by the AMS/EPA Regulatory Model Improvement Committee (AERMIC), and consists of two pre-processors (AERMET and AERMAP) and the dispersion model, AERMOD.

AERMET is a general purpose meteorological pre-processor which uses surface and upper air meteorological conditions together with surface characteristics to calculate the boundary layer parameters needed by AERMOD. AERMAP is the terrain pre-processor used to calculate a representative terrain-influenced height associated with each receptor within the modelling domain.

The AERMOD model calculates maximum hourly concentrations using local meteorological data, which the model subsequently uses to predict 24-hour and annual average off-site concentrations.

5.2 Meteorology

A Ministry developed site specific meteorological data set was used for the modelling exercise (NelsonAggregate_BurlingtonQuarry_Burlington_16216.PFL/NelsonAggregate_BurlingtonQuarry_Burlington_16216.SFC). A wind rose is provided in Appendix D. The wind rose shows the distribution of wind directions and wind speeds from the surface data.

5.3 Terrain Data

The terrain data used, Tile 082, Datum NAD83, UTM Zone 17, was downloaded from Ontario Digital Elevation Model Data on the Ministry's website.

[2] As of January 2017, the US EPA replaced CALQ3HR and CALINE3 models with AERMOD as the preferred model for road modelling.

5.4 Modelling Domain and Receptor Grid

All modelling was undertaken in Universal Transverse Mercator (UTM) coordinates.

Representative discrete receptors as described in Section 2 were included in the modelling exercise.

Where the maximum concentration (which for this Site will occur at the property line) is above the AAQC (including background) a tiered receptor grid was setup to develop contour plots. Grid spacing was determined according to the Ministry Procedure.

5.5 Modelling Source Parameters

The operations inside the existing Burlington Quarry and extension areas include limestone extraction, material processing, material handling, HMA plant operations, aggregate recycling, movement of mobile equipment, and tailpipe emissions from the movement of mobile equipment. These emission sources were modelled as AERMOD open pit sources as these emission sources are below grade and particulate deposition within a quarry is expected.

Exhaust stacks such as the diesel generator stacks (powering the processing equipment) and the HMA plant main baghouse stack were modelled as a point sources with building downwash considered.

The modelling source parameters are summarized in Appendix D.

5.5.1 Particle Size Distribution

AERMOD open pit sources are capable of calculating particulate deposition within the quarry. Particle deposition is a function of particle size and particle density. Particle size distribution was estimated based on emission factors and emissions contribution of dominant emission sources. The particle size distributions used in this study are summarized in Calculation Sheet PSD in Appendix B.

6.0 RESULTS AND DISCUSSION

The following sections present a summary of the air dispersion modelling results for each CoPC by averaging period. As discussed in Section 3.0, background CoPC concentrations have been added to the modelled concentrations to determine overall (cumulative) air quality impacts in the vicinity of the Site as a result of the proposed extension.

The study results are presented by CoPC in tabular format for the closest off-site sensitive receptors in Appendix E.

6.1 Particulate

6.1.1 Total Suspended Particulate (PM) (Nuisance)

Annual Average

As presented in Appendix E, maximum annual average PM concentrations (including background) are predicted to be below the Ontario AAQC at the property line and all sensitive receptors for all scenarios.

24-Hour Average

As presented in Appendix E, maximum 24-hour average PM concentrations (including background) are predicted to be below the Ontario AAQC at all sensitive receptors for all scenarios.

Figures 6-1 predicts concentrations marginally above of the 24-hr average PM criterion along a very small portion of the east property line during phase 1/2, southwest property line during phase 3, and the west property line during phase 4/6 when background is added. Since the criterion is a nuisance (i.e. reduced visibility and nuisance dust) based standard and the concentrations above the AAQC are marginal and limited in extent, no significant air quality impacts from PM.

6.1.2 Fine Particulate ($PM_{2.5}$) (Health)

Annual Average

As presented in Appendix E, the maximum annual average $PM_{2.5}$ concentrations (including background) are predicted to be below the CAAQS (for both current and post 2020) at the property line and all sensitive receptors for all scenarios. It is notable that the background concentration is the dominant contributor.

24-Hour Average

As presented in Appendix E, the maximum 24-hour average $PM_{2.5}$ concentrations (including background) are predicted to be below the CAAQS (for both current and post 2020) at the property line and all sensitive receptors for all scenarios. It is notable that the background concentration is a significant contributor.

6.1.3 Respirable Crystalline Silica (PM_{10} fraction)

24-Hour Average

As presented in Appendix E, the maximum 24-hour average RCS concentrations are predicted to be well below the AAQC at the property line and all sensitive receptors for all scenarios.

6.2 Combustion Gases

6.2.1 Nitrogen Dioxide (NO_2)

24-Hour Average

As presented in Appendix E, the maximum 24-hour average NO_2 concentrations (including background) are predicted to be well below the Ontario 24-hr NO_2 AAQC at the property line and all sensitive receptors for all scenarios.

1-Hour Average

As shown in Appendix E, the maximum 1-hr NO_2 concentrations (including background) are predicted to be below the Ontario 1-hr NO_2 AAQC for the maximum emissions scenario at the property line and all sensitive receptors for all scenarios.

6.2.2 Sulphur Dioxides (SO_2)

Annual Average

As presented in Appendix E, the annual average SO_2 concentrations (including background) are predicted to be well below the annual AAQC (for both current and post 2023) at the property line and all sensitive receptors for all scenarios.

24-Hour Average

As presented in Appendix E, the maximum 24-hr average SO_2 concentrations (including background) are predicted to be well below the 24-hr AAQC at the property line and all sensitive receptors for all scenarios.

1-Hour Average

As presented in Appendix E, the maximum 1-hr SO_2 concentrations (including background) are predicted to be well below the 1-hr AAQC AAQC (for both current and post 2023) at the property line and all sensitive receptors for all scenarios.

6.2.3 Carbon Monoxide (CO)

8-Hour Average

As presented in Appendix E, the maximum 8-hr CO concentrations (including background) are predicted to be well below the 8-hr AAQC at the property line and all sensitive receptors for all scenarios.

1-Hour Average

As presented in Appendix E, the maximum 1-hr CO concentrations (including background) are predicted to be well below the 1-hr AAQC at the property line and all sensitive receptors for all scenarios.

6.3 Benzene

24-Hour Average

As presented in Appendix E, the maximum off-site 24-hour average benzene concentrations including local background were predicted to be well below the Ontario AAQC at the property line and all sensitive receptors for all scenarios.

Annual Average

As presented in Appendix E, the maximum off-site annual average benzene concentrations including local background were predicted to be below the Ontario AAQC at the property line and all sensitive receptors for all scenarios. It is notable that the background concentration is the dominant contributor.

6.4 Benzo(a)pyrene (BaP)

As described in Section 2.2 of this report, the Ministry introduced very stringent criteria for BaP in 2016 such that existing ambient concentrations are above the criteria and small changes in BaP concentrations cause apparent significant relative changes when compared to the criteria.

24-Hour Average

As presented in Appendix E, the maximum off-site 24-hour average BaP concentrations including background were predicted to be above the AAQC at the property line and all sensitive receptors. It is notable that the background concentration is the dominant contributor and on its own is approximately 155% of the criterion. The Site therefore represents only a small incremental change in the local air quality (i.e. the Site meets the AAQC without background).

Annual Average

As presented in Appendix E, the maximum off-site annual average BaP concentrations including background were predicted to be above the AAQC at the property line and all sensitive receptors. It is notable that the background concentration is the dominant contributor and on its own is approximately 293% of the criterion. The Site therefore represents only a small incremental change in the local air quality (i.e. the Site meets the AAQC without background).

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Potential for Health Impacts

With respect to combustion gases (i.e. nitrogen dioxide, sulphur dioxide and carbon monoxide) the study demonstrates that over all phases of the proposed quarry extensions, off-site concentrations of all combustion gases at all sensitive receptors under all averaging periods are below their respective criteria even when background concentrations are added.

With respect to benzene, the study demonstrates that over all phases of the proposed quarry extensions, concentrations at all sensitive receptors are also below their respective criteria even when background concentrations are added.

With respect to BaP, the study demonstrates that over all phases of the proposed quarry extensions, concentrations at all sensitive receptors are below their respective criteria when considering Site operations alone. When the background concentration is added, the total BaP concentration is above the criteria. This is because the background concentration is the dominant contributor such that the Site and proposed extensions result in only a small incremental change in the local air quality.

No health impacts as a result of air quality are, therefore, expected from the proposed quarry extensions.

Potential for Nuisance Dust Impacts

With respect to nuisance impacts (i.e. reduced visibility and nuisance dust) as assessed using PM, the study demonstrates that over all phases of the proposed quarry extensions, concentrations at all sensitive receptors are also below their respective criteria even when background concentrations are added.

PM concentrations above the 24-hour criterion (but not the annual criterion) are predicted along small portions of the property line in some extensions when background is added. These levels are infrequent and marginal. Since the assessment is based on very conservative modelling assumptions and the mitigating effect of planned physical berms is not accounted for in the modelling, any actual nuisance impacts are expected to be insignificant and unlikely.

These conclusions are contingent on the use of equipment controls specified in this report; adherence to the operating hours for certain equipment/activities specified in this report; the construction of the planned noise and dust berms; and upon the implementation of the Best Management Practice Plans for the Control of Fugitive Dust during Site Preparation/Rehabilitation and during Extraction.

7.2 Recommendations

1. The Licensee shall implement their Best Management Practices Plan (BMPP) for the Control of Fugitive Dust in Appendix H.
2. The Licensee shall construct the noise berms as specified in the Noise Impact Assessment

8.0 LIMITATIONS

The assessment, conclusions and recommendations in this report are based on the information provided by Nelson and its representatives. BCX accepts no responsibility for any deficiencies, misstatements, or inaccuracies contained in this report as a result of omissions, or misinterpretations by Nelson or its representatives.

This report was prepared for the exclusive use of Nelson and its representatives for the proposed quarry extensions as specified in the Site Plans presented in Appendix A. Any changes to the assumptions may require an update to this report. BCX accepts no responsibility whatsoever for any third party use of this report.

9.0 REFERENCES

Cowherd, C.; Muleski, G.E.; Englehart, P.; Kinsey, J.S.; Rosbury, K.D.; *Control of Fugitive and Hazardous Dusts*, Pollution Technology Review No.192, 1998.

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Appendix A Figures

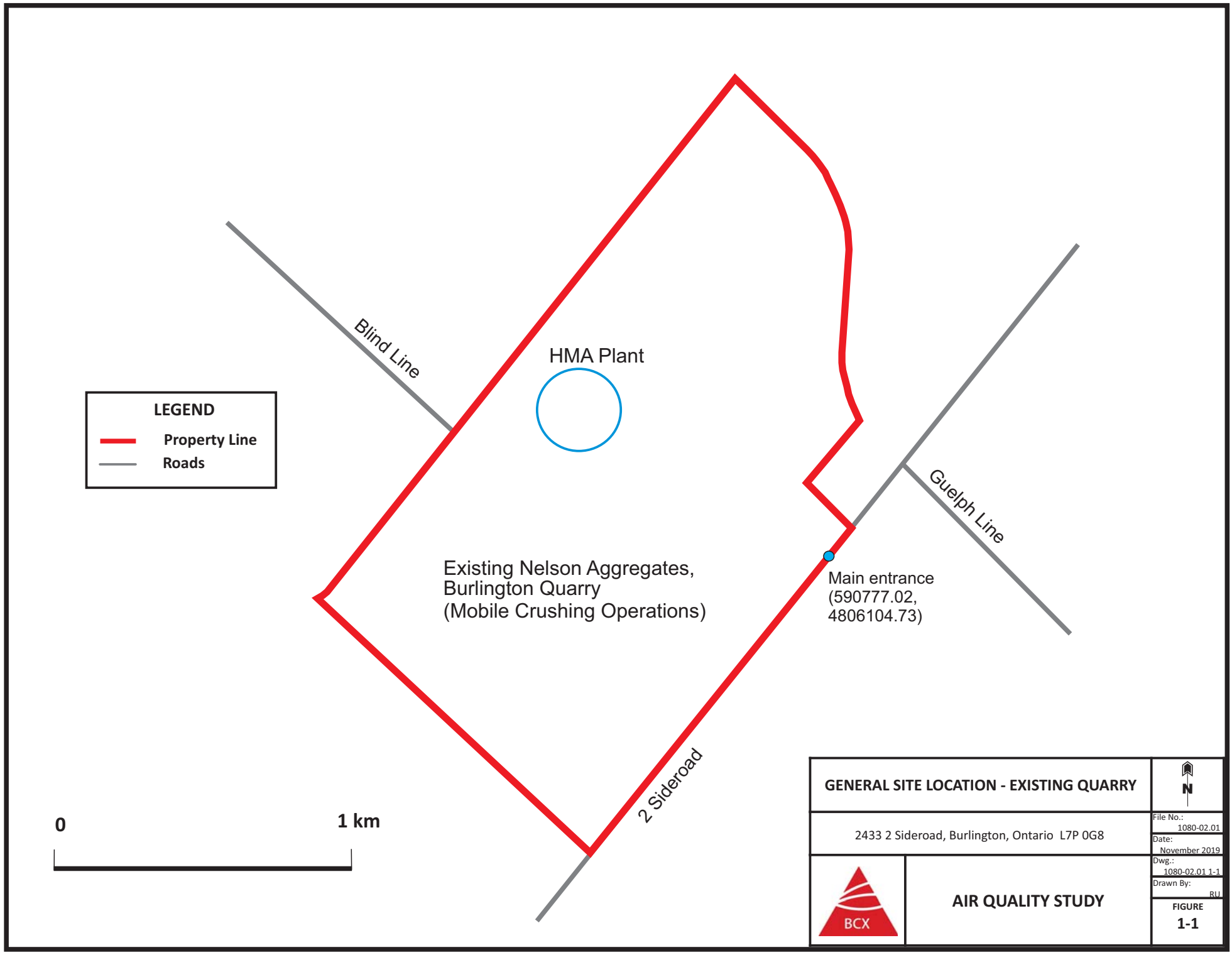
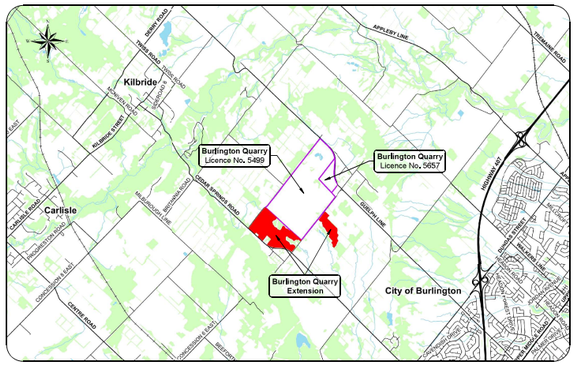
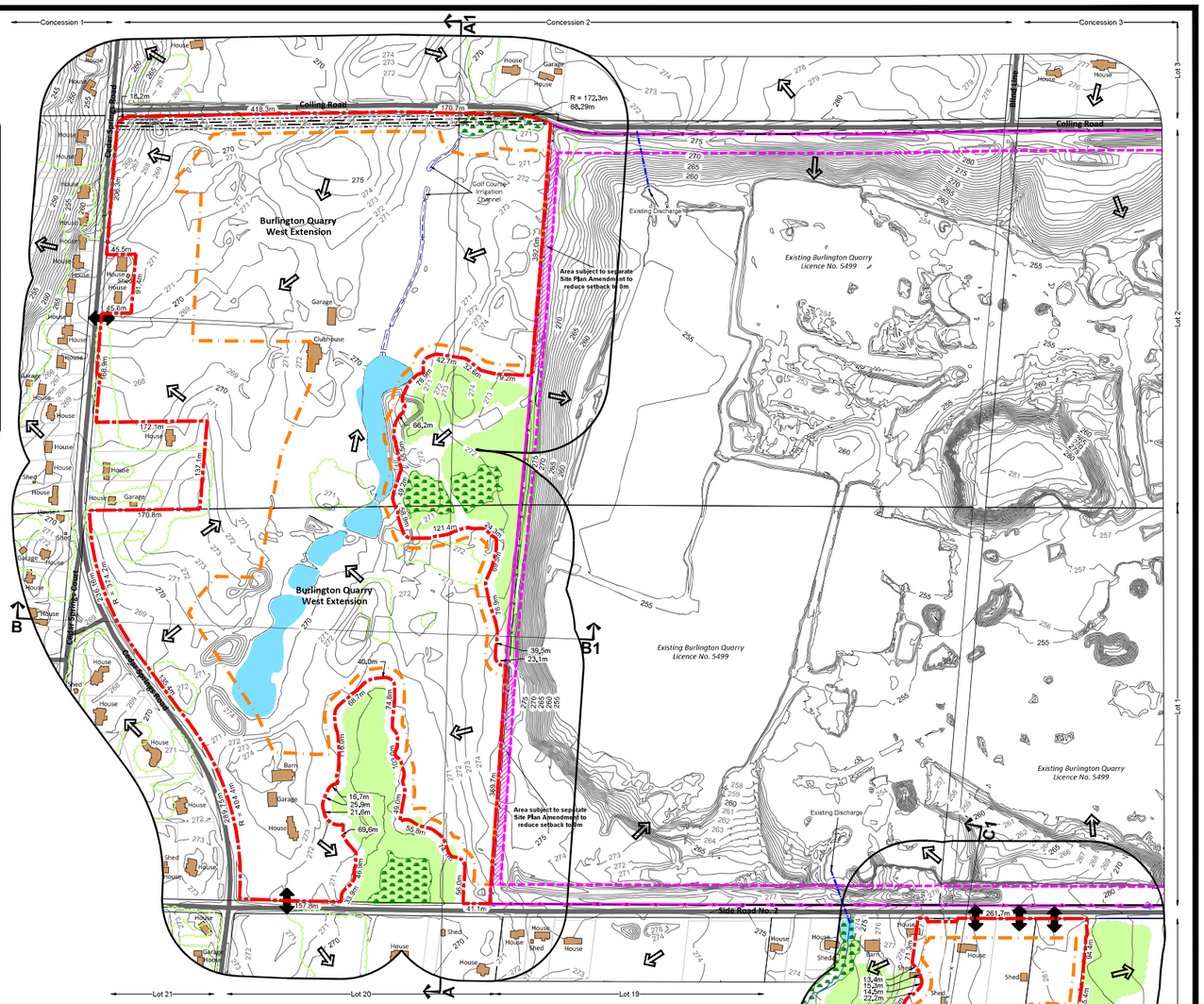

Blind Line
HMA Plant
Guelph Line
Existing Nelson Aggregates,
Burlington Quarry
(Mobile Crushing Operations)
Main entrance
(590777.02,
4806104.73)
2 Sideroad
LEGEND
Property Line
Roads
0
1 km
GENERAL SITE LOCATION - EXISTING QUARRY
2433 2 Sideroad, Burlington, Ontario L7P 0G8
BCX
AIR QUALITY STUDY
N
File No.: 1080-02.01
Date: November 2019
Dwg.: 1080-02.01 1-1
Drawn By: RU
FIGURE
1-1

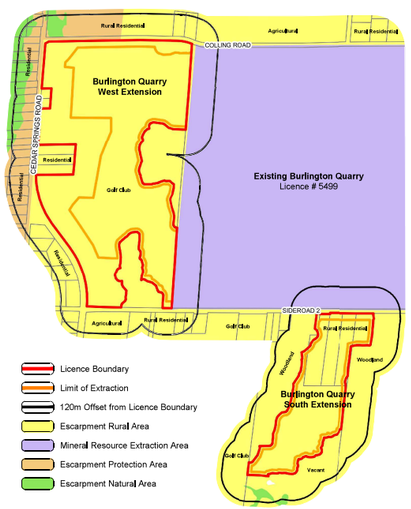
Figure 1-2
(for BCX report)

Key Map
(N.T.S.)

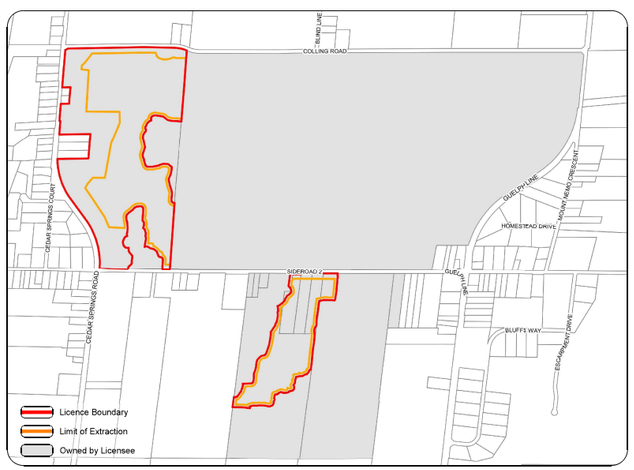




Niagara Escarpment Plan - Land Use Designations



Other Lands Owned by Licensee



Legend

- Licence Boundary
- Limit of Extraction — All setbacks are drawn to scale and show labelled distances
- Contours with Elevation — Metres above sea level (MASL)
- Public Road
- Fence — 1.2m post & wire farm fence unless otherwise noted
- Jefferson Salamander Regulatory Boundary
- Water Feature
- Woodlands — Significant
- Woodlands
- Wetland
- 120m Offset From Licence Boundary
- Existing Licence — Existing Licenced Boundary (solid line) Existing Limit of Extraction (dashed line)
- Parcel Fabric
- Diversion or Discharge Pipe — Existing - Single Dash
- Sun-Canadian Pipe Line — Pipe line location and easement
- Entrance / Exit — Existing
- Direction of Surface Drainage
- Building/Structure — Location and use for buildings on site & within 120m are shown
- Cross Sections (A1)

Legal Description

Part Lot 1 & 2, Concession 2 and Part Lot 17 & 18, Concession 2 NDS
(former geographic Township of Nelson)
City of Burlington
Region of Halton

Site Plan Amendments

No.	Date	Description	By

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
113 COLLIER STREET, BARRIE, ON, L4M 1H2 | P: 705.728.0045 F: 705.728.2010 | WWW.MHBCPLAN.COM

MNRF Approval Stamp

MHBC Stamp

Applicant

NELSON AGGREGATE CO.
2433 No. 2 Sideroad
P.O.Box 1070 Burlington Ont. L7R 4L8
phone: (905) 335-5250

Project
Burlington Quarry Extension

MNRF Licence Reference No.

Pre-approval review:

Plan Scale: 1:4000 (Arch D)
0 120 240 Meters

Date: April 2020
Drawn By: C.P.
Checked By: ***
File No.: 9135D

File Name
Existing Features

Drawing No.
1 of 4

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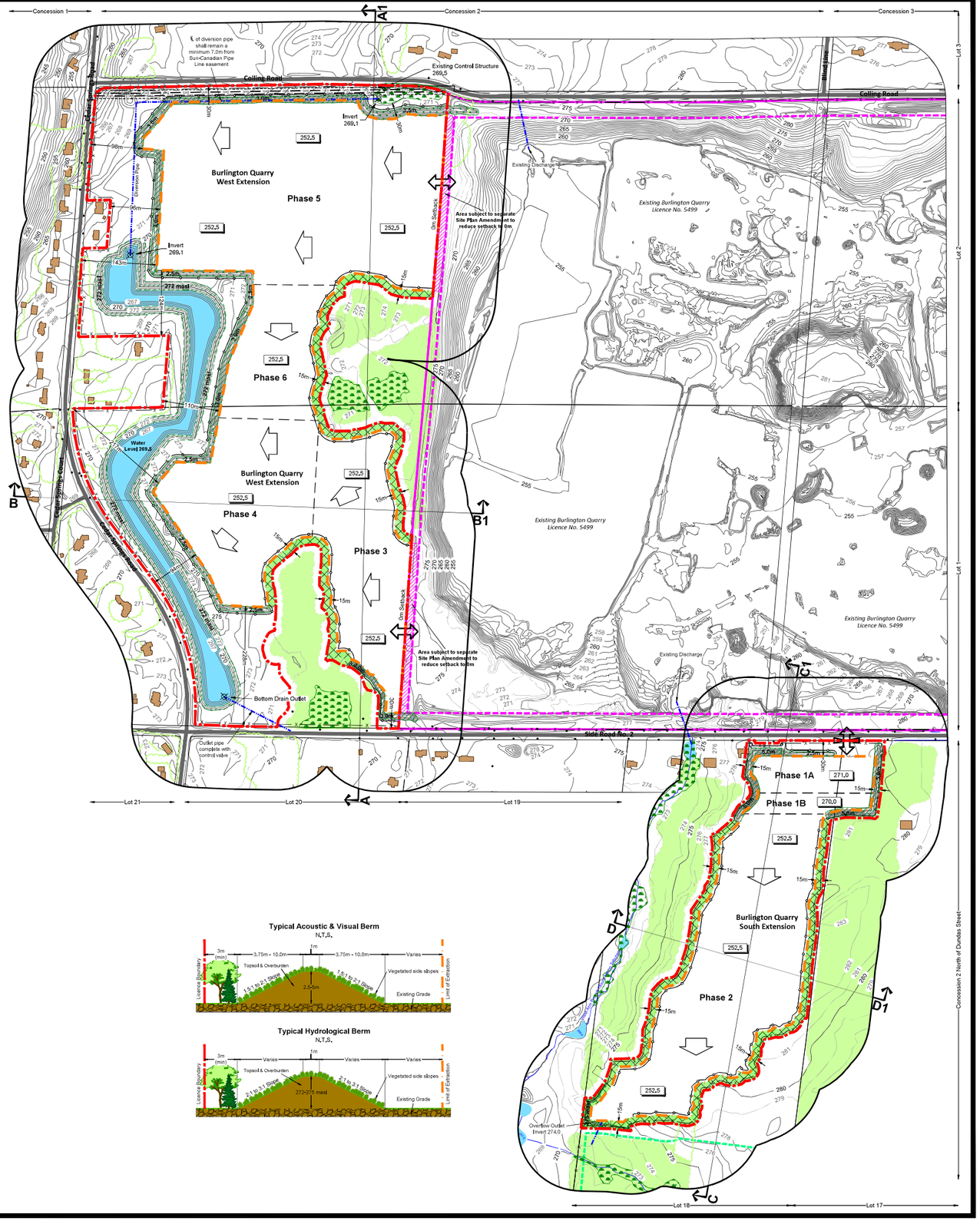
Figure 1-3
(for BCX report)



Typical Acoustic & Visual Berm
N.T.S.

Typical Hydrological Berm
N.T.S.

Legal Description

Part Lot 1 & 2, Concession 2 and Part Lot 17 & 18, Concession 2 NDS
(former geographic Township of Nelson)
City of Burlington
Region of Halton

Legend

- Licence Boundary
- Limit of Extraction — All setbacks are drawn to scale and show labelled distances
- Contours with Elevation — Metres above sea level (MASL)
- Public Road
- Internal Haul Road
- Fence / Silt Fence — 1.2m post & wire fence unless otherwise noted (X); Silt Fencing (O)
- Jefferson Salamander Regulatory Boundary
- Water Feature
- Woodlands — Significant
- Woodlands
- Wetland
- Forested Setbacks
- 120m Offset From Licence Boundary
- Existing Licence — Existing Licenced Boundary (solid line); Existing Limit of Extraction (dashed line)
- Parcel Fabric
- Diversion or Discharge Pipe — Existing • Single Dash; Proposed • Double Dash
- Sun-Canadian Pipe Line — Pipe line location and easement
- Entrance / Exit — Proposed
- Gate
- General Direction of Excavation & Boundary
- Berm — Proposed Acoustic (solid) & Hydrologic (dashed) Berms; Proposed Visual Berms
- Building/Structure — Location and use for buildings on site & within 120m are shown
- Quarry Floor — Metres above sea level (MASL)
- Cross Sections

Site Plan Amendments

No.	Date	Description	By

MHBC PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE
113 COLLIER STREET, BARRIE, ON, L4M 1H2 | P: 705.728.0045 F: 705.728.2010 | WWW.MHBCPLAN.COM

MNRF Approval Stamp

MHBC Stamp

Applicant

NELSON AGGREGATE CO.
2433 No. 2 Sideroad
P.O.Box 1070 Burlington Ont. L7R 4L8
phone: (905) 335-5250

Project
Burlington Quarry Extension

MNRF Licence Reference No.

Pre-approval review:

Plan Scale: 1:4000 (Arch D)
0 120 240 Meters

Date: April 2020
Drawn By: C.P.
Checked By: ***
File No.: 9135D

File Name
Operational Plan

Drawing No.
2 of 4

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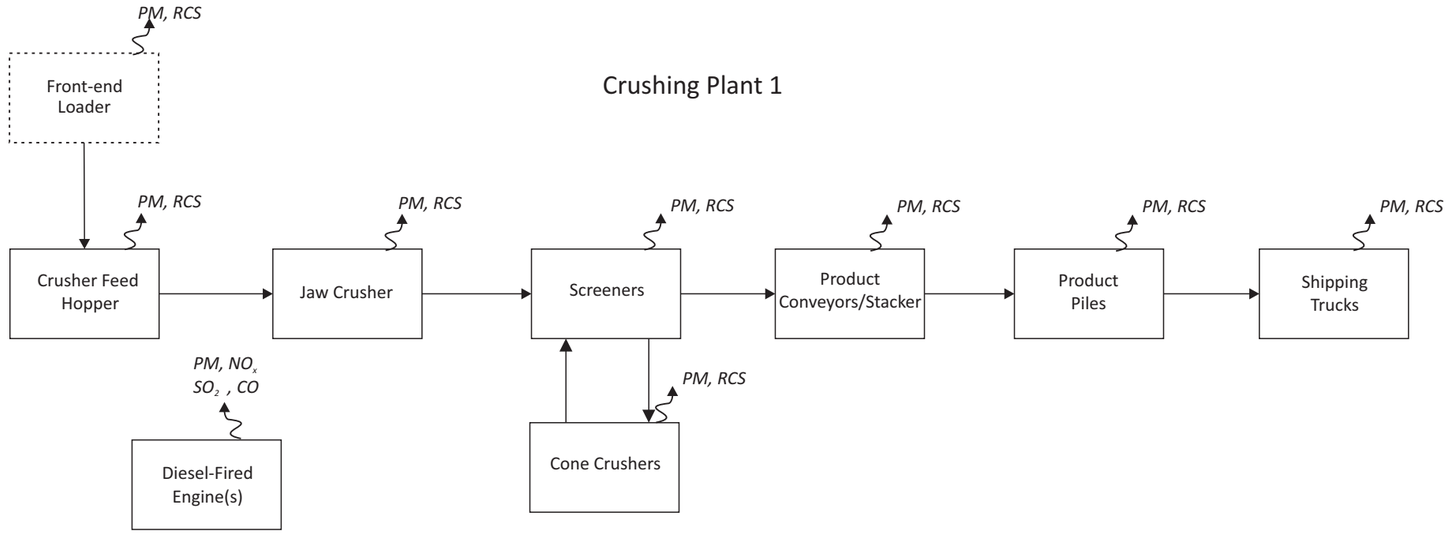
EXISTING QUARRY SCENARIO



Legend

PM - Suspended Particulate Matter
NO_x - Nitrogen Oxides
SO_2 - Sulphur dioxide
CO - Carbon Monoxide
RCS - Respirable Crystalline Silica
Material Flow

PROCESS FLOW DIAGRAM - QUARRY MOBILE CRUSHING

2433 No.2 Side Road in Burlington, Ontario, L7P 0G8

File No.: 1080-02.01
Date: November 2019
Dwg.: 1080-02.01_2-1A
Drawn By: RU

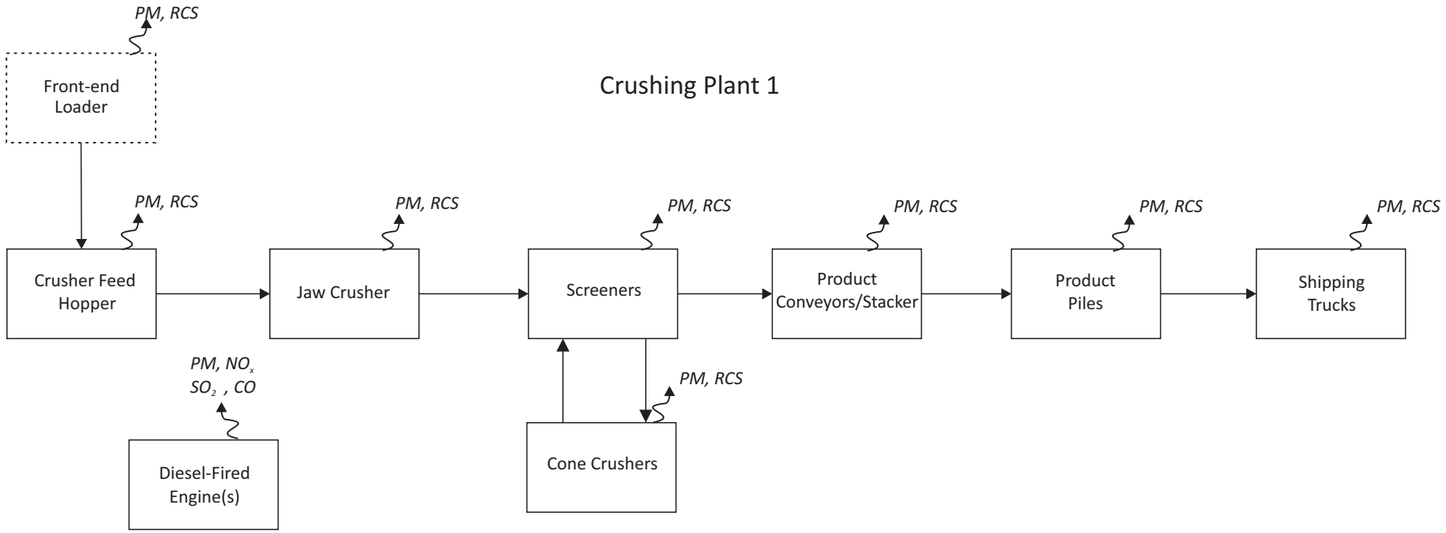
BCX

AIR QUALITY STUDY

FIGURE
2-1A1

QUARRY EXTENSION SCENARIOS

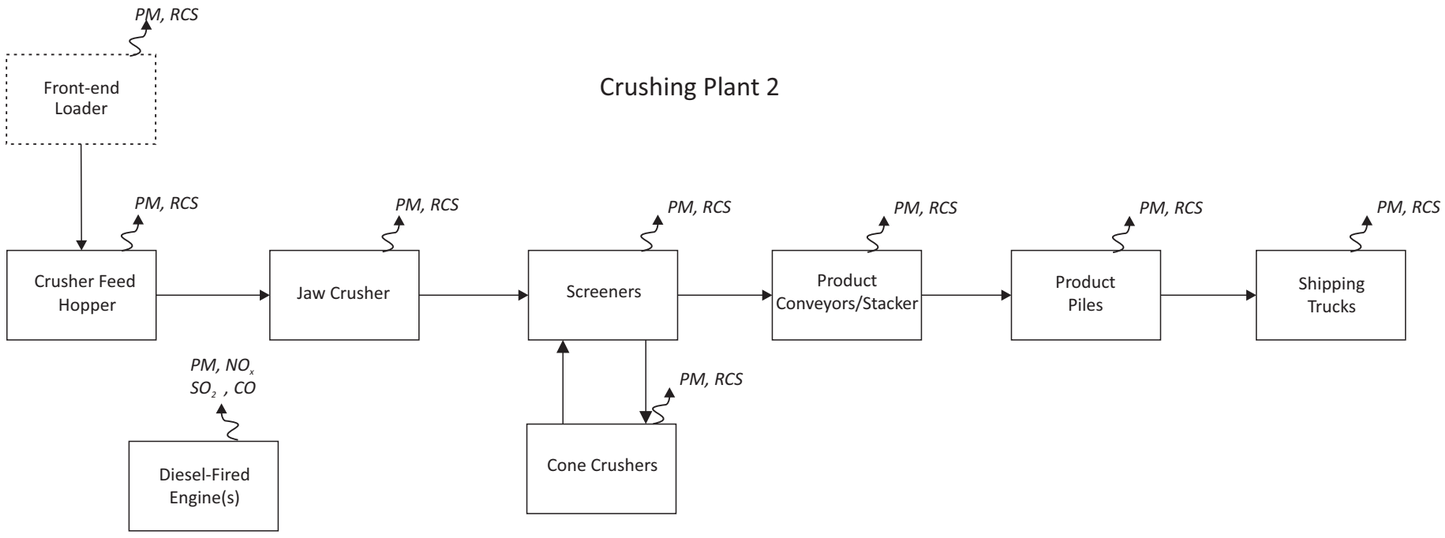
Crushing Plant 1



Legend

PM - Suspended Particulate Matter
NO_x - Nitrogen Oxides
SO_2 - Sulphur dioxide
CO - Carbon Monoxide
RCS - Respirable Crystalline Silica
→ Material Flow

Crushing Plant 2



PROCESS FLOW DIAGRAM - QUARRY MOBILE CRUSHING

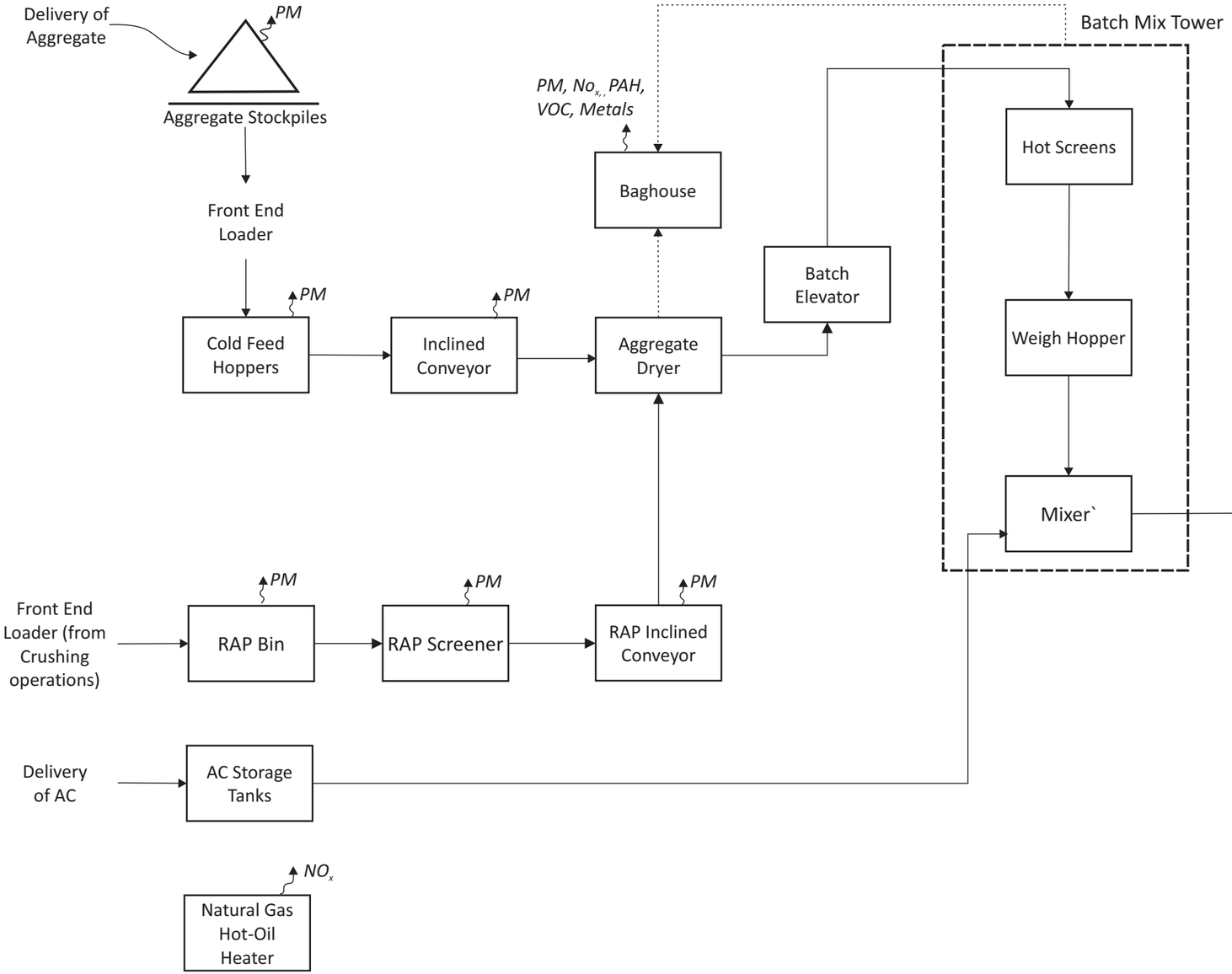
2433 No.2 Side Road in Burlington, Ontario, L7P 0G8

File No.: 1080-02.01
Date: November 2019
Dwg.: 1080-02.01_2-1A
Drawn By: RU

BCX

AIR QUALITY STUDY

FIGURE
2-1A2



PROCESS FLOW DIAGRAM - HMA PLANT

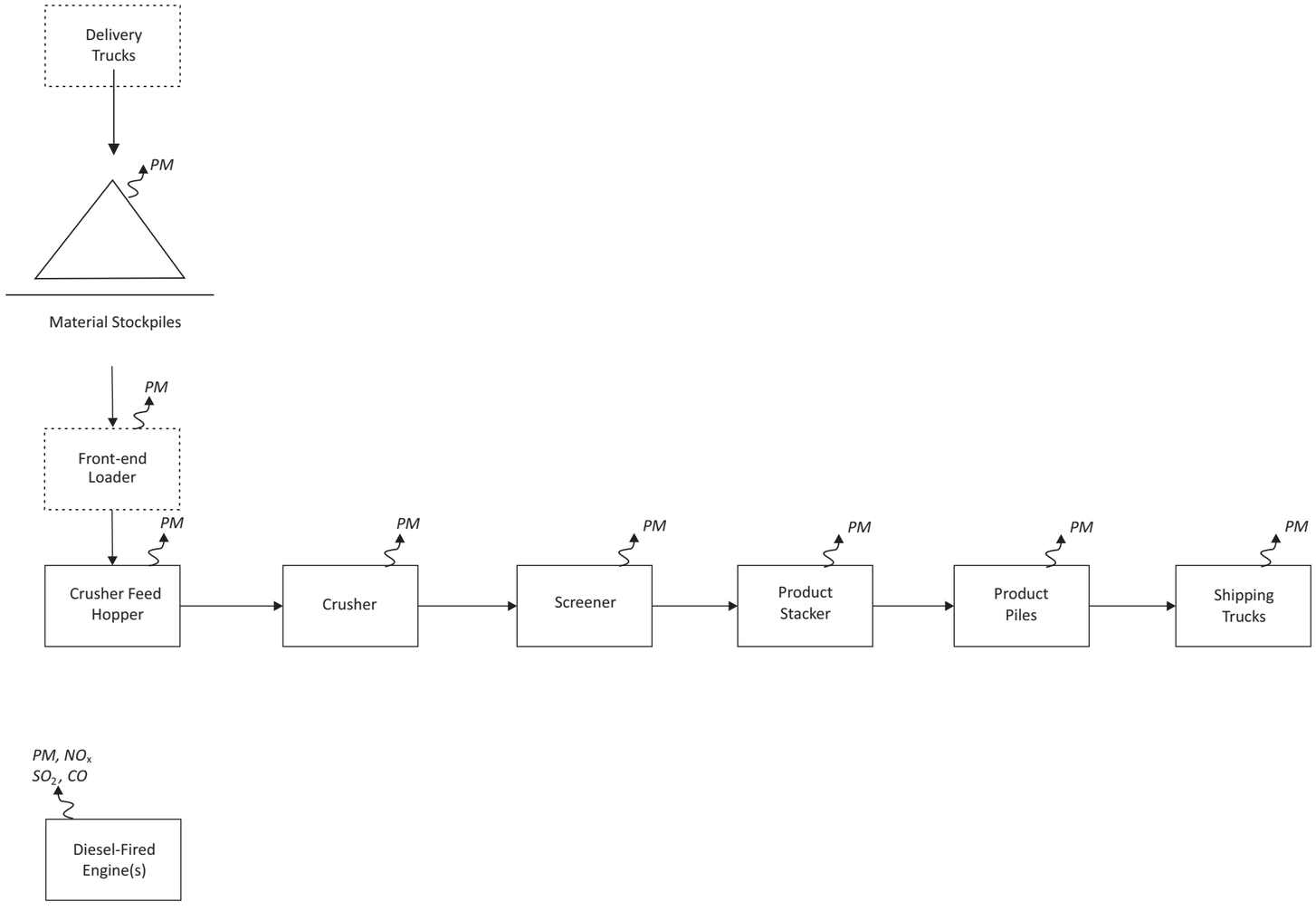
2433 No.2 Side Road in Burlington, Ontario, L7P 0G8

File No.: 1080-02.01
Date: November 2019
Dwg.: 1080-02.01_2-1B
Drawn By: RU

BCX

AIR QUALITY STUDY

FIGURE
2-1B



Legend

PM - Suspended Particulate Matter
NO_x - Nitrogen Oxides
SO_2 - Sulphur dioxide
CO - Carbon Monoxide

Material Flow

PROCESS FLOW DIAGRAM - THIRD PARTY CRUSHING PLANT

2433 No.2 Side Road in Burlington, Ontario, L7P 0G8

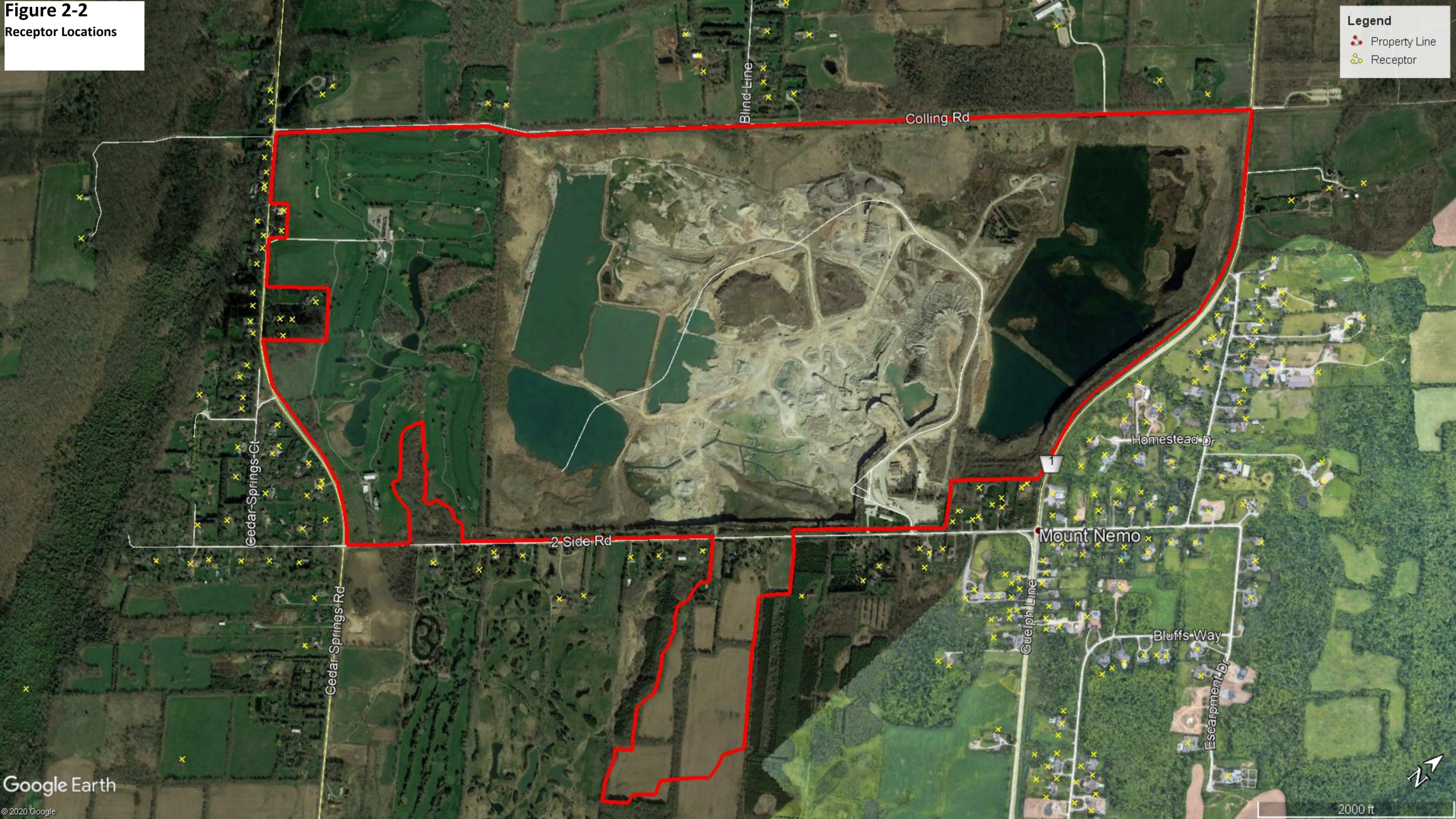
File No.: 1080-02.01
Date: November 2019
Dwg.: 1080-02.01_2-1C
Drawn By: RU

BCX

AIR QUALITY STUDY

FIGURE
2-1C

Figure 2-2
Receptor Locations



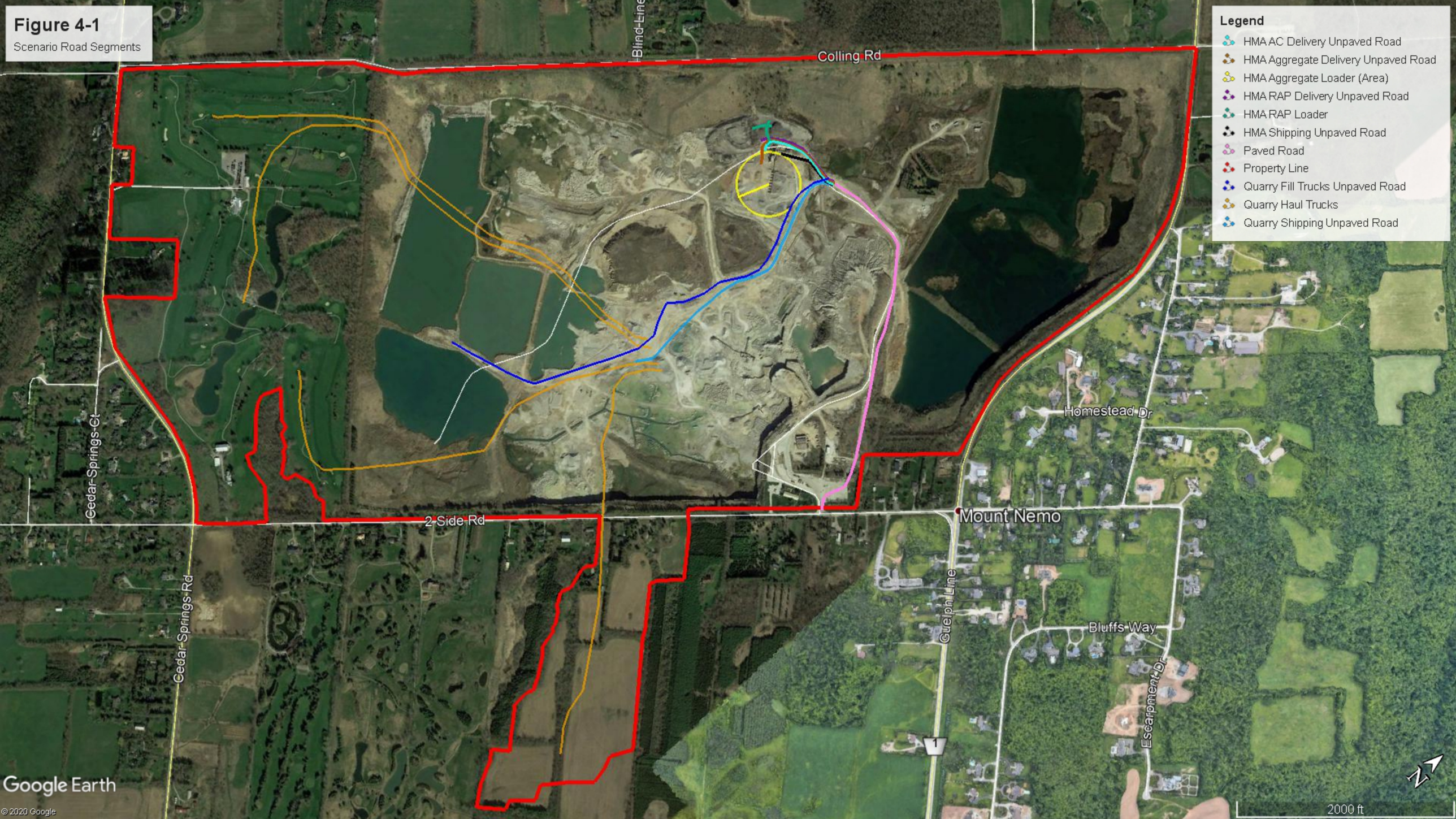
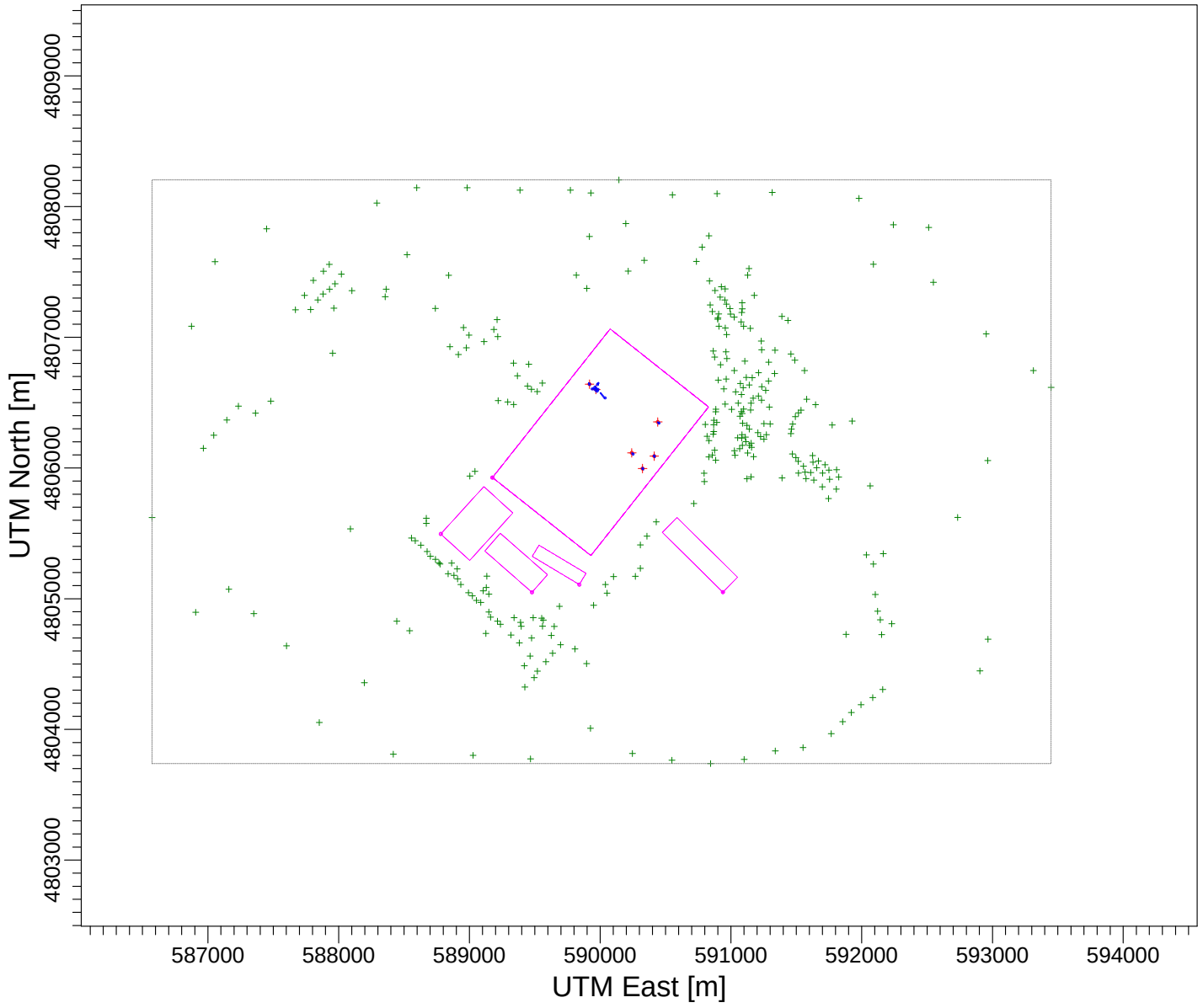


Figure 4-1
Scenario Road Segments
Legend
HMA AC Delivery Unpaved Road
HMA Aggregate Delivery Unpaved Road
HMA Aggregate Loader (Area)
HMA RAP Delivery Unpaved Road
HMA RAP Loader
HMA Shipping Unpaved Road
Paved Road
Property Line
Quarry Fill Trucks Unpaved Road
Quarry Haul Trucks
Quarry Shipping Unpaved Road
Colling Rd
Blind Line
Cedar Springs Ct
2 Side Rd
Cedar Springs Rd
Homestead Dr
Mount Nemo
Guelph Line
Bluffs Way
Escarpment Dr
1
Google Earth
© 2020 Google
2000 ft

PROJECT TITLE:

Figure 5-1: Air Dispersion Modelling Configuration



COMMENTS:

Nelson Aggregate Co. -
Burlington Quarry
2433 No. 2 Sideroad
Burlington, ON
L7P 0G8

SOURCES:

18

RECEPTORS:

323

COMPANY NAME:

BCX Environmental Consulting

MODELER:

RU

DATE:

11/11/2019

SCALE: 1:48,689

0 1 km

PROJECT NO.:

1080-02.01

AERMOD View - Lakes Environmental Software

Appendix B

Emission Calculations

Table SA: Summary of Assumptions

	January		February		March		April- December	
		Units		Units		Units		Units
Quarry (existing operations) - Crushing		Conservative Assumption (typically shipping only)		Conservative Assumption (typically shipping only)		Conservative Assumption (typically shipping only)		
Explosives	12,000	kg/day	12,000	kg/day	12,000	kg/day	12,000	kg/day
Blasting	30,000	tonnes/day	30,000	tonnes/day	30,000	tonnes/day	30,000	tonnes/day
	600,000	tonnes/year	600,000	tonnes/year	600,000	tonnes/year	600,000	tonnes/year
Maximum Number of Blasts per Year	74	2 blasts/wk, 37 wks/yr	74	2 blasts/wk, 37 wks/yr	74	2 blasts/wk, 37 wks/yr	74	2 blasts/wk, 37 wks/yr
Crushing Processing Rate	3500 + 2000	tonnes/day	3500 + 2000	tonnes/day	3500 + 2000	tonnes/day	3500 + 2000	tonnes/day
	Total 5500	tonnes/day	Total 5500	tonnes/day	Total 5500	tonnes/day	Total 5500	tonnes/day
	990,000	tonnes/year	990,000	tonnes/year	990,000	tonnes/year	990,000	tonnes/year
Shipping Rate	5,500	tonnes/day	5,500	tonnes/day	5,500	tonnes/day	5,500	tonnes/day
	990,000	tonnes/year	990,000	tonnes/year	990,000	tonnes/year	990,000	tonnes/year
Number of Processed Limestone Shipping Trucks	183	trucks/day	183	trucks/day	183	trucks/day	183	trucks/day
	33000	trucks/year	33,000	trucks/year	33,000	trucks/year	33,000	trucks/year
Front-end Loaders Weight	34	tonnes (empty)	34	tonnes (empty)	34	tonnes (empty)	34	tonnes (empty)
	15	tonnes (load only)	15	tonnes (load only)	15	tonnes (load only)	15	tonnes (load only)
	49	tonnes (Total)	49	tonnes (Total)	49	tonnes (Total)	49	tonnes (Total)
Truck Weight (shipping)	12	tonnes (empty)	12	tonnes (empty)	12	tonnes (empty)	12	tonnes (empty)
	30	tonnes (load only)	30	tonnes (load only)	30	tonnes (load only)	30	tonnes (load only)
	42	tonnes (Total)	42	tonnes (Total)	42	tonnes (Total)	42	tonnes (Total)
Operating Schedule	11	hours/day	11	hours/day	11	hours/day	11	hours/day
Rehab Trucks		Conservative Assumption (expected to be significantly less)		Conservative Assumption (expected to be significantly less)		Conservative Assumption (expected to be significantly less)		Conservative Assumption (expected to be significantly less)
Number of Rehab Delivery Trucks	202	trucks/day	202	trucks/day	202	trucks/day	202	trucks/day
	37,370	trucks/year	37,370	trucks/year	37,370	trucks/year	37,370	trucks/year
Truck Weight (delivery)	14	tonnes (empty)	14	tonnes (empty)	14	tonnes (empty)	14	tonnes (empty)
	22	tonnes (load only)	22	tonnes (load)	22	tonnes (load)	22	tonnes (load)
	36	tonnes (Total)	36	tonnes (Total)	36	tonnes (Total)	36	tonnes (Total)
Operating Schedule	11	hours/day	11	hours/day	11	hours/day	11	hours/day
Quarry (during extension phases)		Conservative Assumption (typically shipping only)		Conservative Assumption (typically shipping only)		Conservative Assumption (typically shipping only)		
Explosives	12,000	kg/day	12,000	kg/day	12,000	kg/day	12,000	kg/day
Blasting	30,000	tonnes/day	30,000	tonnes/day	30,000	tonnes/day	30,000	tonnes/day
Maximum extraction	2,000,000	tonnes/year	2,000,000	tonnes/year	2,000,000	tonnes/year	2,000,000	tonnes/year
Crushing Processing Rate	10,000	tonnes/day	10,000	tonnes/day	10,000	tonnes/day	10,000	tonnes/day
	2,000,000	tonnes/year	2,000,000	tonnes/year	2,000,000	tonnes/year	2,000,000	tonnes/year
Shipping Rate	8,000	tonnes/day	8,000	tonnes/day	8,000	tonnes/day	8,000	tonnes/day
	2,000,000	tonnes/year	2,000,000	tonnes/year	2,000,000	tonnes/year	2,000,000	tonnes/year
Number of Processed Limestone Shipping Trucks	267	trucks/day	267	trucks/day	267	trucks/day	267	trucks/day
	66,667	trucks/year	66,667	trucks/year	66,667	trucks/year	66,667	trucks/year
Haul Trucks Weight	109	tonnes (empty)	109	tonnes (empty)	109	tonnes (empty)	109	tonnes (empty)
	70	tonnes (load only)	70	tonnes (load only)	70	tonnes (load only)	70	tonnes (load only)
	179	tonnes (Total)	179	tonnes (Total)	179	tonnes (Total)	179	tonnes (Total)
Truck Weight (shipping)	12	tonnes (empty)	12	tonnes (empty)	12	tonnes (empty)	12	tonnes (empty)
	30	tonnes (load only)	30	tonnes (load only)	30	tonnes (load only)	30	tonnes (load only)
	42	tonnes (Total)	42	tonnes (Total)	42	tonnes (Total)	42	tonnes (Total)
Operating Schedule	11	hours/day	11	hours/day	11	hours/day	11	hours/day
HMA Plant	closed		closed		closed			
HMA Production Rate	-	tonnes/day	-	tonnes/day	-	tonnes/day	2,000	tonnes/day
Annual	-	tonnes/year	-	tonnes/year	-	tonnes/year	140,000	tonnes/year
RAP Crushing	-	tonnes/day	-	tonnes/day	-	tonnes/day	2,000	tonnes/day
	-	tonnes/year	-	tonnes/year	-	tonnes/year	60,000	tonnes/year
Number of HMA Shipping Trucks	-	trucks/day	-	trucks/day	-	trucks/day	50	trucks/day
	-	trucks/year	-	trucks/year	-	trucks/year	3,500	trucks/year
Number of Aggregate (coarse and fine) Delivery Trucks	-	trucks/day	-	trucks/day	-	trucks/day	68	trucks/day
	-	trucks/year	-	trucks/year	-	trucks/year	4,773	trucks/year
Number of AC Shipping Trucks	-	trucks/day	-	trucks/day	-	trucks/day	3	trucks/day
	-	trucks/year	-	trucks/year	-	trucks/year	700	trucks/year
Number of RAP Delivery Trucks	-	trucks/day	-	trucks/day	-	trucks/day	91	trucks/day
	-	trucks/year	-	trucks/year	-	trucks/year	2,727	trucks/year
Trucks Weight (aggregate/RAP delivery)	14	tonnes (empty)	14	tonnes (empty)	14	tonnes (empty)	14	tonnes (empty)
	22	tonnes (load only)	22	tonnes (load only)	22	tonnes (load only)	22	tonnes (load only)
	36	tonnes (Total)	36	tonnes (Total)	36	tonnes (Total)	36	tonnes (Total)
Trucks Weight (AC delivery)	15	tonnes (empty)	15	tonnes (empty)	15	tonnes (empty)	15	tonnes (empty)
	40	tonnes (load only)	40	tonnes (load only)	40	tonnes (load only)	40	tonnes (load only)
	55	tonnes (Total)	55	tonnes (Total)	55	tonnes (Total)	55	tonnes (Total)
Front-end Loaders Weight (aggregate/RAP)	12	tonnes (empty)	12	tonnes (empty)	12	tonnes (empty)	12	tonnes (empty)
	5	tonnes (load only)	5	tonnes (load only)	5	tonnes (load only)	5	tonnes (load only)
	17	tonnes (Total)	17	tonnes (Total)	17	tonnes (Total)	17	tonnes (Total)
Truck Weight (HMA shipping)	15	tonnes (empty)	15	tonnes (empty)	15	tonnes (empty)	15	tonnes (empty)
	40	tonnes (load only)	40	tonnes (load only)	40	tonnes (load only)	40	tonnes (load only)
	55	tonnes (Total)	55	tonnes (Total)	55	tonnes (Total)	55	tonnes (Total)
Operating Schedule	-	hours/day	-	hours/day	-	hours/day	12	hours/day

Other Assumptions:

Waterspray system on crushers

Internal unpaved roads are controlled with a combination of watering and chemical suppressant (e.g. calcium chloride)

Explosives used is Centra Gold 70 Emulsion (Emission factors from Orica was used)

Diesel generators powering the crushing plants are Tier 2 or better.

One drill with dust collector for blasting preparation

Calculation Sheet 9E
Tailpipe Emissions - Front End Loaders and Haul Trucks

Tailpipe Travelling Emission Rate [g/s] = Number of Trips x Operating Time [h] x Power [hp] x Tier 4 Emission Factor [g/hp-h] / Averaging Period Converted to seconds [years to seconds/days to seconds/hours to seconds])

Source ID	Scenario	Operation	Source Description	Contaminant	CAS No.	Trip ID	Trip Distance (km) [Note 1]	Number of Trips Per Hour [Note 1]	Vehicle Speed (km/hr) [Note 1]	Operating Time Per Trip (hr) [Note 1]	Power (hp) [Note 1]	Tier 4 Emission Factor (g/hp-h)	Emission Rate (g/s)	Averaging Period [Note 2]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant																
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-A	0.18	40	10	0.018	190	3.00E-01	1.13E-02	1 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-RAP	0.15	11	10	0.015	190	3.00E-01	2.52E-03	1 hr	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-A	0.18	40	10	0.018	190	9.30E-01	3.51E-02	1 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-RAP	0.15	11	10	0.015	190	9.30E-01	7.80E-03	1 hr	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations																
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-RAP	0.12	33	10	0.012	190	3.00E-01	6.33E-03	1 hr	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-RAP	0.12	33	10	0.012	190	9.30E-01	1.96E-02	1 hr	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations																
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	33	10	0.020	412	3.00E-01	2.29E-02	1 hr	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	33	10	0.020	412	9.30E-01	7.09E-02	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	61	10	0.020	412	3.00E-01	4.16E-02	1 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	0.98	13	25	0.039	787	2.60E+00	2.89E-01	1 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	13	25	0.052	787	2.60E+00	3.84E-01	1 hr	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	61	10	0.020	412	9.30E-01	1.29E-01	1 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	0.98	13	25	0.039	787	3.67E-01	4.08E-02	1 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	13	25	0.052	787	3.67E-01	5.42E-02	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)																
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	61	10	0.020	412	3.00E-01	4.16E-02	1 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	1.86	13	25	0.074	787	2.60E+00	5.49E-01	1 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	0.74	13	25	0.030	787	2.60E+00	2.18E-01	1 hr	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	61	10	0.020	412	9.30E-01	1.29E-01	1 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	1.86	13	25	0.074	787	3.67E-01	7.75E-02	1 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	0.74	13	25	0.030	787	3.67E-01	3.08E-02	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)																
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	61	10	0.020	412	3.00E-01	4.16E-02	1 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	2.10	13	25	0.084	787	2.60E+00	6.20E-01	1 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	13	25	0.052	787	2.60E+00	3.84E-01	1 hr	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	61	10	0.020	412	9.30E-01	1.29E-01	1 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	2.10	13	25	0.084	787	3.67E-01	8.75E-02	1 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	13	25	0.052	787	3.67E-01	5.42E-02	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)																
P4-Q1F	SD	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	61	10	0.020	412	3.00E-01	4.16E-02	1 hr	Above Average	MOVES EF
P4-Q1H	SD	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	2.10	13	25	0.084	787	2.60E+00	6.20E-01	1 hr	Above Average	MOVES EF
P4-Q2H	SD	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	13	25	0.052	787	2.60E+00	3.84E-01	1 hr	Above Average	MOVES EF
P4-Q1F	SD	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	61	10	0.020	412	9.30E-01	1.29E-01	1 hr	Above Average	MOVES EF
P4-Q1H	SD	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	2.10	13	25	0.084	787	3.67E-01	8.75E-02	1 hr	Above Average	MOVES EF
P4-Q2H	SD	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	13	25	0.052	787	3.67E-01	5.42E-02	1 hr	Above Average	MOVES EF

Source ID			Source Description	Contaminant	CAS No.	Trip ID	Trip Distance (km) [Note 1]	Number of Trips Per Day [Note 1]	Vehicle Speed (km/hr) [Note 1]	Operating Time Per Trip (h) [Note 1]	Power (hp) [Note 1]	Tier 4 Emission Factor (g/hp-h)	Emission Rate (g/s)	Averaging Period [Note 2]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant																
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	PM	PM	HMA-FL-A	0.18	300	10	0.018	190	1.50E-02	1.78E-04	24 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM	PM	HMA-FL-RAP	0.15	80	10	0.015	190	1.50E-02	3.96E-05	24 hr	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	PM2.5	PM2.5	HMA-FL-A	0.18	300	10	0.018	190	1.50E-02	1.78E-04	24 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM2.5	PM2.5	HMA-FL-RAP	0.15	80	10	0.015	190	1.50E-02	3.96E-05	24 hr	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-A	0.18	300	10	0.018	190	3.00E-01	3.56E-03	24 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-RAP	0.15	80	10	0.015	190	3.00E-01	7.92E-04	24 hr	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-A	0.18	300	10	0.018	190	9.30E-01	1.10E-02	24 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-RAP	0.15	80	10	0.015	190	9.30E-01	2.45E-03	24 hr	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	Benzene	71-43-2	HMA-FL-A	0.18	300	10	0.018	190	2.36E-03	2.80E-05	24 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzene	71-43-2	HMA-FL-RAP	0.15	80	10	0.015	190	2.36E-03	6.23E-06	24 hr	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-FL-A	0.18	300	10	0.018	190	4.95E-08	5.88E-10	24 hr	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-FL-RAP	0.15	80	10	0.015	190	4.95E-08	1.31E-10	24 hr	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations																
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM	PM	HMA-FL-RAP	0.12	400	10	0.012	190	1.50E-02	1.58E-04	24 hr	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM2.5	PM2.5	HMA-FL-RAP	0.12	400	10	0.012	190	1.50E-02	1.58E-04	24 hr	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-RAP	0.12	400	10	0.012	190	3.00E-01	3.17E-03	24 hr	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-RAP	0.12	400	10	0.012	190	9.30E-01	9.82E-03	24 hr	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzene	71-43-2	HMA-FL-RAP	0.12	400	10	0.012	190	2.36E-03	2.49E-05	24 hr	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-FL-RAP	0.12	400	10	0.012	190	4.95E-08	5.23E-10	24 hr	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations																
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	367	10	0.020	412	1.50E-02	5.25E-04	24 hr	Above Average	MOVES EF

Calculation Sheet 9E
Tailpipe Emissions - Front End Loaders and Haul Trucks

Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	367	10	0.020	412	1.50E-02	5.25E-04	24 hr	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	367	10	0.020	412	3.00E-01	1.05E-02	24 hr	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	367	10	0.020	412	9.30E-01	3.25E-02	24 hr	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	367	10	0.020	412	2.36E-03	8.25E-05	24 hr	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	367	10	0.020	412	4.95E-08	1.73E-09	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	0.98	143	25	0.039	787	3.00E-02	1.53E-03	24 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	1.30	143	25	0.052	787	3.00E-02	2.03E-03	24 hr	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	0.98	143	25	0.039	787	3.00E-02	1.53E-03	24 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.30	143	25	0.052	787	3.00E-02	2.03E-03	24 hr	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	667	10	0.020	412	3.00E-01	1.91E-02	24 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	0.98	143	25	0.039	787	2.60E+00	1.33E-01	24 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	143	25	0.052	787	2.60E+00	1.76E-01	24 hr	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	667	10	0.020	412	9.30E-01	5.91E-02	24 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	0.98	143	25	0.039	787	3.67E-01	1.87E-02	24 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	143	25	0.052	787	3.67E-01	2.48E-02	24 hr	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	667	10	0.020	412	2.36E-03	1.50E-04	24 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	0.98	143	25	0.039	787	2.36E-03	1.20E-04	24 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	1.30	143	25	0.052	787	2.36E-03	1.60E-04	24 hr	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	667	10	0.020	412	4.95E-08	3.15E-09	24 hr	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	0.98	143	25	0.039	787	9.90E-08	5.05E-09	24 hr	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	1.30	143	25	0.052	787	9.90E-08	6.70E-09	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)																
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	1.86	143	25	0.074	787	3.00E-02	2.90E-03	24 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	0.74	143	25	0.030	787	3.00E-02	1.16E-03	24 hr	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	1.86	143	25	0.074	787	3.00E-02	2.90E-03	24 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.74	143	25	0.030	787	3.00E-02	1.16E-03	24 hr	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	667	10	0.020	412	3.00E-01	1.91E-02	24 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	1.86	143	25	0.074	787	2.60E+00	2.52E-01	24 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	0.74	143	25	0.030	787	2.60E+00	1.00E-01	24 hr	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	667	10	0.020	412	9.30E-01	5.91E-02	24 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	1.86	143	25	0.074	787	3.67E-01	3.55E-02	24 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	0.74	143	25	0.030	787	3.67E-01	1.41E-02	24 hr	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	667	10	0.020	412	2.36E-03	1.50E-04	24 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	1.86	143	25	0.074	787	2.36E-03	2.28E-04	24 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	0.74	143	25	0.030	787	2.36E-03	9.09E-05	24 hr	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	667	10	0.020	412	4.95E-08	3.15E-09	24 hr	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	1.86	143	25	0.074	787	9.90E-08	9.58E-09	24 hr	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	0.74	143	25	0.030	787	9.90E-08	3.81E-09	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)																
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	2.10	143	25	0.084	787	3.00E-02	3.28E-03	24 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	1.30	143	25	0.052	787	3.00E-02	2.03E-03	24 hr	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2.10	143	25	0.084	787	3.00E-02	3.28E-03	24 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.30	143	25	0.052	787	3.00E-02	2.03E-03	24 hr	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	667	10	0.020	412	3.00E-01	1.91E-02	24 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	2.10	143	25	0.084	787	2.60E+00	2.84E-01	24 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	143	25	0.052	787	2.60E+00	1.76E-01	24 hr	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	667	10	0.020	412	9.30E-01	5.91E-02	24 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	2.10	143	25	0.084	787	3.67E-01	4.01E-02	24 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	143	25	0.052	787	3.67E-01	2.48E-02	24 hr	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	667	10	0.020	412	2.36E-03	1.50E-04	24 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	2.10	143	25	0.084	787	2.36E-03	2.58E-04	24 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	1.30	143	25	0.052	787	2.36E-03	1.60E-04	24 hr	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	667	10	0.020	412	4.95E-08	3.15E-09	24 hr	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	2.10	143	25	0.084	787	9.90E-08	1.08E-08	24 hr	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	1.30	143	25	0.052	787	9.90E-08	6.70E-09	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)																
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	2.00	143	25	0.080	787	3.00E-02	3.12E-03	24 hr	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	0.80	143	25	0.032	787	3.00E-02	1.25E-03	24 hr	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	667	10	0.020	412	1.50E-02	9.54E-04	24 hr	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2.00	143	25	0.080	787	3.00E-02	3.12E-03	24 hr	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.80	143	25	0.032	787	3.00E-02	1.25E-03	24 hr	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	667	10	0.020	412	3.00E-01	1.91E-02	24 hr	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	2.00	143	25	0.080	787	2.60E+00	2.71E-01	24 hr	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	0.80	143	25	0.032	787	2.60E+00	1.08E-01	24 hr	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	667	10	0.020	412	9.30E-01	5.91E-02	24 hr	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	2.00	143	25	0.080	787	3.67E-01	3.82E-02	24 hr	Above Average	MOVES EF

Calculation Sheet 9E
Tailpipe Emissions - Front End Loaders and Haul Trucks

P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	0.80	143	25	0.032	787	3.67E-01	1.53E-02	24 hr	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	667	10	0.020	412	2.36E-03	1.50E-04	24 hr	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	2.00	143	25	0.080	787	2.36E-03	2.46E-04	24 hr	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	0.80	143	25	0.032	787	2.36E-03	9.83E-05	24 hr	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	667	10	0.020	412	4.95E-08	3.15E-09	24 hr	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	2.00	143	25	0.080	787	9.90E-08	1.03E-08	24 hr	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	0.80	143	25	0.032	787	9.90E-08	4.12E-09	24 hr	Above Average	MOVES EF

Source ID	Scenario		Source Description	Contaminant	CAS No.	Trip ID	Trip Distance (km) [Note 1]	Number of Trips Per Year [Note 1]	Vehicle Speed (km/hr) [Note 1]	Operating Time Per Trip (h) [Note 1]	Power (hp) [Note 1]	Tier 4 Emission Factor (g/hp-h)	Emission Rate (g/s)	Averaging Period [Note 2]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant																
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	PM	PM	HMA-FL-A	0.18	21000	10	0.018	190	1.50E-02	3.42E-05	annual	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM	PM	HMA-FL-RAP	0.15	5600	10	0.015	190	1.50E-02	7.59E-06	annual	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	PM2.5	PM2.5	HMA-FL-A	0.18	21000	10	0.018	190	1.50E-02	3.42E-05	annual	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM2.5	PM2.5	HMA-FL-RAP	0.15	5600	10	0.015	190	1.50E-02	7.59E-06	annual	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-A	0.18	21000	10	0.018	190	3.00E-01	6.83E-04	annual	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-RAP	0.15	5600	10	0.015	190	3.00E-01	1.52E-04	annual	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-A	0.18	21000	10	0.018	190	9.30E-01	2.12E-03	annual	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-RAP	0.15	5600	10	0.015	190	9.30E-01	4.71E-04	annual	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	Benzene	71-43-2	HMA-FL-A	0.18	21000	10	0.018	190	2.36E-03	5.37E-06	annual	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzene	71-43-2	HMA-FL-RAP	0.15	5600	10	0.015	190	2.36E-03	1.19E-06	annual	Above Average	MOVES EF
TP1F	HMA	HMA Production	Tailpipe emissions from aggregate front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-FL-A	0.18	21000	10	0.018	190	4.95E-08	1.13E-10	annual	Above Average	MOVES EF
TP2F	HMA	HMA Production	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-FL-RAP	0.15	5600	10	0.015	190	4.95E-08	2.51E-11	annual	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations																
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM	PM	HMA-FL-RAP	0.12	12000	10	0.012	190	1.50E-02	1.30E-05	annual	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	PM2.5	PM2.5	HMA-FL-RAP	0.12	12000	10	0.012	190	1.50E-02	1.30E-05	annual	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	NO_2	10102-44-0	HMA-FL-RAP	0.12	12000	10	0.012	190	3.00E-01	2.60E-04	annual	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	SO_2	7446-09-5	HMA-FL-RAP	0.12	12000	10	0.012	190	9.30E-01	8.07E-04	annual	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzene	71-43-2	HMA-FL-RAP	0.12	12000	10	0.012	190	2.36E-03	2.05E-06	annual	Above Average	MOVES EF
CRTF	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-FL-RAP	0.12	12000	10	0.012	190	4.95E-08	4.29E-11	annual	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations																
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	66000	10	0.020	412	1.50E-02	2.59E-04	annual	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	66000	10	0.020	412	1.50E-02	2.59E-04	annual	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	66000	10	0.020	412	3.00E-01	5.17E-03	annual	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	66000	10	0.020	412	9.30E-01	1.60E-02	annual	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	66000	10	0.020	412	2.36E-03	4.07E-05	annual	Above Average	MOVES EF
Q1FL	SE	SE-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	66000	10	0.020	412	4.95E-08	8.54E-10	annual	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	0.98	28571	25	0.039	787	3.00E-02	8.39E-04	annual	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	1.30	28571	25	0.052	787	3.00E-02	1.11E-03	annual	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	0.98	28571	25	0.039	787	3.00E-02	8.39E-04	annual	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.30	28571	25	0.052	787	3.00E-02	1.11E-03	annual	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	133333	10	0.020	412	3.00E-01	1.05E-02	annual	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	0.98	28571	25	0.039	787	2.60E+00	7.27E-02	annual	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	28571	25	0.052	787	2.60E+00	9.64E-02	annual	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	133333	10	0.020	412	9.30E-01	3.24E-02	annual	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	0.98	28571	25	0.039	787	3.67E-01	1.03E-02	annual	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	28571	25	0.052	787	3.67E-01	1.36E-02	annual	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	133333	10	0.020	412	2.36E-03	8.22E-05	annual	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	0.98	28571	25	0.039	787	2.36E-03	6.60E-05	annual	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	1.30	28571	25	0.052	787	2.36E-03	8.75E-05	annual	Above Average	MOVES EF
P1-Q1F	SA	SA-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	133333	10	0.020	412	4.95E-08	1.72E-09	annual	Above Average	MOVES EF
P1-Q1H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	0.98	28571	25	0.039	787	9.90E-08	2.77E-09	annual	Above Average	MOVES EF
P1-Q2H	SA	SA-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	1.30	28571	25	0.052	787	9.90E-08	3.67E-09	annual	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)																
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	1.86	28571	25	0.074	787	3.00E-02	1.59E-03	annual	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	0.74	28571	25	0.030	787	3.00E-02	6.33E-04	annual	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	1.86	28571	25	0.074	787	3.00E-02	1.59E-03	annual	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.74	28571	25	0.030	787	3.00E-02	6.33E-04	annual	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	133333	10	0.020	412	3.00E-01	1.05E-02	annual	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	1.86	28571	25	0.074	787	2.60E+00	1.38E-01	annual	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	0.74	28571	25	0.030	787	2.60E+00	5.49E-02	annual	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	133333	10	0.020	412	9.30E-01	3.24E-02	annual	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	1.86	28571	25	0.074	787	3.67E-01	1.95E-02	annual	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	0.74	28571	25	0.030	787	3.67E-01	7.74E-03	annual	Above Average	MOVES EF
P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	133333	10	0.020	412	2.36E-03	8.22E-05	annual	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	1.86	28571	25	0.074	787	2.36E-03	1.25E-04	annual	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	0.74	28571	25	0.030	787	2.36E-03	4.98E-05	annual	Above Average	MOVES EF

Calculation Sheet 9E
Tailpipe Emissions - Front End Loaders and Haul Trucks

P2-Q1F	SB	SB-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	133333	10	0.020	412	4.95E-08	1.72E-09	annual	Above Average	MOVES EF
P2-Q1H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	1.86	28571	25	0.074	787	9.90E-08	5.25E-09	annual	Above Average	MOVES EF
P2-Q2H	SB	SB-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	0.74	28571	25	0.030	787	9.90E-08	2.09E-09	annual	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)																
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	2.10	28571	25	0.084	787	3.00E-02	1.80E-03	annual	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	1.30	28571	25	0.052	787	3.00E-02	1.11E-03	annual	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2.10	28571	25	0.084	787	3.00E-02	1.80E-03	annual	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.30	28571	25	0.052	787	3.00E-02	1.11E-03	annual	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	133333	10	0.020	412	3.00E-01	1.05E-02	annual	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	2.10	28571	25	0.084	787	2.60E+00	1.56E-01	annual	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	1.30	28571	25	0.052	787	2.60E+00	9.64E-02	annual	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	133333	10	0.020	412	9.30E-01	3.24E-02	annual	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	2.10	28571	25	0.084	787	3.67E-01	2.20E-02	annual	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	1.30	28571	25	0.052	787	3.67E-01	1.36E-02	annual	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	133333	10	0.020	412	2.36E-03	8.22E-05	annual	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	2.10	28571	25	0.084	787	2.36E-03	1.41E-04	annual	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	1.30	28571	25	0.052	787	2.36E-03	8.75E-05	annual	Above Average	MOVES EF
P3-Q1F	SC	SC-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	133333	10	0.020	412	4.95E-08	1.72E-09	annual	Above Average	MOVES EF
P3-Q1H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	2.10	28571	25	0.084	787	9.90E-08	5.93E-09	annual	Above Average	MOVES EF
P3-Q2H	SC	SC-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	1.30	28571	25	0.052	787	9.90E-08	3.67E-09	annual	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)																
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM	PM	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM	PM	Q-HT-E	2.00	28571	25	0.080	787	3.00E-02	1.71E-03	annual	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM	PM	Q-HT	0.80	28571	25	0.032	787	3.00E-02	6.84E-04	annual	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	PM2.5	PM2.5	Q-FL	0.20	133333	10	0.020	412	1.50E-02	5.23E-04	annual	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2.00	28571	25	0.080	787	3.00E-02	1.71E-03	annual	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.80	28571	25	0.032	787	3.00E-02	6.84E-04	annual	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	NO_2	10102-44-0	Q-FL	0.20	133333	10	0.020	412	3.00E-01	1.05E-02	annual	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-HT-E	2.00	28571	25	0.080	787	2.60E+00	1.48E-01	annual	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-HT	0.80	28571	25	0.032	787	2.60E+00	5.93E-02	annual	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	SO_2	7446-09-5	Q-FL	0.20	133333	10	0.020	412	9.30E-01	3.24E-02	annual	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-HT-E	2.00	28571	25	0.080	787	3.67E-01	2.09E-02	annual	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-HT	0.80	28571	25	0.032	787	3.67E-01	8.37E-03	annual	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzene	71-43-2	Q-FL	0.20	133333	10	0.020	412	2.36E-03	8.22E-05	annual	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-HT-E	2.00	28571	25	0.080	787	2.36E-03	1.35E-04	annual	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-HT	0.80	28571	25	0.032	787	2.36E-03	5.38E-05	annual	Above Average	MOVES EF
P4-Q1F	SD	SD-Quarry Operations	Tailpipe emissions from limestone front-end loader travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FL	0.20	133333	10	0.020	412	4.95E-08	1.72E-09	annual	Above Average	MOVES EF
P4-Q1H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-HT-E	2.00	28571	25	0.080	787	9.90E-08	5.65E-09	annual	Above Average	MOVES EF
P4-Q2H	SD	SD-Quarry Operations	Tailpipe emissions from limestone haul trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-HT	0.80	28571	25	0.032	787	9.90E-08	2.26E-09	annual	Above Average	MOVES EF

Notes:
1. Determined based on Information provided by Nelson.
2. Averaging periods were determined based on relevant Canadian Ambient Air Quality Standard (CAAQS)and Ontario Ambient Air Quality Criteria (AAQC) values.

Calculation Sheet 9D
Tailpipe Idling Emissions

Tailpipe Idling Emission Rate [g/s] = Number of Vehicles x Distance Travelled per Vehicle [km] x 0.621 [miles/ km] Speed [miles/h] x Idling Emission Factor [g/VMT] x Idling Time [h] / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

Source ID	Scenario	Operation	Source Description	Contaminant	CAS No.	Trip ID	Vehicle Type	Number of Vehicles [Note 1]	Idling "Speed" (miles/h) [Note 2]	Idling Time (h) [Note 1]	Idling Emission Factor (g/VMT) [Note 3]	Emission Rate (g/s)	Averaging Period [Note 4]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant															
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	9	2.5	0.08	3.59E+01	1.87E-02	1 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	NO_2	10102-44-0	HMA-AC	HMA/AC truck	1	2.5	0.25	3.01E+01	5.23E-03	1 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	NO_2	10102-44-0	HMA-SHIPP	Aggregate/Limestone/RAP truck	7	2.5	0.25	3.59E+01	4.12E-02	1 hr	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	9	2.5	0.08	1.25E-01	6.52E-05	1 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	SO_2	7446-09-5	HMA-AC	HMA/AC truck	1	2.5	0.25	1.12E-01	1.95E-05	1 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	SO_2	7446-09-5	HMA-SHIPP	Aggregate/Limestone/RAP truck	7	2.5	0.25	1.25E-01	1.43E-04	1 hr	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations															
CR1Ti	HMA	HMA Third-party crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	8	2.5	0.08	3.59E+01	1.57E-02	1 hr	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-party crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	8	2.5	0.08	1.25E-01	5.47E-05	1 hr	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations															
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	17	2.5	0.17	3.59E+01	6.92E-02	1 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	17	2.5	0.08	3.59E+01	3.53E-02	1 hr	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	17	2.5	0.17	1.25E-01	2.41E-04	1 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	17	2.5	0.08	1.25E-01	1.23E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)															
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	3.59E+01	2.08E-01	1 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	3.59E+01	3.53E-02	1 hr	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	1.25E-01	7.22E-04	1 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	1.25E-01	1.23E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)															
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	3.59E+01	2.08E-01	1 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	3.59E+01	3.53E-02	1 hr	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	1.25E-01	7.22E-04	1 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	1.25E-01	1.23E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)															
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	3.59E+01	2.08E-01	1 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	3.59E+01	3.53E-02	1 hr	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	1.25E-01	7.22E-04	1 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	1.25E-01	1.23E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)															
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.17	3.59E+01	2.08E-01	1 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	3.59E+01	3.53E-02	1 hr	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.08	1.25E-01	3.61E-04	1 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	17	2.5	0.08	1.25E-01	1.23E-04	1 hr	Above Average	MOVES EF

Source ID	Scenario	Operation	Source Description	Contaminant	CAS No.	Trip ID	Vehicle Type	Number of Vehicles [Note 1]	Idling "Speed" (miles/h) [Note 2]	Idling Time (h) [Note 1]	Idling Emission Factor (g/VMT) [Note 3]	Emission Rate (g/s)	Averaging Period [Note 4]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant															
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	3.75E+00	6.17E-04	24 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	PM	PM	HMA-AC	HMA/AC truck	3	2.5	0.25	3.18E+00	5.75E-05	24 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	PM	PM	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	3.75E+00	1.36E-03	24 hr	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	1.86E+00	3.05E-04	24 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	PM2.5	PM2.5	HMA-AC	HMA/AC truck	3	2.5	0.25	1.61E+00	2.90E-05	24 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	PM2.5	PM2.5	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	1.86E+00	6.72E-04	24 hr	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	3.59E+01	5.90E-03	24 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	NO_2	10102-44-0	HMA-AC	HMA/AC truck	3	2.5	0.25	3.01E+01	5.44E-04	24 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	NO_2	10102-44-0	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	3.59E+01	1.30E-02	24 hr	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	1.25E-01	2.05E-05	24 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	SO_2	7446-09-5	HMA-AC	HMA/AC truck	3	2.5	0.25	1.12E-01	2.03E-06	24 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	SO_2	7446-09-5	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	1.25E-01	4.51E-05	24 hr	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	6.80E-02	1.12E-05	24 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	Benzene	71-43-2	HMA-AC	HMA/AC truck	3	2.5	0.25	8.93E-02	1.62E-06	24 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	Benzene	71-43-2	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	6.80E-02	2.46E-05	24 hr	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	3.00E-04	4.94E-08	24 hr	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	HMA-AC	HMA/AC truck	3	2.5	0.25	2.70E-04	4.89E-09	24 hr	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	Benzo(a)pyrene	50-32-8	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	3.00E-04	1.09E-07	24 hr	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations															
CR1Ti	HMA	HMA Third-Party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	3.75E+00	8.22E-04	24 hr	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-Party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	1.86E+00	4.07E-04	24 hr	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-Party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	3.59E+01	7.86E-03	24 hr	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-Party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	1.25E-01	2.73E-05	24 hr	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-Party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	6.80E-02	1.49E-05	24 hr	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-Party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	3.00E-04	6.58E-08	24 hr	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations															
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	3.75E+00	3.32E-03	24 hr	Above Average	MOVES EF

Calculation Sheet 9D
Tailpipe Idling Emissions

QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	1.83E-03	24 hr	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	1.86E+00	1.64E-03	24 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	9.04E-04	24 hr	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	3.59E+01	3.17E-02	24 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	1.75E-02	24 hr	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	1.25E-01	1.10E-04	24 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	6.08E-05	24 hr	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	6.80E-02	6.01E-05	24 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	3.31E-05	24 hr	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	3.00E-04	2.65E-07	24 hr	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	1.46E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)															
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	4.83E-03	24 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	HMA/AC truck	202	2.5	0.08	3.18E+00	1.55E-03	24 hr	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	2.39E-03	24 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	HMA/AC truck	202	2.5	0.08	1.61E+00	7.82E-04	24 hr	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	4.61E-02	24 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	HMA/AC truck	202	2.5	0.08	3.01E+01	1.47E-02	24 hr	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	1.60E-04	24 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	HMA/AC truck	202	2.5	0.08	1.12E-01	5.46E-05	24 hr	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	8.74E-05	24 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	HMA/AC truck	202	2.5	0.08	8.93E-02	4.35E-05	24 hr	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	3.86E-07	24 hr	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	HMA/AC truck	202	2.5	0.08	2.70E-04	1.32E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)															
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	4.83E-03	24 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	1.83E-03	24 hr	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	2.39E-03	24 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	9.04E-04	24 hr	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	4.61E-02	24 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	1.75E-02	24 hr	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	1.60E-04	24 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	6.08E-05	24 hr	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	8.74E-05	24 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	3.31E-05	24 hr	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	3.86E-07	24 hr	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	1.46E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)															
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	4.83E-03	24 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	1.83E-03	24 hr	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	2.39E-03	24 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	9.04E-04	24 hr	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	4.61E-02	24 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	1.75E-02	24 hr	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	1.60E-04	24 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	6.08E-05	24 hr	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	8.74E-05	24 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	3.31E-05	24 hr	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	3.86E-07	24 hr	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	1.46E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)															
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	4.83E-03	24 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	1.83E-03	24 hr	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	2.39E-03	24 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	9.04E-04	24 hr	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	4.61E-02	24 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	1.75E-02	24 hr	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	1.60E-04	24 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	6.08E-05	24 hr	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	8.74E-05	24 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	3.31E-05	24 hr	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	3.86E-07	24 hr	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	1.46E-07	24 hr	Above Average	MOVES EF

Calculation Sheet 9D
Tailpipe Idling Emissions

Source ID	Scenario	Operation	Source Description	Contaminant	CAS No.	Trip ID	Vehicle Type	Number of Vehicles [Note 1]	Idling "Speed" (miles/h) [Note 2]	Idling Time (h) [Note 1]	Idling Emission Factor (g/VMT) [Note 3]	Emission Rate (g/s)	Averaging Period [Note 4]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant															
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	3.75E+00	1.69E-06	annual	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	PM	PM	HMA-AC	HMA/AC truck	3	2.5	0.25	3.18E+00	1.58E-07	annual	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	PM	PM	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	3.75E+00	3.72E-06	annual	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	1.86E+00	8.36E-07	annual	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	PM2.5	PM2.5	HMA-AC	HMA/AC truck	3	2.5	0.25	1.61E+00	7.95E-08	annual	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	PM2.5	PM2.5	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	1.86E+00	1.84E-06	annual	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	3.59E+01	1.62E-05	annual	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	NO_2	10102-44-0	HMA-AC	HMA/AC truck	3	2.5	0.25	3.01E+01	1.49E-06	annual	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	NO_2	10102-44-0	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	3.59E+01	3.55E-05	annual	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	1.25E-01	5.62E-08	annual	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	SO_2	7446-09-5	HMA-AC	HMA/AC truck	3	2.5	0.25	1.12E-01	5.56E-09	annual	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	SO_2	7446-09-5	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	1.25E-01	1.24E-07	annual	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	6.80E-02	3.06E-08	annual	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	Benzene	71-43-2	HMA-AC	HMA/AC truck	3	2.5	0.25	8.93E-02	4.43E-09	annual	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	Benzene	71-43-2	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	6.80E-02	6.74E-08	annual	Above Average	MOVES EF
TP1I	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	68	2.5	0.08	3.00E-04	1.35E-10	annual	Above Average	MOVES EF
TP2I	HMA	HMA Production	Tailpipe emissions from AC delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	HMA-AC	HMA/AC truck	3	2.5	0.25	2.70E-04	1.34E-11	annual	Above Average	MOVES EF
TP3I	HMA	HMA Production	Tailpipe emissions from HMA trucks idling during loading	Benzo(a)pyrene	50-32-8	HMA-SHIPP	Aggregate/Limestone/RAP truck	50	2.5	0.25	3.00E-04	2.98E-10	annual	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations															
CR1Ti	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	3.75E+00	2.25E-06	annual	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	1.86E+00	1.12E-06	annual	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	3.59E+01	2.15E-05	annual	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	1.25E-01	7.49E-08	annual	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	6.80E-02	4.08E-08	annual	Above Average	MOVES EF
CR1Ti	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	91	2.5	0.08	3.00E-04	1.80E-10	annual	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations															
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	3.75E+00	9.09E-06	annual	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	5.01E-06	annual	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	1.86E+00	4.50E-06	annual	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	2.48E-06	annual	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	3.59E+01	8.69E-05	annual	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	4.79E-05	annual	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	1.25E-01	3.02E-07	annual	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	1.66E-07	annual	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	6.80E-02	1.65E-07	annual	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	9.07E-08	annual	Above Average	MOVES EF
Q1Ti	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	183	2.5	0.17	3.00E-04	7.27E-10	annual	Above Average	MOVES EF
QTi-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	4.01E-10	annual	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)															
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	1.32E-05	annual	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	HMA/AC truck	202	2.5	0.08	3.18E+00	4.24E-06	annual	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	6.54E-06	annual	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	HMA/AC truck	202	2.5	0.08	1.61E+00	2.14E-06	annual	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	1.26E-04	annual	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	HMA/AC truck	202	2.5	0.08	3.01E+01	4.02E-05	annual	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	4.40E-07	annual	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	HMA/AC truck	202	2.5	0.08	1.12E-01	1.50E-07	annual	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	2.40E-07	annual	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	HMA/AC truck	202	2.5	0.08	8.93E-02	1.19E-07	annual	Above Average	MOVES EF
P1-Q1Ti	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	1.06E-09	annual	Above Average	MOVES EF
P1-QTi-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	HMA/AC truck	202	2.5	0.08	2.70E-04	3.61E-10	annual	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)															
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	1.32E-05	annual	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	5.01E-06	annual	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	6.54E-06	annual	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	2.48E-06	annual	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	1.26E-04	annual	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	4.79E-05	annual	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	4.40E-07	annual	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	1.66E-07	annual	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	2.40E-07	annual	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	9.07E-08	annual	Above Average	MOVES EF
P2-Q1Ti	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	1.06E-09	annual	Above Average	MOVES EF
P2-QTi-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	4.01E-10	annual	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)															
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	1.32E-05	annual	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	5.01E-06	annual	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	6.54E-06	annual	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	2.48E-06	annual	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	1.26E-04	annual	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	4.79E-05	annual	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	4.40E-07	annual	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	1.66E-07	annual	Above Average	MOVES EF

Calculation Sheet 9D
Tailpipe Idling Emissions

P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	2.40E-07	annual	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	9.07E-08	annual	Above Average	MOVES EF
P3-Q1Ti	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	1.06E-09	annual	Above Average	MOVES EF
P3-QTi-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	4.01E-10	annual	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)															
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.75E+00	1.32E-05	annual	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.75E+00	5.01E-06	annual	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.86E+00	6.54E-06	annual	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.86E+00	2.48E-06	annual	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.59E+01	1.26E-04	annual	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.59E+01	4.79E-05	annual	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	1.25E-01	4.40E-07	annual	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	1.25E-01	1.66E-07	annual	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	6.80E-02	2.40E-07	annual	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	6.80E-02	9.07E-08	annual	Above Average	MOVES EF
P4-Q2Ti	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks idling during loading	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	267	2.5	0.17	3.00E-04	1.06E-09	annual	Above Average	MOVES EF
P4-QTi-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks idling during unloading	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	202	2.5	0.08	3.00E-04	4.01E-10	annual	Above Average	MOVES EF

Notes:
1. Determined based on Information provided by Nelson.
2. This speed was determined based on the lowest speed bin in MOVES2014a.
3. These emission factors were estimated using MOVES2014a.
4. Averaging periods were determined based on relevant Canadian Ambient Air Quality Standard (CAAQS)and Ontario Ambient Air Quality Criteria (AAQC) values.

Calculation Sheet 9C
Tailpipe Travelling Emissions

Tailpipe Travelling Emission Rate [g/s] = Number of Vehicles x Distance Travelled per Vehicles [km] x 0.621 [miles/ km] x Travelling Emission Factor [g/VMT] / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

Source ID	Scenario		Source Description	Contaminant	CAS No.	Trip ID	Vehicle Type	Trip Distance (km) [Note 1]	Number of Vehicles [Note 1]	Travelling Emission Factor (g/VMT) [Note 2]	Emission Rate (g/s)	Averaging Period [Note 3]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant														
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	9	9.41E+00	3.81E-02	1 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-AC	HMA/AC truck	2.44	1	8.41E+00	3.54E-03	1 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	NO_2	10102-44-0	HMA-SHIPP	HMA/AC truck	2.3	7	8.41E+00	2.21E-02	1 hr	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	9	3.43E-02	1.39E-04	1 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-AC	HMA/AC truck	2.44	1	3.30E-02	1.39E-05	1 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	SO_2	7446-09-5	HMA-SHIPP	HMA/AC truck	2.3	7	3.30E-02	8.69E-05	1 hr	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations														
CR1Tt	HMA	HMA Third-party crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	8	9.41E+00	3.05E-02	1 hr	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	SO2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	8	3.43E-02	1.11E-04	1 hr	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations														
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	17	9.41E+00	9.20E-02	1 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	17	9.41E+00	1.27E-01	1 hr	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	17	3.43E-02	3.35E-04	1 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	17	3.43E-02	4.62E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)														
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	9.41E+00	2.76E-01	1 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	17	9.41E+00	1.21E-01	1 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	1.3	17	9.41E+00	3.59E-02	1 hr	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	3.43E-02	1.01E-03	1 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	17	3.43E-02	4.40E-04	1 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	17	3.43E-02	1.31E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)														
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	9.41E+00	2.76E-01	1 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	17	9.41E+00	1.45E-01	1 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	0.74	17	9.41E+00	2.04E-02	1 hr	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	3.43E-02	1.01E-03	1 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	17	3.43E-02	5.29E-04	1 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	0.74	17	3.43E-02	7.44E-05	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)														
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	9.41E+00	2.76E-01	1 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	17	9.41E+00	1.52E-01	1 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	1.3	17	9.41E+00	3.59E-02	1 hr	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	3.43E-02	1.01E-03	1 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	17	3.43E-02	5.53E-04	1 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	17	3.43E-02	1.31E-04	1 hr	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)														
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	9.41E+00	2.76E-01	1 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	17	9.41E+00	1.49E-01	1 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	0.8	17	9.41E+00	2.21E-02	1 hr	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	50	3.43E-02	1.01E-03	1 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	17	3.43E-02	5.43E-04	1 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	0.8	17	3.43E-02	8.04E-05	1 hr	Above Average	MOVES EF

Source ID	Scenario		Source Description	Contaminant	CAS No.	Trip ID	Vehicle Type	Trip Distance (km) [Note 1]	Number of Vehicles [Note 1]	Travelling Emission Factor (g/VMT) [Note 2]	Emission Rate (g/s)	Averaging Period [Note 3]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant														
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	68	1.88E+00	2.39E-03	24 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	PM	PM	HMA-AC	HMA/AC truck	2.44	3	1.59E+00	6.98E-05	24 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	PM	PM	HMA-SHIPP	HMA/AC truck	2.3	50	1.59E+00	1.32E-03	24 hr	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	68	6.09E-01	7.76E-04	24 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	PM2.5	PM2.5	HMA-AC	HMA/AC truck	2.44	3	5.34E-01	2.34E-05	24 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	PM2.5	PM2.5	HMA-SHIPP	HMA/AC truck	2.3	50	5.34E-01	4.42E-04	24 hr	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	68	9.41E+00	1.20E-02	24 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-AC	HMA/AC truck	2.44	3	8.41E+00	3.69E-04	24 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	NO_2	10102-44-0	HMA-SHIPP	HMA/AC truck	2.3	50	8.41E+00	6.96E-03	24 hr	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	68	3.43E-02	4.37E-05	24 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-AC	HMA/AC truck	2.44	3	3.30E-02	1.45E-06	24 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	SO_2	7446-09-5	HMA-SHIPP	HMA/AC truck	2.3	50	3.30E-02	2.73E-05	24 hr	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	68	1.95E-02	2.48E-05	24 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	Benzene	71-43-2	HMA-AC	HMA/AC truck	2.44	3	2.81E-02	1.23E-06	24 hr	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	Benzene	71-43-2	HMA-SHIPP	HMA/AC truck	2.3	50	2.81E-02	2.32E-05	24 hr	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	68	7.77E-05	9.90E-08	24 hr	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-AC	HMA/AC truck	2.44	3	7.09E-05	3.11E-09	24 hr	Above Average	MOVES EF

Calculation Sheet 9C
Tailpipe Travelling Emissions

TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-SHIPP	HMA/AC truck	2.3	50	7.09E-05	5.86E-08	24 hr	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations														
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	91	1.88E+00	3.04E-03	24 hr	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	91	6.09E-01	9.87E-04	24 hr	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	91	9.41E+00	1.53E-02	24 hr	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	91	3.43E-02	5.56E-05	24 hr	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	91	1.95E-02	3.16E-05	24 hr	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	91	7.77E-05	1.26E-07	24 hr	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations														
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	183	1.88E+00	8.42E-03	24 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	202	1.88E+00	1.25E-02	24 hr	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	183	6.09E-01	2.73E-03	24 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	202	6.09E-01	4.07E-03	24 hr	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	183	9.41E+00	4.22E-02	24 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	202	9.41E+00	6.29E-02	24 hr	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	183	3.43E-02	1.54E-04	24 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	202	3.43E-02	2.29E-04	24 hr	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	183	1.95E-02	8.73E-05	24 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	202	1.95E-02	1.30E-04	24 hr	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	183	7.77E-05	3.48E-07	24 hr	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	202	7.77E-05	5.19E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)														
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.88E+00	1.22E-02	24 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	202	1.88E+00	1.19E-02	24 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	1.88E+00	3.55E-03	24 hr	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	6.09E-01	3.97E-03	24 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	202	6.09E-01	3.87E-03	24 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	6.09E-01	1.15E-03	24 hr	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	9.41E+00	6.13E-02	24 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	202	9.41E+00	5.99E-02	24 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	9.41E+00	1.78E-02	24 hr	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	3.43E-02	2.23E-04	24 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	202	3.43E-02	2.18E-04	24 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	3.43E-02	6.47E-05	24 hr	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.95E-02	1.27E-04	24 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	202	1.95E-02	1.24E-04	24 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	1.95E-02	3.68E-05	24 hr	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	7.77E-05	5.06E-07	24 hr	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	202	7.77E-05	4.94E-07	24 hr	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	7.77E-05	1.47E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)														
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.88E+00	1.22E-02	24 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	202	1.88E+00	1.43E-02	24 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	0.74	202	1.88E+00	2.02E-03	24 hr	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	6.09E-01	3.97E-03	24 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	202	6.09E-01	4.65E-03	24 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	0.74	202	6.09E-01	6.54E-04	24 hr	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	9.41E+00	6.13E-02	24 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	202	9.41E+00	7.19E-02	24 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	0.74	202	9.41E+00	1.01E-02	24 hr	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	3.43E-02	2.23E-04	24 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	202	3.43E-02	2.62E-04	24 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	0.74	202	3.43E-02	3.68E-05	24 hr	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.95E-02	1.27E-04	24 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	202	1.95E-02	1.49E-04	24 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	0.74	202	1.95E-02	2.09E-05	24 hr	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	7.77E-05	5.06E-07	24 hr	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	202	7.77E-05	5.93E-07	24 hr	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	0.74	202	7.77E-05	8.35E-08	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)														
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.88E+00	1.22E-02	24 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	202	1.88E+00	1.50E-02	24 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	1.88E+00	3.55E-03	24 hr	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	6.09E-01	3.97E-03	24 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	202	6.09E-01	4.86E-03	24 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	6.09E-01	1.15E-03	24 hr	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	9.41E+00	6.13E-02	24 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	202	9.41E+00	7.52E-02	24 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	9.41E+00	1.78E-02	24 hr	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	3.43E-02	2.23E-04	24 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	202	3.43E-02	2.74E-04	24 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	3.43E-02	6.47E-05	24 hr	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.95E-02	1.27E-04	24 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	202	1.95E-02	1.56E-04	24 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	1.95E-02	3.68E-05	24 hr	Above Average	MOVES EF

Calculation Sheet 9C
Tailpipe Travelling Emissions

P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	7.77E-05	5.06E-07	24 hr	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	202	7.77E-05	6.20E-07	24 hr	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	1.3	202	7.77E-05	1.47E-07	24 hr	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)														
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.88E+00	1.22E-02	24 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	202	1.88E+00	1.47E-02	24 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	0.8	202	1.88E+00	2.18E-03	24 hr	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	6.09E-01	3.97E-03	24 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	202	6.09E-01	4.77E-03	24 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	0.8	202	6.09E-01	7.07E-04	24 hr	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	9.41E+00	6.13E-02	24 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	202	9.41E+00	7.38E-02	24 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	0.8	202	9.41E+00	1.09E-02	24 hr	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	3.43E-02	2.23E-04	24 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	202	3.43E-02	2.69E-04	24 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	0.8	202	3.43E-02	3.98E-05	24 hr	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	1.95E-02	1.27E-04	24 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	202	1.95E-02	1.53E-04	24 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	0.8	202	1.95E-02	2.26E-05	24 hr	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	267	7.77E-05	5.06E-07	24 hr	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	202	7.77E-05	6.09E-07	24 hr	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	0.8	202	7.77E-05	9.02E-08	24 hr	Above Average	MOVES EF

Source ID	Scenario		Source Description	Contaminant	CAS No.	Trip ID	Vehicle Type	Trip Distance (km) [Note 1]	Number of Vehicles [Note 1]	Travelling Emission Factor (g/VMT) [Note 2]	Emission Rate (g/s)	Averaging Period [Note 3]	Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant														
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	4773	1.88E+00	4.59E-04	annual	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	PM	PM	HMA-AC	HMA/AC truck	2.44	700	1.59E+00	5.35E-05	annual	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	PM	PM	HMA-SHIPP	HMA/AC truck	2.3	3500	1.59E+00	2.52E-04	annual	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	4773	6.09E-01	1.49E-04	annual	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	PM2.5	PM2.5	HMA-AC	HMA/AC truck	2.44	700	5.34E-01	1.80E-05	annual	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	PM2.5	PM2.5	HMA-SHIPP	HMA/AC truck	2.3	3500	5.34E-01	8.48E-05	annual	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	4773	9.41E+00	2.30E-03	annual	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-AC	HMA/AC truck	2.44	700	8.41E+00	2.83E-04	annual	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	NO_2	10102-44-0	HMA-SHIPP	HMA/AC truck	2.3	3500	8.41E+00	1.33E-03	annual	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	4773	3.43E-02	8.38E-06	annual	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	SO_2	7446-09-5	HMA-AC	HMA/AC truck	2.44	700	3.30E-02	1.11E-06	annual	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	SO_2	7446-09-5	HMA-SHIPP	HMA/AC truck	2.3	3500	3.30E-02	5.24E-06	annual	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	4773	1.95E-02	4.76E-06	annual	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	Benzene	71-43-2	HMA-AC	HMA/AC truck	2.44	700	2.81E-02	9.45E-07	annual	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	Benzene	71-43-2	HMA-SHIPP	HMA/AC truck	2.3	3500	2.81E-02	4.45E-06	annual	Above Average	MOVES EF
TP1T	HMA	HMA Production	Tailpipe emissions from aggregate delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	2.6	4773	7.77E-05	1.90E-08	annual	Above Average	MOVES EF
TP2T	HMA	HMA Production	Tailpipe emissions from AC delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-AC	HMA/AC truck	2.44	700	7.09E-05	2.39E-09	annual	Above Average	MOVES EF
TP3T	HMA	HMA Production	Tailpipe emissions from HMA trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-SHIPP	HMA/AC truck	2.3	3500	7.09E-05	1.12E-08	annual	Above Average	MOVES EF
HMA Plant Third Party Mobile Crushing Operations														
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	PM	PM	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	2727	1.88E+00	2.50E-04	annual	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	PM2.5	PM2.5	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	2727	6.09E-01	8.11E-05	annual	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	NO_2	10102-44-0	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	2727	9.41E+00	1.25E-03	annual	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	SO2	7446-09-5	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	2727	3.43E-02	4.57E-06	annual	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	Benzene	71-43-2	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	2727	1.95E-02	2.60E-06	annual	Above Average	MOVES EF
CR1Tt	HMA	HMA Third-party Crushing	Tailpipe emissions from RAP delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	HMA-DEL	Aggregate/Limestone/RAP truck	2.48	2727	7.77E-05	1.03E-08	annual	Above Average	MOVES EF
Existing Quarry Operations - Crushing Operations														
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	33000	1.88E+00	4.15E-03	annual	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	37370	1.88E+00	6.36E-03	annual	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	33000	6.09E-01	1.35E-03	annual	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	37370	6.09E-01	2.06E-03	annual	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	33000	9.41E+00	2.08E-02	annual	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	37370	9.41E+00	3.19E-02	annual	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	33000	3.43E-02	7.57E-05	annual	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	37370	3.43E-02	1.16E-04	annual	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	33000	1.95E-02	4.31E-05	annual	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	37370	1.95E-02	6.60E-05	annual	Above Average	MOVES EF
Q1Tt	SE	SE-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	33000	7.77E-05	1.72E-07	annual	Above Average	MOVES EF
QTt-FILL	SE	SE-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	4.6	37370	7.77E-05	2.63E-07	annual	Above Average	MOVES EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)														
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.88E+00	8.39E-03	annual	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	37370	1.88E+00	6.06E-03	annual	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	1.88E+00	1.80E-03	annual	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	6.09E-01	2.72E-03	annual	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	37370	6.09E-01	1.96E-03	annual	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	6.09E-01	5.83E-04	annual	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	9.41E+00	4.20E-02	annual	Above Average	MOVES EF

Calculation Sheet 9C
Tailpipe Travelling Emissions

P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	37370	9.41E+00	3.03E-02	annual	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	9.41E+00	9.00E-03	annual	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	3.43E-02	1.53E-04	annual	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	37370	3.43E-02	1.10E-04	annual	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	3.43E-02	3.28E-05	annual	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.95E-02	8.70E-05	annual	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	37370	1.95E-02	6.28E-05	annual	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	1.95E-02	1.86E-05	annual	Above Average	MOVES EF
P1-Q1Tt	SA	SA-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	7.77E-05	3.47E-07	annual	Above Average	MOVES EF
P1-Q1Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	4.38	37370	7.77E-05	2.50E-07	annual	Above Average	MOVES EF
P1-Q2Tt-FILL	SA	SA-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	7.77E-05	7.43E-08	annual	Above Average	MOVES EF
Quarry Operations - Scenario B (Phase 3)														
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.88E+00	8.39E-03	annual	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	37370	1.88E+00	7.27E-03	annual	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	0.74	37370	1.88E+00	1.02E-03	annual	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	6.09E-01	2.72E-03	annual	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	37370	6.09E-01	2.36E-03	annual	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	0.74	37370	6.09E-01	3.32E-04	annual	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	9.41E+00	4.20E-02	annual	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	37370	9.41E+00	3.64E-02	annual	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	0.74	37370	9.41E+00	5.13E-03	annual	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	3.43E-02	1.53E-04	annual	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	37370	3.43E-02	1.33E-04	annual	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	0.74	37370	3.43E-02	1.87E-05	annual	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.95E-02	8.70E-05	annual	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	37370	1.95E-02	7.55E-05	annual	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	0.74	37370	1.95E-02	1.06E-05	annual	Above Average	MOVES EF
P2-Q1Tt	SB	SB-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	7.77E-05	3.47E-07	annual	Above Average	MOVES EF
P2-Q1Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	5.26	37370	7.77E-05	3.01E-07	annual	Above Average	MOVES EF
P2-Q2Tt-FILL	SB	SB-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	0.74	37370	7.77E-05	4.23E-08	annual	Above Average	MOVES EF
Quarry Operations - Scenario C (Phase 4 & 6)														
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.88E+00	8.39E-03	annual	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	37370	1.88E+00	7.61E-03	annual	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	1.88E+00	1.80E-03	annual	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	6.09E-01	2.72E-03	annual	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	37370	6.09E-01	2.46E-03	annual	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	6.09E-01	5.83E-04	annual	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	9.41E+00	4.20E-02	annual	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	37370	9.41E+00	3.81E-02	annual	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	9.41E+00	9.00E-03	annual	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	3.43E-02	1.53E-04	annual	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	37370	3.43E-02	1.39E-04	annual	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	3.43E-02	3.28E-05	annual	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.95E-02	8.70E-05	annual	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	37370	1.95E-02	7.89E-05	annual	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	1.95E-02	1.86E-05	annual	Above Average	MOVES EF
P3-Q1Tt	SC	SC-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	7.77E-05	3.47E-07	annual	Above Average	MOVES EF
P3-Q1Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	5.5	37370	7.77E-05	3.14E-07	annual	Above Average	MOVES EF
P3-Q2Tt-FILL	SC	SC-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	1.3	37370	7.77E-05	7.43E-08	annual	Above Average	MOVES EF
Quarry Operations - Scenario D (Phase 5)														
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM	PM	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.88E+00	8.39E-03	annual	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM	PM	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	37370	1.88E+00	7.47E-03	annual	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM	PM	Q-FILL	Aggregate/Limestone/RAP truck	0.8	37370	1.88E+00	1.11E-03	annual	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	PM2.5	PM2.5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	6.09E-01	2.72E-03	annual	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	37370	6.09E-01	2.42E-03	annual	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	PM2.5	PM2.5	Q-FILL	Aggregate/Limestone/RAP truck	0.8	37370	6.09E-01	3.59E-04	annual	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	NO_2	10102-44-0	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	9.41E+00	4.20E-02	annual	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	NO_2	10102-44-0	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	37370	9.41E+00	3.74E-02	annual	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	NO_2	10102-44-0	Q-FILL	Aggregate/Limestone/RAP truck	0.8	37370	9.41E+00	5.54E-03	annual	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	SO_2	7446-09-5	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	3.43E-02	1.53E-04	annual	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	SO_2	7446-09-5	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	37370	3.43E-02	1.36E-04	annual	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	SO_2	7446-09-5	Q-FILL	Aggregate/Limestone/RAP truck	0.8	37370	3.43E-02	2.02E-05	annual	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzene	71-43-2	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	1.95E-02	8.70E-05	annual	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzene	71-43-2	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	37370	1.95E-02	7.75E-05	annual	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzene	71-43-2	Q-FILL	Aggregate/Limestone/RAP truck	0.8	37370	1.95E-02	1.15E-05	annual	Above Average	MOVES EF
P4-Q1Tt	SD	SD-Quarry Operations	Tailpipe emissions from processed limestone shipping trucks travelling on onsite road	Benzo(a)pyrene	50-32-8	Q-SHIPP	Aggregate/Limestone/RAP truck	3.4	66667	7.77E-05	3.47E-07	annual	Above Average	MOVES EF
P4-Q1Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (existing quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL-E	Aggregate/Limestone/RAP truck	5.4	37370	7.77E-05	3.09E-07	annual	Above Average	MOVES EF
P4-Q2Tt-FILL	SD	SD-Quarry Operations	Tailpipe emissions from fill delivery trucks travelling on onsite road (extension quarry road)	Benzo(a)pyrene	50-32-8	Q-FILL	Aggregate/Limestone/RAP truck	0.8	37370	7.77E-05	4.57E-08	annual	Above Average	MOVES EF

Notes:
1. Determined based on Information provided by Nelson.
2. These emission factors were estimated using MOVES2014a.
3. Averaging periods were determined based on relevant Canadian Ambient Air Quality Standard (CAAQS)and Ontario Ambient Air Quality Criteria (AAQC) values.

Calculation Sheet 9B
Paved Road Dust Emissions

Road Dust Emission Rate [g/s] = E [g/VMT] x Number of Vehicles x Distance Travelled [miles] / Averaging Period Converted to seconds [years to seconds/days to seconds/hours to seconds]

Paved Road Emission Factor E (g/VMT) = k * ((sL)^0.91 * (W)^1.02) [Note 1]

E = the particulate emission factor [g/VMT]
k = particulate size multiplier [g/VMT]
sL = silt loading [g/m^2]
W = average weight of vehicle [tons]

Roadway Average Daily Traffic (ADT)	sL
<500	0.6
50-5000	0.2
5000-10000	0.06
>10000	0.03

Source ID	Scenario	Operation	Source Description	Contaminant	CAS Number	Trip ID	Averaging Period [Note 2]	k (g/VMT) [Note 1]	ADT	Number of Vehicles [Note 3]	Distance Travelled (miles) [Note 4]	sL (g/m^2) [Note 1]	W (tons) [Note 1]	E (g/VMT) [Note 1]	Control Efficiency (%) [Note 5]	Emission Rate (g/s)	US EPA AP42 Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant																		
RP1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite paved road	PM	PM	HMA-DEL	24 hr	5.24	<500	68	1.243	0.6	27.56	9.69E+01	50%	4.75E-02	A	EF
RP1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-DEL	24 hr	0.25	<500	68	1.243	0.6	27.56	4.62E+00	50%	2.27E-03	D	EF
RP2	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite paved road	PM	PM	HMA-AC	24 hr	5.24	<500	3	1.243	0.6	38.58	1.37E+02	50%	2.46E-03	A	EF
RP2	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-AC	24 hr	0.25	<500	3	1.243	0.6	38.58	6.52E+00	50%	1.17E-04	D	EF
RP3	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite paved road	PM	PM	HMA-SHIPP	24 hr	5.24	<500	50	1.243	0.6	38.58	1.37E+02	50%	4.91E-02	A	EF
RP3	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-SHIPP	24 hr	0.25	<500	50	1.243	0.6	38.58	6.52E+00	50%	2.34E-03	D	EF
HMA Plant Third Party Mobile Crushing Operations																		
CR1Rp	HMA	HMA Third-party Crushing	Road dust emissions from RAP delivery trucks travelling on onsite paved road	PM	PM	HMA-DEL	24 hr	5.24	<500	91	1.243	0.6	27.56	9.69E+01	50%	6.34E-02	A	EF
CR1Rp	HMA	HMA Third-party Crushing	Road dust emissions from RAP delivery trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-DEL	24 hr	0.25	<500	91	1.243	0.6	27.56	4.62E+00	50%	3.02E-03	D	EF
Existing Quarry Operations - Crushing Operations																		
Q1Rp	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	24 hr	5.24	<500	183	1.243	0.6	29.76	1.05E+02	50%	1.38E-01	A	EF
Q1Rp	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	24 hr	0.25	<500	183	1.243	0.6	29.76	5.00E+00	50%	6.60E-03	D	EF
QRp-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	24 hr	5.24	<500	202	1.243	0.6	27.56	9.69E+01	50%	1.41E-01	A	EF
QRp-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	24 hr	0.25	<500	202	1.243	0.6	27.56	4.62E+00	50%	6.72E-03	D	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																		
P1-Q1Rp	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	24 hr	5.24	<500	267	1.243	0.6	29.76	1.05E+02	50%	2.01E-01	A	EF
P1-Q1Rp	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	24 hr	0.25	<500	267	1.243	0.6	29.76	5.00E+00	50%	9.59E-03	D	EF
P1-QRp-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	24 hr	5.24	<500	202	1.243	0.6	27.56	9.69E+01	50%	1.41E-01	A	EF
P1-QRp-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	24 hr	0.25	<500	202	1.243	0.6	27.56	4.62E+00	50%	6.72E-03	D	EF
Quarry Operations - Scenario B (Phase 3)																		
P2-Q1Rp	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	24 hr	5.24	<500	267	1.243	0.6	29.76	1.05E+02	50%	2.01E-01	A	EF
P2-Q1Rp	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	24 hr	0.25	<500	267	1.243	0.6	29.76	5.00E+00	50%	9.59E-03	D	EF
P2-QRp-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	24 hr	5.24	<500	202	1.243	0.6	27.56	9.69E+01	50%	1.41E-01	A	EF
P2-QRp-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	24 hr	0.25	<500	202	1.243	0.6	27.56	4.62E+00	50%	6.72E-03	D	EF
Quarry Operations - Scenario C (Phase 4 & 6)																		
P3-Q1Rp	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	24 hr	5.24	<500	267	1.243	0.6	29.76	1.05E+02	50%	2.01E-01	A	EF
P3-Q1Rp	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	24 hr	0.25	<500	267	1.243	0.6	29.76	5.00E+00	50%	9.59E-03	D	EF
P3-QRp-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	24 hr	5.24	<500	202	1.243	0.6	27.56	9.69E+01	50%	1.41E-01	A	EF
P3-QRp-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	24 hr	0.25	<500	202	1.243	0.6	27.56	4.62E+00	50%	6.72E-03	D	EF
Quarry Operations - Scenario D (Phase 5)																		

Calculation Sheet 9B
Paved Road Dust Emissions

P4-Q1Rp	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	24 hr	5.24	<500	267	1.243	0.6	29.76	1.05E+02	50%	2.01E-01	A	EF
P4-Q1Rp	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	24 hr	0.25	<500	267	1.243	0.6	29.76	5.00E+00	50%	9.59E-03	D	EF
P4-QRp-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	24 hr	5.24	<500	202	1.243	0.6	27.56	9.69E+01	50%	1.41E-01	A	EF
P4-QRp-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	24 hr	0.25	<500	202	1.243	0.6	27.56	4.62E+00	50%	6.72E-03	D	EF

Source ID	Scenario		Source Description	Contaminant	CAS Number	Trip ID	Averaging Period [Note 2]	k (g/VMT) [Note 1]	ADT	Number of Vehicles [Note 3]	Distance Travelled (miles) [Note 4]	sL (g/m^2) [Note 1]	W (tons) [Note 1]	E (g/VMT) [Note 1]	Control Efficiency (%) [Note 5]	Emission Rate (g/s)	US EPA AP42 Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant																		
RP1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite paved road	PM	PM	HMA-DEL	annual	5.24	<500	4773	1.243	0.6	27.56	9.69E+01	50%	9.12E-03	A	EF
RP1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-DEL	annual	0.25	<500	4773	1.243	0.6	27.56	4.62E+00	50%	4.35E-04	D	EF
RP2	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite paved road	PM	PM	HMA-AC	annual	5.24	<500	700	1.243	0.6	38.58	1.37E+02	50%	1.88E-03	A	EF
RP2	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-AC	annual	0.25	<500	700	1.243	0.6	38.58	6.52E+00	50%	8.99E-05	D	EF
RP3	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite paved road	PM	PM	HMA-SHIPP	annual	5.24	<500	3500	1.243	0.6	38.58	1.37E+02	50%	9.42E-03	A	EF
RP3	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-SHIPP	annual	0.25	<500	3500	1.243	0.6	38.58	6.52E+00	50%	4.50E-04	D	EF
HMA Plant Third Party Mobile Crushing Operations																		
CR1Rp	HMA	HMA Third-party Crushing	Road dust emissions from RAP delivery trucks travelling on onsite paved road	PM	PM	HMA-DEL	annual	5.24	<500	2727	1.243	0.6	27.56	9.69E+01	50%	5.21E-03	A	EF
CR1Rp	HMA	HMA Third-party Crushing	Road dust emissions from RAP delivery trucks travelling on onsite paved road	PM2.5	PM2.5	HMA-DEL	annual	0.25	<500	2727	1.243	0.6	27.56	4.62E+00	50%	2.49E-04	D	EF
Existing Quarry Operations - Crushing Operations																		
Q1Rp	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	annual	5.24	<500	33000	1.243	0.6	29.76	1.05E+02	50%	6.82E-02	A	EF
Q1Rp	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	annual	0.25	<500	33000	1.243	0.6	29.76	5.00E+00	50%	3.25E-03	D	EF
QRp-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	annual	5.24	<500	37370	1.243	0.6	27.56	9.69E+01	50%	7.14E-02	A	EF
QRp-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	annual	0.25	<500	37370	1.243	0.6	27.56	4.62E+00	50%	3.41E-03	D	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																		
P1-Q1Rp	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	annual	5.24	<500	66667	1.243	0.6	29.76	1.05E+02	50%	1.38E-01	A	EF
P1-Q1Rp	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	annual	0.25	<500	66667	1.243	0.6	29.76	5.00E+00	50%	6.57E-03	D	EF
P1-QRp-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	annual	5.24	<500	37370	1.243	0.6	27.56	9.69E+01	50%	7.14E-02	A	EF
P1-QRp-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	annual	0.25	<500	37370	1.243	0.6	27.56	4.62E+00	50%	3.41E-03	D	EF
Quarry Operations - Scenario B (Phase 3)																		
P2-Q1Rp	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	annual	5.24	<500	66667	1.243	0.6	29.76	1.05E+02	50%	1.38E-01	A	EF
P2-Q1Rp	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	annual	0.25	<500	66667	1.243	0.6	29.76	5.00E+00	50%	6.57E-03	D	EF
P2-QRp-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	annual	5.24	<500	37370	1.243	0.6	27.56	9.69E+01	50%	7.14E-02	A	EF
P2-QRp-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	annual	0.25	<500	37370	1.243	0.6	27.56	4.62E+00	50%	3.41E-03	D	EF
Quarry Operations - Scenario C (Phase 4 & 6)																		
P3-Q1Rp	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	annual	5.24	<500	66667	1.243	0.6	29.76	1.05E+02	50%	1.38E-01	A	EF
P3-Q1Rp	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	annual	0.25	<500	66667	1.243	0.6	29.76	5.00E+00	50%	6.57E-03	D	EF
P3-QRp-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	annual	5.24	<500	37370	1.243	0.6	27.56	9.69E+01	50%	7.14E-02	A	EF
P3-QRp-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	annual	0.25	<500	37370	1.243	0.6	27.56	4.62E+00	50%	3.41E-03	D	EF
Quarry Operations - Scenario D (Phase 5)																		
P4-Q1Rp	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM	PM	Q-SHIPP	annual	5.24	<500	66667	1.243	0.6	29.76	1.05E+02	50%	1.38E-01	A	EF
P4-Q1Rp	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite paved road	PM2.5	PM2.5	Q-SHIPP	annual	0.25	<500	66667	1.243	0.6	29.76	5.00E+00	50%	6.57E-03	D	EF

Calculation Sheet 9B
Paved Road Dust Emissions

P4-QRp-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM	PM	Q-FILL-E	annual	5.24	<500	37370	1.243	0.6	27.56	9.69E+01	50%	7.14E-02	A	EF
P4-QRp-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite paved road	PM2.5	PM2.5	Q-FILL-E	annual	0.25	<500	37370	1.243	0.6	27.56	4.62E+00	50%	3.41E-03	D	EF

Notes:
1. The emission factor calculation and constant values for paved road dust are from the US EPA AP42 document titled "13.2.1 Paved Roads".
2. Averaging periods were determined based on relevant Canadian Ambient Air Quality Standard (CAAQS) and Ontario Ambient Air Quality Criteria (AAQC) values.
3. The number of vehicles is based on the averaging period. The daily and annual number of trucks were determined by information provided by Nelson.
4. The distance travelled by the trucks were determined from the travelling routes identified by Nelson (Nelson, 2019).
5. A 50% control efficiency was assumed because the unpaved roads are watered regularly (Nelson, 2019).

Calculation Sheet 9A
Unpaved Road Dust Emissions

Unpaved Road Dust Emission Rate [g/s] = Unpaved Road Emission Factor [g/VKT] x Trip Distance [km] x (1-Control Efficiency [%]) / Averaging Period Converted to seconds [years to seconds/days to seconds/hours to seconds])

Unpaved Road Emission Factor E (lb/VMT) = k * ((s/12)^a * (W/3)^b) [Note 1]

Source I.D.	Scenario	Operation	Activity	Contaminant	CAS No.	Trip ID	Trip Distance (km) [Note 2]	Number of Trips per Day [Note 3]	Empty Vehicle Weight (tonne) [Note 3]	Load Weight (tonne)	Loaded Vehicle Weight (tonne)	Vehicle Weight (ton) [Note 3]	Silt Content of Unpaved Road, s (%) [Note 1]	k [Note 1]	a [Note 1]	b [Note 1]	Emission Factor (g/VKT) [Note 4]	Uncontrolled Emissions (g/s)	Control Efficiency (%) [Note 5]	Controlled Emissions (g/s)	Averaging Period [Note 6]	US EPA AP42 Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant																							
RU1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite unpaved road	PM	PM	HMA-DEL	0.6	68	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	1.37E+00	95%	6.85E-02	24 hr	B	EF
RU1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-DEL	0.6	68	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	3.90E-02	95%	1.95E-03	24 hr	B	EF
RU2	HMA	HMA Production	Road dust emissions from aggregate front-end loader travelling on onsite unpaved road	PM	PM	HMA-FL-A	0.18	300	12.0	5	17	16.0	8.3	4.9	0.7	0.45	2265.515	1.42E+00	95%	7.08E-02	24 hr	B	EF
RU2	HMA	HMA Production	Road dust emissions from aggregate front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	HMA-FL-A	0.18	300	12.0	5	17	16.0	8.3	0.15	0.9	0.45	64.423	4.03E-02	95%	2.01E-03	24 hr	B	EF
RU3	HMA	HMA Production	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM	PM	HMA-FL-RAP	0.15	80	12.0	5	17	16.0	8.3	4.9	0.7	0.45	2265.515	3.15E-01	95%	1.57E-02	24 hr	B	EF
RU3	HMA	HMA Production	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	HMA-FL-RAP	0.15	80	12.0	5	17	16.0	8.3	0.15	0.9	0.45	64.423	8.95E-03	95%	4.47E-04	24 hr	B	EF
RU4	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite unpaved road	PM	PM	HMA-AC	0.44	3	15.0	40	55	38.6	8.3	4.9	0.7	0.45	3368.076	4.29E-02	95%	2.14E-03	24 hr	B	EF
RU4	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-AC	0.44	3	15.0	40	55	38.6	8.3	0.15	0.9	0.45	95.776	1.22E-03	95%	6.10E-05	24 hr	B	EF
RU5	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite unpaved road	PM	PM	HMA-SHIPP	0.3	50	15.0	40	55	38.6	8.3	4.9	0.7	0.45	3368.076	5.85E-01	95%	2.92E-02	24 hr	B	EF
RU5	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-SHIPP	0.3	50	15.0	40	55	38.6	8.5	0.15	0.9	0.45	97.851	1.70E-02	95%	8.49E-04	24 hr	B	EF
HMA Plant Third Party Mobile Crushing Operations																							
CR1Ru	HMA	HMA Third-party crushing	Road dust emissions from RAP delivery trucks travelling on onsite unpaved road	PM	PM	HMA-DEL	0.48	91	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	1.46E+00	95%	7.31E-02	24 hr	B	EF
CR1Ru	HMA	HMA Third-party crushing	Road dust emissions from RAP delivery trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-DEL	0.48	91	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	4.16E-02	95%	2.08E-03	24 hr	B	EF
CR2Ru	HMA	HMA Third-party crushing	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM	PM	HMA-FL-RAP	0.12	400	12.0	5	17	16.0	8.3	4.9	0.7	0.45	2265.515	1.26E+00	95%	6.29E-02	24 hr	B	EF
CR2Ru	HMA	HMA Third-party crushing	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	HMA-FL-RAP	0.12	400	12.0	5	17	16.0	8.3	0.15	0.9	0.45	64.423	3.58E-02	95%	1.79E-03	24 hr	B	EF
Existing Quarry Operations - Crushing Operations																							
Q1Ru	SE	SE-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	367	34.0	15	49	45.7	8.3	4.9	0.7	0.45	3636.410	3.09E+00	95%	1.54E-01	24 hr	B	EF
Q1Ru	SE	SE-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	367	34.0	15	49	45.7	8.3	0.15	0.9	0.45	103.406	8.78E-02	95%	4.39E-03	24 hr	B	EF
Q2Ru	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	183	12.0	30	42	29.8	8.3	4.9	0.7	0.45	2996.850	8.90E+00	95%	4.45E-01	24 hr	B	EF
Q2Ru	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	183	12.0	30	42	29.8	8.3	0.15	0.9	0.45	85.220	2.53E-01	95%	1.27E-02	24 hr	B	EF
QRu-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road	PM	PM	Q-FILL-E	2.6	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	1.76E+01	95%	8.80E-01	24 hr	B	EF
QRu-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-FILL-E	2.6	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	5.00E-01	95%	2.50E-02	24 hr	B	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																							
P1-Q1Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	0.98	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	1.03E+01	95%	5.16E-01	24 hr	B	EF
P1-Q1Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	0.98	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	2.93E-01	95%	1.47E-02	24 hr	B	EF
P1-Q2Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	1.3	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	1.37E+01	95%	6.84E-01	24 hr	B	EF
P1-Q2Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.3	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	3.89E-01	95%	1.95E-02	24 hr	B	EF

Calculation Sheet 9A
Unpaved Road Dust Emissions

P1-Q3Ru	SA	SA-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	667	34.0	15	49	45.7	8.3	4.9	0.7	0.45	3636.410	5.61E+00	95%	2.81E-01	24 hr	B	EF
P1-Q3Ru	SA	SA-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	667	34.0	15	49	45.7	8.3	0.15	0.9	0.45	103.406	1.60E-01	95%	7.98E-03	24 hr	B	EF
P1-Q4Ru	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	4.9	0.7	0.45	2996.850	1.29E+01	95%	6.47E-01	24 hr	B	EF
P1-Q4Ru	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	0.15	0.9	0.45	85.220	3.68E-01	95%	1.84E-02	24 hr	B	EF
P1-Q1Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	2.38	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	1.61E+01	95%	8.05E-01	24 hr	B	EF
P1-Q1Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	2.38	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	4.58E-01	95%	2.29E-02	24 hr	B	EF
P1-Q2Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	1.3	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	8.80E+00	95%	4.40E-01	24 hr	B	EF
P1-Q2Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	1.3	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	2.50E-01	95%	1.25E-02	24 hr	B	EF
Quarry Operations - Scenario B (Phase 3)																							
P2-Q1Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	1.86	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	1.96E+01	95%	9.79E-01	24 hr	B	EF
P2-Q1Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	1.86	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	5.57E-01	95%	2.78E-02	24 hr	B	EF
P2-Q2Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	0.74	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	7.79E+00	95%	3.89E-01	24 hr	B	EF
P2-Q2Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.74	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	2.21E-01	95%	1.11E-02	24 hr	B	EF
P2-Q3Ru	SB	SB-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	667	34.0	15	49	45.7	8.3	4.9	0.7	0.45	3636.410	5.61E+00	95%	2.81E-01	24 hr	B	EF
P2-Q3Ru	SB	SB-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	667	34.0	15	49	45.7	8.3	0.15	0.9	0.45	103.406	1.60E-01	95%	7.98E-03	24 hr	B	EF
P2-Q4Ru	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	4.9	0.7	0.45	2996.850	1.29E+01	95%	6.47E-01	24 hr	B	EF
P2-Q4Ru	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	0.15	0.9	0.45	85.220	3.68E-01	95%	1.84E-02	24 hr	B	EF
P2-Q1Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	3.26	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	2.21E+01	95%	1.10E+00	24 hr	B	EF
P2-Q1Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	3.26	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	6.27E-01	95%	3.14E-02	24 hr	B	EF
P2-Q2Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	0.74	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	5.01E+00	95%	2.50E-01	24 hr	B	EF
P2-Q2Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	0.74	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	1.42E-01	95%	7.12E-03	24 hr	B	EF
Quarry Operations - Scenario C (Phase 4 & 6)																							
P3-Q1Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	2.1	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	2.21E+01	95%	1.11E+00	24 hr	B	EF
P3-Q1Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2.1	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	6.28E-01	95%	3.14E-02	24 hr	B	EF
P3-Q2Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	1.3	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	1.37E+01	95%	6.84E-01	24 hr	B	EF
P3-Q2Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.3	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	3.89E-01	95%	1.95E-02	24 hr	B	EF
P3-Q3Ru	SC	SC-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	667	34.0	15	49	45.7	8.3	4.9	0.7	0.45	3636.410	5.61E+00	95%	2.81E-01	24 hr	B	EF
P3-Q3Ru	SC	SC-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	667	34.0	15	49	45.7	8.3	0.15	0.9	0.45	103.406	1.60E-01	95%	7.98E-03	24 hr	B	EF
P3-Q4Ru	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	4.9	0.7	0.45	2996.850	1.29E+01	95%	6.47E-01	24 hr	B	EF
P3-Q4Ru	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	0.15	0.9	0.45	85.220	3.68E-01	95%	1.84E-02	24 hr	B	EF
P3-Q1Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	3.5	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	2.37E+01	95%	1.18E+00	24 hr	B	EF
P3-Q1Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	3.5	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	6.74E-01	95%	3.37E-02	24 hr	B	EF
P3-Q2Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	1.3	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	8.80E+00	95%	4.40E-01	24 hr	B	EF
P3-Q2Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	1.3	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	2.50E-01	95%	1.25E-02	24 hr	B	EF

Calculation Sheet 9A
Unpaved Road Dust Emissions

Source I.D.	Scenario		Activity	Contaminant	CAS No.	Trip ID	Trip Distance (km) [Note 2]	Number of Trips per Year	Empty Truck Weight (tonne)	Load Weight (tonne)	Loaded Truck Weight (tonne)	Average Truck Weight (ton)	Silt Content of Unpaved Road, s (%) [Note 1]	k [Note 1]	a [Note 1]	b [Note 1]	Emission Factor (g/VKT) [Note 4]	Uncontrolled Emissions (g/s)	Control Efficiency (%) [Note 5]	Controlled Emissions (g/s)	Averaging Period [Note 6]	Data Quality	Estimation Technique
Quarry Operations - Scenario D (Phase 5)																							
P4-Q1Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	2	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	2.10E+01	95%	1.05E+00	24 hr	B	EF
P4-Q1Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	5.99E-01	95%	2.99E-02	24 hr	B	EF
P4-Q2Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	0.8	143	109.0	70	179	158.7	8.3	4.9	0.7	0.45	6365.234	8.42E+00	95%	4.21E-01	24 hr	B	EF
P4-Q2Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.8	143	109.0	70	179	158.7	8.3	0.15	0.9	0.45	181.004	2.39E-01	95%	1.20E-02	24 hr	B	EF
P4-Q3Ru	SD	SD-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	667	34.0	15	49	45.7	8.3	4.9	0.7	0.45	3636.410	5.61E+00	95%	2.81E-01	24 hr	B	EF
P4-Q3Ru	SD	SD-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	667	34.0	15	49	45.7	8.3	0.15	0.9	0.45	103.406	1.60E-01	95%	7.98E-03	24 hr	B	EF
P4-Q4Ru	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	4.9	0.7	0.45	2996.850	1.29E+01	95%	6.47E-01	24 hr	B	EF
P4-Q4Ru	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	267	12.0	30	42	29.8	8.3	0.15	0.9	0.45	85.220	3.68E-01	95%	1.84E-02	24 hr	B	EF
P4-Q1Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	3.4	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	2.30E+01	95%	1.15E+00	24 hr	B	EF
P4-Q1Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	3.4	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	6.54E-01	95%	3.27E-02	24 hr	B	EF
P4-Q2Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	0.8	202	14.0	22	36	27.6	8.3	4.9	0.7	0.45	2894.838	5.41E+00	95%	2.71E-01	24 hr	B	EF
P4-Q2Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	0.8	202	14.0	22	36	27.6	8.3	0.15	0.9	0.45	82.319	1.54E-01	95%	7.70E-03	24 hr	B	EF
Hot Mix Asphalt (HMA) Plant																							
RU1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite unpaved road	PM	PM	HMA-DEL	0.6	4773	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	2.63E-01	95%	1.31E-02	annual	B	EF
RU1	HMA	HMA Production	Road dust emissions from aggregate delivery trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-DEL	0.6	4773	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	7.47E-03	95%	3.74E-04	annual	B	EF
RU2	HMA	HMA Production	Road dust emissions from aggregate front-end loader travelling on onsite unpaved road	PM	PM	HMA-FL-A	0.18	21000	12.0	5.0	17.0	16.0	8.3	4.9	0.7	0.45	2265.515	2.72E-01	95%	1.36E-02	annual	B	EF
RU2	HMA	HMA Production	Road dust emissions from aggregate front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	HMA-FL-A	0.18	21000	12.0	5.0	17.0	16.0	8.3	0.15	0.9	0.45	64.423	7.72E-03	95%	3.86E-04	annual	B	EF
RU3	HMA	HMA Production	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM	PM	HMA-FL-RAP	0.15	5600	12.0	5.0	17.0	16.0	8.3	4.9	0.7	0.45	2265.515	6.03E-02	95%	3.02E-03	annual	B	EF
RU3	HMA	HMA Production	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	HMA-FL-RAP	0.15	5600	12.0	5.0	17.0	16.0	8.3	0.15	0.9	0.45	64.423	1.72E-03	95%	8.58E-05	annual	B	EF
RU4	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite unpaved road	PM	PM	HMA-AC	0.44	700	15.0	40.0	55.0	38.6	8.3	4.9	0.7	0.45	3368.076	3.29E-02	95%	1.64E-03	annual	B	EF
RU4	HMA	HMA Production	Road dust emissions from AC trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-AC	0.44	700	15.0	40.0	55.0	38.6	8.3	0.15	0.9	0.45	95.776	9.35E-04	95%	4.68E-05	annual	B	EF
RU5	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite unpaved road	PM	PM	HMA-SHIPP	0.3	3500	15.0	40.0	55.0	38.6	8.3	4.9	0.7	0.45	3368.076	1.12E-01	95%	5.61E-03	annual	B	EF
RU5	HMA	HMA Production	Road dust emissions from HMA trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-SHIPP	0.3	3500	15.0	40.0	55.0	38.6	8.3	0.15	0.9	0.45	95.776	3.19E-03	95%	1.59E-04	annual	B	EF
HMA Plant Third Party Mobile Crushing Operations																							
CR1Ru	HMA	HMA Third-party Crushing	Road dust emissions from RAP delivery trucks travelling on onsite unpaved road	PM	PM	HMA-DEL	0.48	2727	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	1.20E-01	95%	6.01E-03	annual	B	EF
CR1Ru	HMA	HMA Third-party Crushing	Road dust emissions from RAP delivery trucks travelling on onsite unpaved road	PM2.5	PM2.5	HMA-DEL	0.48	2727	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	3.42E-03	95%	1.71E-04	annual	B	EF
CR2Ru	HMA	HMA Third-party Crushing	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM	PM	HMA-FL-RAP	0.12	12000	12.0	5.0	17.0	16.0	8.3	4.9	0.7	0.45	2265.515	1.03E-01	95%	5.17E-03	annual	B	EF
CR2Ru	HMA	HMA Third-party Crushing	Road dust emissions from RAP front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	HMA-FL-RAP	0.12	12000	12.0	5.0	17.0	16.0	8.3	0.15	0.9	0.45	64.423	2.94E-03	95%	1.47E-04	annual	B	EF
Existing Quarry Operations - Crushing Operations																							

Calculation Sheet 9A
Unpaved Road Dust Emissions

Q1Ru	SE	SE-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	66000	34.0	15.0	49.0	45.7	8.3	4.9	0.7	0.45	3636.410	1.52E+00	95%	7.61E-02	annual	B	EF
Q1Ru	SE	SE-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	66000	34.0	15.0	49.0	45.7	8.3	0.15	0.9	0.45	103.406	4.33E-02	95%	2.16E-03	annual	B	EF
Q2Ru	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	33000	12.0	30.0	42.0	29.8	8.3	4.9	0.7	0.45	2996.850	4.39E+00	95%	2.20E-01	annual	B	EF
Q2Ru	SE	SE-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	33000	12.0	30.0	42.0	29.8	8.3	0.15	0.9	0.45	85.220	1.25E-01	95%	6.24E-03	annual	B	EF
QRu-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road	PM	PM	Q-FILL-E	2.6	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	8.92E+00	95%	4.46E-01	annual	B	EF
QRu-FILL	SE	SE-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-FILL-E	2.6	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	2.54E-01	95%	1.27E-02	annual	B	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)																							
P1-Q1Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	0.98	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	5.65E+00	95%	2.83E-01	annual	B	EF
P1-Q1Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	0.98	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	1.61E-01	95%	8.04E-03	annual	B	EF
P1-Q2Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	1.3	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	7.50E+00	95%	3.75E-01	annual	B	EF
P1-Q2Ru	SA	SA-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.3	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	2.13E-01	95%	1.07E-02	annual	B	EF
P1-Q3Ru	SA	SA-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	4.9	0.7	0.45	3636.410	3.07E+00	95%	1.54E-01	annual	B	EF
P1-Q3Ru	SA	SA-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	0.15	0.9	0.45	103.406	8.74E-02	95%	4.37E-03	annual	B	EF
P1-Q4Ru	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	4.9	0.7	0.45	2996.850	8.87E+00	95%	4.43E-01	annual	B	EF
P1-Q4Ru	SA	SA-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	0.15	0.9	0.45	85.220	2.52E-01	95%	1.26E-02	annual	B	EF
P1-Q1Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	2.38	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	8.16E+00	95%	4.08E-01	annual	B	EF
P1-Q1Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	2.38	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	2.32E-01	95%	1.16E-02	annual	B	EF
P1-Q2Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	1.3	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	4.46E+00	95%	2.23E-01	annual	B	EF
P1-Q2Ru-FILL	SA	SA-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	1.3	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	1.27E-01	95%	6.34E-03	annual	B	EF
Quarry Operations - Scenario B (Phase 3)																							
P2-Q1Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	1.86	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	1.07E+01	95%	5.36E-01	annual	B	EF
P2-Q1Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	1.86	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	3.05E-01	95%	1.53E-02	annual	B	EF
P2-Q2Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	0.74	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	4.27E+00	95%	2.13E-01	annual	B	EF
P2-Q2Ru	SB	SB-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.74	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	1.21E-01	95%	6.07E-03	annual	B	EF
P2-Q3Ru	SB	SB-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	4.9	0.7	0.45	3636.410	3.07E+00	95%	1.54E-01	annual	B	EF
P2-Q3Ru	SB	SB-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	0.15	0.9	0.45	103.406	8.74E-02	95%	4.37E-03	annual	B	EF
P2-Q4Ru	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	4.9	0.7	0.45	2996.850	8.87E+00	95%	4.43E-01	annual	B	EF
P2-Q4Ru	SB	SB-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	0.15	0.9	0.45	85.220	2.52E-01	95%	1.26E-02	annual	B	EF
P2-Q1Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	3.26	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	1.12E+01	95%	5.59E-01	annual	B	EF
P2-Q1Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	3.26	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	3.18E-01	95%	1.59E-02	annual	B	EF
P2-Q2Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	0.74	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	2.54E+00	95%	1.27E-01	annual	B	EF
P2-Q2Ru-FILL	SB	SB-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	0.74	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	7.22E-02	95%	3.61E-03	annual	B	EF
Quarry Operations - Scenario C (Phase 4 & 6)																							
P3-Q1Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	2.1	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	1.21E+01	95%	6.06E-01	annual	B	EF
P3-Q1Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2.1	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	3.44E-01	95%	1.72E-02	annual	B	EF

Calculation Sheet 9A
Unpaved Road Dust Emissions

P3-Q2Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	1.3	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	7.50E+00	95%	3.75E-01	annual	B	EF
P3-Q2Ru	SC	SC-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	1.3	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	2.13E-01	95%	1.07E-02	annual	B	EF
P3-Q3Ru	SC	SC-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	4.9	0.7	0.45	3636.410	3.07E+00	95%	1.54E-01	annual	B	EF
P3-Q3Ru	SC	SC-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	0.15	0.9	0.45	103.406	8.74E-02	95%	4.37E-03	annual	B	EF
P3-Q4Ru	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	4.9	0.7	0.45	2996.850	8.87E+00	95%	4.43E-01	annual	B	EF
P3-Q4Ru	SC	SC-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	0.15	0.9	0.45	85.220	2.52E-01	95%	1.26E-02	annual	B	EF
P3-Q1Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	3.5	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	1.20E+01	95%	6.00E-01	annual	B	EF
P3-Q1Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	3.5	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	3.41E-01	95%	1.71E-02	annual	B	EF
P3-Q2Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	1.3	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	4.46E+00	95%	2.23E-01	annual	B	EF
P3-Q2Ru-FILL	SC	SC-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	1.3	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	1.27E-01	95%	6.34E-03	annual	B	EF
Quarry Operations - Scenario D (Phase 5)																							
P4-Q1Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-HT-E	2	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	1.15E+01	95%	5.77E-01	annual	B	EF
P4-Q1Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-HT-E	2	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	3.28E-01	95%	1.64E-02	annual	B	EF
P4-Q2Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-HT	0.8	28571	109.0	70.0	179.0	158.7	8.3	4.9	0.7	0.45	6365.234	4.61E+00	95%	2.31E-01	annual	B	EF
P4-Q2Ru	SD	SD-Quarry Operations	Road dust emissions from limestone haul trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-HT	0.8	28571	109.0	70.0	179.0	158.7	8.3	0.15	0.9	0.45	181.004	1.31E-01	95%	6.56E-03	annual	B	EF
P4-Q3Ru	SD	SD-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM	PM	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	4.9	0.7	0.45	3636.410	3.07E+00	95%	1.54E-01	annual	B	EF
P4-Q3Ru	SD	SD-Quarry Operations	Road dust emissions from limestone front-end loader travelling on onsite unpaved road	PM2.5	PM2.5	Q-FL	0.2	133333	34.0	15.0	49.0	45.7	8.3	0.15	0.9	0.45	103.406	8.74E-02	95%	4.37E-03	annual	B	EF
P4-Q4Ru	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM	PM	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	4.9	0.7	0.45	2996.850	8.87E+00	95%	4.43E-01	annual	B	EF
P4-Q4Ru	SD	SD-Quarry Operations	Road dust emissions from processed limestone shipping trucks travelling on onsite unpaved road	PM2.5	PM2.5	Q-SHIPP	1.4	66667	12.0	30.0	42.0	29.8	8.3	0.15	0.9	0.45	85.220	2.52E-01	95%	1.26E-02	annual	B	EF
P4-Q1Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM	PM	Q-FILL-E	3.4	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	1.17E+01	95%	5.83E-01	annual	B	EF
P4-Q1Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (existing quarry road)	PM2.5	PM2.5	Q-FILL-E	3.4	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	3.32E-01	95%	1.66E-02	annual	B	EF
P4-Q2Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM	PM	Q-FILL	0.8	37370	14.0	22.0	36.0	27.6	8.3	4.9	0.7	0.45	2894.838	2.74E+00	95%	1.37E-01	annual	B	EF
P4-Q2Ru-FILL	SD	SD-Quarry Operations	Road dust emissions from fill delivery trucks travelling on onsite unpaved road (extension quarry road)	PM2.5	PM2.5	Q-FILL	0.8	37370	14.0	22.0	36.0	27.6	8.3	0.15	0.9	0.45	82.319	7.80E-02	95%	3.90E-03	annual	B	EF

Notes:
1. This emission factor calculation and constant values for unpaved road dust are from the US EPA AP42 document titled "13.2.2 Unpaved Roads".
2. The distance travelled by the trucks were determined from the travelling routes identified by Nelson (Nelson, 2019).
3. Determined based on Information provided by Nelson (Nelson, 2019).
4. 1 lb/VMT = 281.9 g/VKT
5. A 95% control efficiency was assumed because the internal unpaved roads are controlled with a combination of watering and chemical suppressant (e.g. calcium chloride) (Nelson, 2019).
6. Averaging periods were determined based on relevant Canadian Ambient Air Quality Standard (CAAQS) and Ontario Ambient Air Quality Criteria (AAQC) values.

Calculation Sheet 8
Emission Rates - Diesel Engines

Emission factors for NO_X, CO and PM for diesel combustion were taken from U.S. EPA Emission Standards for a Tier 2 and Tier 3 Engines. Emission factors for SO2 and BaP were takend from U.S. EPA, AP-42 Section 3.3 and 3.4, Table 3.3-1, 3.3-2, 43.4-1 and 3.4-4. The diesel fuel sulphur content was assumed to be 0.1% as per Sulphur in Diesel Fuel Regulations (SOR/2002-254), Environment Canada.

The total heat input is calculated using an engine efficiency of 36.2%, which is calculated using the fuel input and power output emission factors listed in the U.S. EPA AP-42 Section 3.3.

It was conservatively assumed that the HMA RAP crusher diesel engine(s) operate 12 hours per day and 9 months per year and the quarry crushers diesel engines operate 11 hours per day and 9 months per year for the maximum emisison scenario.

Engine Efficiency (%) = Power Output (lb/hp-hr) / Fuel Input (lb/MMBtu) x (1 MMBTU / 393.0148 hp-hr)

Annual Emissions (g/s) = Fuel Input Emission Factor (lb/MMBTU) x Heat Input (MMBTU/hr) x (g/0.0022 lb) x (1 hr/3600 s) x (operating hours per day/24 hours per day) x (operating months per year/12 months per year)

Daily Emissions (g/s) = Emission Factor (lb/hp-hr) x Power Rate (kW) x (1hp/0.746kW) x (g/0.0022 lb) x (1hr/3600s) x (operating hours per day/24 hours per day)

Daily Emissions (g/s) = Fuel Input Emission Factor (lb/MMBtu) x Heat Input (MMBTU/hr) x (g/0.0022 lb) x (1 hr/3600 s) x (operating hours per day/24 hours per day)

Hourly Emissions (g/s) = Emission Factor (lb/hp-hr) x Power Rate (kW) x (1hp/0.746kW) x (g/0.0022 lb) x (1hr/3600s)

Source I.D.	Scenario	Source Description	Contaminant	CAS #	Averaging Period	Power Rate		Heat Input		Emission Factors		Emissions (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
						Value	Units	Value	Units	Value	Units				
HMA Plant Third Party Mobile Crushing Operations															
CR5	HMA	Diesel-fired engine for HMA crushing operations	PM	PM	24 hr	339.0	kW	3.20	MMBTU/hr	1.50E-01	g/hp-hr	9.47E-03	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	7.10E-03	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	9.47E-03	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	7.10E-03	A	Above Average	EF
			NO_X	10102-44-0	1 hr					2.80E+00	g/hp-hr	3.54E-01	A	Above Average	EF
			NO_X	10102-44-0	24 hr					2.80E+00	g/hp-hr	1.77E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					2.80E+00	g/hp-hr	1.33E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					2.05E-03	lb/hp-hr	1.18E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					2.05E-03	lb/hp-hr	5.88E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					2.05E-03	lb/hp-hr	4.41E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	3.28E-01	A	Above Average	EF
			B(a)P	50-32-8	Annual					1.88E-07	lb/MMBTU	2.85E-08	E	Marginal	EF
			B(a)P	50-32-8	24 hr					1.88E-07	lb/MMBTU	3.80E-08	E	Marginal	EF
Q17A	SE	Diesel-fired engines for quarry crushing operations (Crushing Plant 1)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF

Calculation Sheet 8
Emission Rates - Diesel Engines

Q17B	SE	Diesel-fired engines for quarry crushing operations (Crushing Plant 2)	PM	PM	24 hr	750.0	kW	7.08	MMBTU/hr	1.50E-01	g/hp-hr	1.92E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	1.44E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	1.92E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	1.44E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.26E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	5.76E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	4.32E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.03E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	4.71E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	3.53E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	7.26E-01	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	7.89E-08	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.05E-07	E	Marginal	EF
P1-Q12A	SA	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF
P1-Q12B	SA	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF

Calculation Sheet 8
Emission Rates - Diesel Engines

P2-Q12A	SB	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF
P2-Q12B	SB	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF
P3-Q12A	SC	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF

Calculation Sheet 8
Emission Rates - Diesel Engines

P3-Q12B	SC	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF
P4-Q12A	SD	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF
P4-Q13B	SD	Diesel-fired engines for quarry crushing operations (limestone)	PM	PM	24 hr	1120.0	kW	10.57	MMBTU/hr	1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM	PM	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			PM2.5	PM2.5	24 hr					1.50E-01	g/hp-hr	2.87E-02	A	Above Average	EF
			PM2.5	PM2.5	annual					1.50E-01	g/hp-hr	2.15E-02	A	Above Average	EF
			NO_X	10102-44-0	1 hr					4.50E+00	g/hp-hr	1.88E+00	A	Above Average	EF
			NO_X	10102-44-0	24 hr					4.50E+00	g/hp-hr	8.60E-01	A	Above Average	EF
			NO_X	10102-44-0	annual					4.50E+00	g/hp-hr	6.45E-01	A	Above Average	EF
			SO_2	7446-09-5	1 hr					8.09E-04	lb/hp-hr	1.53E-01	D	Marginal	EF
			SO_2	7446-09-5	24 hr					8.09E-04	lb/hp-hr	7.03E-02	D	Marginal	EF
			SO_2	7446-09-5	annual					8.09E-04	lb/hp-hr	5.27E-02	D	Marginal	EF
			CO	630-08-0	1 hr					2.60E+00	g/hp-hr	1.08E+00	A	Above Average	EF
			B(a)P	50-32-8	Annual					2.57E-07	lb/MMBTU	1.18E-07	E	Marginal	EF
			B(a)P	50-32-8	24 hr					2.57E-07	lb/MMBTU	1.57E-07	E	Marginal	EF

Calculation Sheet 7
Emission Rates - Batch Mix Tower Loadout

Emission calculations are based on compounds emission factors and contaminant speciation profile percentage taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Tables 11.1-15 and 11.1-16 and Table 11.1-14, respectively.

For each contaminant the applicable speciation profile percentage was applied to the appropriate emission factor (i.e. PAH emissions were calculated using the Organic PM emission factor) taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Tables 11.1-15 and 11.1-16.

The % of Organic PM for Benzo(a)pyrene is listed as non-detect in U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15. Since the Benzo(a)pyrene emissions come from the asphalt cement in HMA production and since the HMA temperature is the same for silo filling as it is for loadout, it was conservatively assumed that the % of Benzo(a)pyrene in Organic PM would be the same for silo filling as it is for HMA loadout.

Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EF - Emission Factors

Emission Factor (lb/ton) (Total PM) = 0.000181 + 0.00141 x (-V) x exp[(0.0251) x (Temperature(°F) + 460) - 20.43]

Emission Factor (lb/ton) (Total Organic Carbon) = 0.0172 x (-V) x exp[(0.0251) x (Temperature(°F) + 460) - 20.43]

Emission Factor (lb/ton) (Organic PM) = 0.00141 x (-V) x exp[(0.0251) x (Temperature(°F) + 460) - 20.43]

Emission Factor (lb/ton) (Carbon Monoxide) = 0.00558 x (-V) x exp[(0.0251) x (Temperature(°F) + 460) - 20.43]

Emission Rate (g/s) = Maximum Production Rate (tonne/year) x Emission Factor (kg/tonne) x (1000g/kg) x (yr/365days) x (day/24hr) x (hr/3600s)

Emission Rate (g/s) = Maximum Production Rate (tonne/day) x Emission Factor (kg/tonne) x (day/24hr) x (hr/3600s)

Emission Rate (g/s) = Maximum Production Rate (tonne/hr) x Emission Factor (kg/tonne) x (hr/3600s)

Emission Rate (g/s) = Organic Based Compound Emission Rate (g/s) x (% of Organic-Based Compound)/100

HMA Mix Temperature			325	°F
Asphalt Volatility (V)	-	**Annual**	0.5	
Asphalt Volatility (V)	-	**24 hr**	1.0	
Asphalt Volatility (V)	-	**1 hr**	1.0	
Maximum Silo Loadout Rate	-	**Annual**	140,000	tonnes/year
Maximum Silo Loadout Rate	-	**24 hr**	2,000	tonnes/day
Maximum Silo Loadout Rate	-	**1 hr**	265	tonnes/hour

Source I.D.	Source Description	Material	Contaminant	CAS Number	Scenario	Averaging Period	Emission Factor (lb/ton) [2], [3], [4]	Emission Factor (kg/tonne) [5]	Emission Rate (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality [7]	Estimation Technique [8]
LO	HMA truck loadout from HMA batch mix tower	HMA	PM	PM	1	24 hr	8.63E-04	4.31E-04	9.99E-03	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	PM	PM	1	annual	5.22E-04	2.61E-04	1.16E-03	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	PM2.5	PM2.5	1	24 hr	8.63E-04	4.31E-04	9.99E-03	C	Average	EF

Calculation Sheet 7
Emission Rates - Batch Mix Tower Loadout

LO	HMA truck loadout from HMA batch mix tower	HMA	PM2.5	PM2.5	1	annual	5.22E-04	2.61E-04	1.16E-03	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	TOC	-	1	annual	4.16E-03	2.08E-03	9.23E-03	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	TOC	-	1	24 hr	8.32E-03	4.16E-03	9.63E-02	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	Organic PM	-	1	annual	3.41E-04	1.70E-04	7.57E-04	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	Organic PM	-	1	24 hr	6.82E-04	3.41E-04	7.89E-03	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	Organic PM		1	1 hr	6.82E-04	3.41E-04	2.51E-02	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	CO	630-08-0	1	1 hr	2.70E-03	1.35E-03	9.93E-02	C	Average	EF

Source I.D.	Source Description	Material	Contaminant	CAS Number	Scenario	Averaging Period	Emission Factor (% of Organic-Based Compound)	Emission Factor (% of Organic-Based Compound) [6]	Emission Rate (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality [7]	Estimation Technique [8]
Organic Volatile-Based Compounds												
LO	HMA truck loadout from HMA batch mix tower	HMA	Benzene	71-43-2	1	annual	% of TOC	5.20E-02	4.80E-06	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	Benzene	71-43-2	1	24 hr	% of TOC	5.20E-02	5.01E-05	C	Average	EF
Organic Particulate-Based Compounds												
LO	HMA truck loadout from HMA batch mix tower	HMA	B(a)P	50-32-8	1	annual	% of Organic PM	2.30E-03	1.74E-08	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	B(a)P	50-32-8	1	24 hr	% of Organic PM	2.30E-03	1.82E-07	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	Naphthalene	91-20-3	1	24 hr	% of Organic PM	1.25E+00	9.87E-05	C	Average	EF
LO	HMA truck loadout from HMA batch mix tower	HMA	Naphthalene	91-20-3	1	10 min	% of Organic PM	1.25E+00	3.14E-04	C	Average	EF

Calculation Sheet 6
Emission Rates - Hot Oil Heater for AC tanks

The emission factor (EF) used was taken from U.S. EPA, AP-42, Section 1.4 "Natural Gas Combustion," July 1998, Table 1.4-1 for a boiler <100 MMBTU/hr. For combustion of natural gas only emissions of NOx were estimated (MOECC Procedure for Preparing an ESDM Report, Section 7.1.1, September 2016). Furthermore, a natural gas heating value of 1020 BTU/scf from AP42 Section 1.4 "Natural Gas Combustion" (July 1998), Table 1.4-1 note a was used to convert lb/10^6scf to lb/MMBTU.

It was conservatively assumed that the heater operates 24 hours per day. Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EF - Emission Factor

Emissions (g/s) = Emission Factor (lb/10^6scf) x Fuel Consumption (MMBTU/hr) x (10^6scf/1020MMBTU) x (kg/2.2lb) x (1000g/kg) x (1hr/3600s)

Source I.D.	Scenario	Source Description	Contaminants	CAS #	Averaging Period	Fuel Consumption		Emission Factors		Emission Rate (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
						Value	Units	Value	Units				
Hot Mix Asphalt (HMA) Plant													
HOH1	HMA	Natural gas-fired hot-oil heaters, servicing the AC storage tanks	NO_X	10102-44-0	1 hr	2.10	MMBTU/hr	100	lb/10^6 scf	2.60E-02	B	Above Average	EF
			NO_X	10102-44-0	24 hr			100	lb/10^6 scf	2.60E-02	B	Above Average	EF
			NO_X	10102-44-0	annual			100	lb/10^6 scf	2.60E-02	B	Above Average	EF
HOH2	HMA	Natural gas-fired hot-oil heaters, servicing the AC storage tanks	NO_X	10102-44-0	1 hr	0.41	MMBTU/hr	100	lb/10^6 scf	5.12E-03	B	Above Average	EF
			NO_X	10102-44-0	24 hr			100	lb/10^6 scf	5.12E-03	B	Above Average	EF
			NO_X	10102-44-0	annual			100	lb/10^6 scf	5.12E-03	B	Above Average	EF

Calculation Sheet 5 (cont'd)
Asphalt Cement Storage Tank Fugitive Emissions - Annual (Source AC2)

For each contaminant the applicable speciation profile percentage was applied to the appropriate emission factor (i.e. PAH emissions were calculated using the Organic PM emission factor) taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15 and Table 11.1-16. For benzo(a)pyrene, the speciation profile for load-out and yard emissions was conservatively assumed, since the speciation profile for silo filling and asphalt storage tank emissions were measured below detection limits. (U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15).

The annual working loss was calculated using the daily working loss, multiplied by the number of trucks accepted at each tank per year. The annual breathing loss was calculated using the annual storage rate and the range of tempeartures listed below.

Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EC - Engineering Calculations

Asphalt Cement Delivery for Tank	3,520.00	tonne/yr		
Asphalt Cement Specific Gravity (SG)	1.027			
Asphalt Cement Stored (V_{air})	3,427,459	L/yr	905,438.78	gal/yr
Tank Type	Horizontal			
Is the tank heated?	Yes			
Shell Length	10.4	m	34.0	ft
Shell Diameter	3.5	m	11.5	ft
Working Volume	89,735	L	23,705.51	gal
	Breathing Loss		Working Loss	
Average Liquid Surface Temperature	301.00	°F	325	°F
Minimum Liquid Surface Temperature	277	°F	325	°F
Maximum Liquid Surface Temperature	325	°F	325	°F
Bulk Liquid Temperature	300	°F	325	°F
Average Asphalt Cement Vapour Pressure (VPavg)	0.00949	psi	0.01828	psi
Minimum Asphalt Cement Vapour Pressure (VPmin)	0.00472	psi	0.01828	psi
Maximum Asphalt Cement Vapour Pressure (VPmax)	0.01828	psi	0.01828	psi
Liquid Molecular Weight	1000.00	g/mol		
Vapour Molecular Weight	105.00	g/mol		
Asphalt Fume (TOC) Working Loss - **Tanks 4.0.9**	14.20	kg/yr	31.2	lb/yr
Asphalt Fume (TOC) Breathing Loss - **Tanks 4.0.9**	2.91	kg/yr	6.40	lb/yr
Asphalt Fume (TOC) Total Emissions - **Tanks 4.0.9**	17.11	kg/yr	37.64	lb/yr
Ratio of TOC to Organic PM Emission Factors for Silo Filling (0.0504/0.00105)	48			

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS Number	Speciation Profile (% of TOC)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC2	HMA	AC storage tank 2	Asphalt Cement	Total VOC	-	100	5.43E-04	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	Benzene	71-43-2	0.032	1.74E-07	Average	EC

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS Number	Speciation Profile (% of Organic PM)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC2	HMA	AC storage tank 2	Asphalt Cement	Organic PM (total PM)	PM	-	1.13E-05	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	Organic PM (PM2.5)	PM2.5	-	1.13E-05	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	B(a)P	50-32-8	0.0023	2.60E-10	Average	EC

Calculation Sheet 5 (cont'd)
Asphalt Cement Storage Tank Fugitive Emissions - Daily (Source AC2)

For each contaminant the applicable speciation profile percentage was applied to the appropriate emission factor (i.e. PAH emissions were calculated using the Organic PM emission factor) taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15 and Table 11.1-16. For benzo(a)pyrene, the speciation profile for load-out and yard emissions was conservatively assumed, since the speciation profile for silo filling and asphalt storage tank emissions were measured below detection limits. (U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15).

The daily working loss was estimated using TANKS 4.0.9d, where the calculation was based on the daily amount of asphalt cement stored in the tank and the maximum delivery temperature listed below. The daily breathing loss is equal to the annual breathing loss on the following calculation sheet, divided by 365 days.

Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EC - Engineering Calculations

Asphalt Cement Delivery for Tank	80.00	tonne/day		
Asphalt Cement Specific Gravity (SG)	1.027			
Asphalt Cement Stored (V_{air})	77,896.79	L/day	20,578.15	gal/day
Tank Type	Horizontal			
Is the tank heated?	Yes			
Shell Length	10.4	m	34.0	ft
Shell Diameter	3.5	m	11.5	ft
Working Volume	89,735.10	L	23,705.51	gal
	Breathing Loss		Working Loss	
Average Liquid Surface Temperature	301.00	°F	325	°F
Minimum Liquid Surface Temperature	277	°F	325	°F
Maximum Liquid Surface Temperature	325	°F	325	°F
Bulk Liquid Temperature	300	°F	325	°F
Average Asphalt Cement Vapour Pressure (VPavg)	0.00949	psi	0.01828	psi
Minimum Asphalt Cement Vapour Pressure (VPmin)	0.00472	psi	0.01828	psi
Maximum Asphalt Cement Vapour Pressure (VPmax)	0.01828	psi	0.01828	psi
Liquid Molecular Weight	1000	g/mol		
Vapour Molecular Weight	105	g/mol		
Asphalt Fume (TOC) Working Loss - **Tanks 4.0.9**	0.32	kg/day	0.71	lb/day
Asphalt Fume (TOC) Breathing Loss - **Tanks 4.0.9 (Annual loss/365 days)**	0.01	kg/day	6.40	lb/yr
Asphalt Fume (TOC) Total Emissions - **Tanks 4.0.9**	0.33	kg/day	7.11	lb/yr
Ratio of TOC to Organic PM Emission Factors for Silo Filling (0.0504/0.00105)	48			

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS #	Speciation Profile (% of TOC)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC2	HMA	AC storage tank 2	Asphalt Cement	Total VOC	-	100	3.83E-03	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	Benzene	71-43-2	0.032	1.22E-06	Average	EC

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS #	Speciation Profile (% of Organic PM)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC2	HMA	AC storage tank 2	Asphalt Cement	Organic PM (total PM)	PM	-	7.97E-05	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	Organic PM (PM2.5)	PM2.5	-	7.97E-05	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	B(a)P	50-32-8	0.0023	1.83E-09	Average	EC
AC2	HMA	AC storage tank 2	Asphalt Cement	Naphthalene	91-20-3	1.82	1.45E-06	Average	EC

Calculation Sheet 5 (cont'd)
Asphalt Cement Storage Tank Fugitive Emissions - Annual (Source AC1)

For each contaminant the applicable speciation profile percentage was applied to the appropriate emission factor (i.e. PAH emissions were calculated using the Organic PM emission factor) taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15 and Table 11.1-16. For benzo(a)pyrene, the speciation profile for load-out and yard emissions was conservatively assumed, since the speciation profile for silo filling and asphalt storage tank emissions were measured below detection limits. (U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15).

The annual working loss was calculated using the daily working loss, multiplied by the number of trucks accepted at each tank per year. The annual breathing loss was calculated using the annual storage rate and the range of tempeartures listed below.

Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EC - Engineering Calculations

Asphalt Cement Delivery for Tank	3,520.00	tonne/yr		
Asphalt Cement Specific Gravity (SG)	1.027			
Asphalt Cement Stored (V_{air})	3,427,459	L/yr	905,438.78	gal/yr
Tank Type	Horizontal			
Is the tank heated?	Yes			
Shell Length	13.5	m	44.3	ft
Shell Diameter	3.0	m	9.8	ft
Working Volume	85,883	L	22,687.96	gal
	Breathing Loss		Working Loss	
Average Liquid Surface Temperature	301.00	°F	325	°F
Minimum Liquid Surface Temperature	277	°F	325	°F
Maximum Liquid Surface Temperature	325	°F	325	°F
Bulk Liquid Temperature	300	°F	325	°F
Average Asphalt Cement Vapour Pressure (VPavg)	0.00949	psi	0.01828	psi
Minimum Asphalt Cement Vapour Pressure (VPmin)	0.00472	psi	0.01828	psi
Maximum Asphalt Cement Vapour Pressure (VPmax)	0.01828	psi	0.01828	psi
Liquid Molecular Weight	1000.00	g/mol		
Vapour Molecular Weight	105.00	g/mol		
Asphalt Fume (TOC) Working Loss - **Tanks 4.0.9**	14.20	kg/yr	31.2	lb/yr
Asphalt Fume (TOC) Breathing Loss - **Tanks 4.0.9**	2.75	kg/yr	6.06	lb/yr
Asphalt Fume (TOC) Total Emissions - **Tanks 4.0.9**	16.95	kg/yr	37.30	lb/yr
Ratio of TOC to Organic PM Emission Factors for Silo Filling (0.0504/0.00105)	48			

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS Number	Speciation Profile (% of TOC)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC1	HMA	AC storage tank 1	Asphalt Cement	Total VOC	-	100	5.38E-04	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	Benzene	71-43-2	0.032	1.72E-07	Average	EC

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS Number	Speciation Profile (% of Organic PM)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC1	HMA	AC storage tank 1	Asphalt Cement	Organic PM (total PM)	PM	-	1.12E-05	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	Organic PM (PM2.5)	PM2.5	-	1.12E-05	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	B(a)P	50-32-8	0.0023	2.58E-10	Average	EC

Calculation Sheet 5 (cont'd)
Asphalt Cement Storage Tank Fugitive Emissions - Daily (Source AC1)

For each contaminant the applicable speciation profile percentage was applied to the appropriate emission factor (i.e. PAH emissions were calculated using the Organic PM emission factor) taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15 and Table 11.1-16. For benzo(a)pyrene, the speciation profile for load-out and yard emissions was conservatively assumed, since the speciation profile for silo filling and asphalt storage tank emissions were measured below detection limits. (U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-15).

The daily working loss was estimated using TANKS 4.0.9d, where the calculation was based on the daily amount of asphalt cement stored in the tank and the maximum delivery temperature listed below. The daily breathing loss is equal to the annual breathing loss on the following calculation sheet, divided by 365 days.

Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EC - Engineering Calculations

Asphalt Cement Delivery for Tank	80.00	tonne/day		
Asphalt Cement Specific Gravity (SG)	1.027			
Asphalt Cement Stored (V_{air})	77,896.79	L/day	20,578.15	gal/day
Tank Type	Horizontal			
Is the tank heated?	Yes			
Shell Length	13.5	m	44.3	ft
Shell Diameter	3.0	m	9.8	ft
Working Volume	85,883.29	L	22,687.96	gal
	Breathing Loss		Working Loss	
Average Liquid Surface Temperature	301	°F	325	°F
Minimum Liquid Surface Temperature	277	°F	325	°F
Maximum Liquid Surface Temperature	325	°F	325	°F
Bulk Liquid Temperature	300	°F	325	°F
Average Asphalt Cement Vapour Pressure (VPavg)	0.00949	psi	0.01828	psi
Minimum Asphalt Cement Vapour Pressure (VPmin)	0.00472	psi	0.01828	psi
Maximum Asphalt Cement Vapour Pressure (VPmax)	0.01828	psi	0.01828	psi
Liquid Molecular Weight	1000	g/mol		
Vapour Molecular Weight	105	g/mol		
Asphalt Fume (TOC) Working Loss - **Tanks 4.0.9**	0.32	kg/day	0.71	lb/day
Asphalt Fume (TOC) Breathing Loss - **Tanks 4.0.9 (Annual loss/365 days)**	0.01	kg/day	6.06	lb/yr
Asphalt Fume (TOC) Total Emissions - **Tanks 4.0.9**	0.33	kg/day	6.77	lb/day
Ratio of TOC to Organic PM Emission Factors for Silo Filling (0.0504/0.00105)	48			

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS #	Speciation Profile (% of TOC)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC1	HMA	AC storage tank 1	Asphalt Cement	Total VOC	-	100	3.82E-03	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	Benzene	71-43-2	0.032	1.22E-06	Average	EC

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS #	Speciation Profile (% of Organic PM)	Emission Rate (g/s)	ESDM Data Quality	Estimation Technique
AC1	HMA	AC storage tank 1	Asphalt Cement	Organic PM (total PM)	PM	-	7.96E-05	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	Organic PM (PM2.5)	PM2.5	-	7.96E-05	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	B(a)P	50-32-8	0.0023	1.83E-09	Average	EC
AC1	HMA	AC storage tank 1	Asphalt Cement	Naphthalene	91-20-3	1.82	1.45E-06	Average	EC

Calculation Sheet 5
Asphalt Cement Requirements, Tank Dimensions and Volumes

The daily asphalt cement delivery rate for each tank is calculated using the number of full, 40-tonne trucks which satisfies the asphalt cement required, assuming each tank contributes to the requirement equally.

The yearly asphalt cement delivery rate is then calculated by using the ratio of trucks accepted to each tank daily, multiplied by the number of tanker trucks required to fulfill the annual asphalt cement requirement.

Total HMA Produced	140,000	tonnes/yr	2,000	tonnes/day
Asphalt Cement in HMA	5.0	%		
Total Asphalt Cement Required	7,000	tonne/yr	100	tonne/day
Number of 40-tonne Asphalt Cement Tanker Trucks Required	175	trucks/yr	3	trucks/day

Tank	Content	Type	Height / Length (m)	Diameter (m)	Volume (m^3)	Capacity (tonnes)	Working Volume (m^3)	Working Capacity (tonnes)	Volume %	Asphalt Cement Required tonnes/ day	Maximum Number of Trucks Accepted in a Day	Asphalt Cement Delivery Rate tonnes/ day	Maximum Number of Trucks Accepted in a Year	Asphalt Cement Delivery Rate tonnes/ year
AC1	Asphalt Cement	HFRT	13.5	3.0	95.4	98.0	85.9	88.2	49%	48.9	2	80.0	88	3,520.0
AC2	Asphalt Cement	HFRT	10.4	3.5	99.7	102.4	89.7	92.2	51%	51.1	2	80.0	88	3,520.0

Calculation Sheet 4

Emission Rates - Batch Dryer (HMA Baghouse)

Emission factors taken from U.S. EPA, AP-42, Section 11.1, "Hot Mix Asphalt Plants," March 2004 Table 11.1-1, 11.1-5, 11.1-9 and 11.1-11 for a batch dryer with fabric filter with a burner fired by natural gas. To convert from lb/ton to kg/Mg, multiply by 0.5 (U.S. EPA AP-42, 11.1 Hot Mix Asphalt Plants)

Data quality of the emission estimates determined as per MOECC Guideline A-10, Section 9.2 Data Quality. EF - Emission Factor

Maximum Annual Emission Rate (g/s) = Maximum Production Rate (tonne/year) x Emission Factor (lb/ton) x 0.5 (kg/tonne)/(lb/ton) x (1000g/kg) x (yr/365days) x (day/24 hr) x (hr/3600s)

Maximum Daily Emission Rate (g/s) = Maximum Production Rate (tonne/day) x Emission Factor (lb/ton) x 0.5 (kg/tonne)/(lb/ton) x (1000g/kg) x (day/24 hr) x (hr/3600s)

Maximum Hourly Emission Rate (g/s) = Maximum Production Rate (tonne/hr) x Emission Factor (lb/ton) x 0.5 (kg/tonne)/(lb/ton) x (1000g/kg) x (hr/3600s)

Maximum HMA Production Rate - Annual	140,000	tonnes/year
Maximum HMA Production Rate - 24 hr	2,000	tonnes/day
Maximum HMA Production Rate - 1 hr	265	tonnes/hour

Source I.D.	Scenario	Source Description	Contaminant	CAS#	Averaging Period	Emission Factor (lb/ton)	Controlled Emissions (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	PM	PM	24 hr	4.20E-02	4.86E-01	B	Above Average	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	PM	PM	Annual	4.20E-02	9.32E-02	B	Above Average	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	PM2.5	PM2.5	24 hr	2.54E-02	2.94E-01	E	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	PM2.5	PM2.5	Annual	2.54E-02	5.64E-02	E	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Organic PM	-	24 hr	4.10E-03	4.75E-02	A	Above Average	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	NO_X	10102-44-0	1 hr	2.50E-02	9.20E-01	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	NO_X	10102-44-0	24 hr	2.50E-02	2.89E-01	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	NO_X	10102-44-0	annual	2.50E-02	5.55E-02	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Benzene	71-43-2	Annual	2.80E-04	6.22E-04	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Benzene	71-43-2	24 hr	2.80E-04	3.24E-03	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	B(a)P	50-32-8	Annual	3.10E-10	6.88E-10	E	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	B(a)P	50-32-8	24 hr	3.10E-10	3.59E-09	E	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Naphthalene	91-20-3	24 hr	3.60E-05	4.17E-04	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Arsenic	7440-38-2	24 hr	4.60E-07	5.32E-06	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Lead	7439-92-1	24 hr	8.90E-07	1.03E-05	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Nickel	7440-02-0	Annual	3.00E-06	6.66E-06	D	Marginal	EF
BH	HMA	Baghouse, servicing the HMA plant including the natural gas fired dryer	Nickel	7440-02-0	24 hr	3.00E-06	3.47E-05	D	Marginal	EF

Calculation Sheet 3
Emission Rates - Crushing and Screening

Emissions from crushing and screening were calculated using emission factors in US EPA AP-42, Section 11.9.2, Sand and Gravel Processing (August 2004). PM, PM10 and PM2.5 emission factors for controlled tertiary crushing and controlled and uncontrolled screening taken from U.S. EPA, AP-42, Section 11.19.2, "Crushed Stone Processing and Pulverized Mineral Processing," August 2004, Table 11.19.2-1 were used.

The limestone crushing operations in the quarry are controlled by water spray; therefore, the crushing controlled emission factor was used in the calculations. The RAP crushing (HMA plant operations) was treated as uncontrolled.
Screening emissions from the HMA Plant third-party crushing operations and and the Quarry crushing operations are treated as controlled since the material is either washed/wet and/or is moist/sticky.

A maximum concentration of respirable crystalline silica (quartz) in PM10 of 1.4% was used for crushing and screening of aggregate material.

Controlled Contaminant Emissions (g/s) = Contaminant Emission Factor (kg/tonne) x Loading Rate (tonnes/day) x (1-Control Efficiency, %) x 1000g/kg x Percent of Contaminant / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

		Scenario	24 hr		Annual	
Maximum production rate of the HMA Plant	**HMA**	HMA	2,000	tonnes/day	140,000	tonnes/year
Maximum processing rate of the crusher (HMA Plant)	**Crushed RAP**	HMA	2,000	tonnes/day	60,000	tonnes/year
Maximum processing rate of Crushing Plant 1 (Quarry)	**limestone**	SE	3,500	tonnes/day	630,000	tonnes/year
Maximum processing rate of Crushing Plant 2 (Quarry)	**limestone**	SE	2,000	tonnes/day	360,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2 (Quarry)	**limestone**	SA	10,000	tonnes/day	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2 (Quarry)	**limestone**	SB	10,000	tonnes/day	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2 (Quarry)	**limestone**	SC	10,000	tonnes/day	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2 (Quarry)	**limestone**	SD	10,000	tonnes/day	2,000,000	tonnes/year

Percentage of Material in HMA

Percentage of Coarse Aggregate	**in HMA**	25.0	%
Percentage of Sand	**in HMA**	50.0	%
Percentage of RAP	**in HMA**	20.0	%
Percentage of Asphalt Cement	**in HMA**	5.0	%

Source I.D.	Scenario	Source Description	Material	Contaminants	CAS #	Averaging Period	Maximum Loading Rate	Maximum Loading Rate Units	Additional Control Efficiency (%)	% of Contaminant	Emission Factor (kg/tonne)	Controlled Emissions (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant															
SC	HMA	Screening	RAP	PM	PM	24 hr	400	tonnes/day	0%	100%	0.00110	5.09E-03	E	Marginal	EF
SC	HMA	Screening	RAP	PM	PM	annual	28000	tonnes/year	0%	100%	0.00110	9.77E-04	E	Marginal	EF
SC	HMA	Screening	RAP	PM2.5	PM2.5	24 hr	400	tonnes/day	0%	100%	0.00005	2.31E-04	E	Marginal	EF
SC	HMA	Screening	RAP	PM2.5	PM2.5	annual	28000	tonnes/year	0%	100%	0.00005	4.44E-05	E	Marginal	EF
HMA Plant Third Party Mobile Crushing Operations															
CR3-1	HMA	Crushing	Crushed RAP	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.00270	6.25E-02	E	Marginal	EF
CR3-1	HMA	Crushing	Crushed RAP	PM	PM	annual	60000	tonnes/year	0%	100%	0.00270	5.14E-03	E	Marginal	EF
CR3-1	HMA	Crushing	Crushed RAP	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.00120	2.78E-02	E	Marginal	EF
CR3-1	HMA	Crushing	Crushed RAP	PM2.5	PM2.5	annual	60000	tonnes/year	0%	100%	0.00120	2.28E-03	E	Marginal	EF
CR3-2	HMA	Screening	Crushed RAP	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.00110	2.55E-02	E	Marginal	EF
CR3-2	HMA	Screening	Crushed RAP	PM	PM	annual	60000	tonnes/year	0%	100%	0.00110	2.09E-03	E	Marginal	EF
CR3-2	HMA	Screening	Crushed RAP	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.00005	1.16E-03	E	Marginal	EF
CR3-2	HMA	Screening	Crushed RAP	PM2.5	PM2.5	annual	60000	tonnes/year	0%	100%	0.00005	9.51E-05	E	Marginal	EF
Existing Quarry Operations - Crushing Operations															
Q2	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 1)	limestone	PM	PM	24 hr	3500	tonnes/day	0%	100%	0.00060	2.43E-02	E	Marginal	EF
Q2	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 1)	limestone	PM	PM	annual	630000	tonnes/year	0%	100%	0.00060	1.20E-02	E	Marginal	EF
Q2	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	3500	tonnes/day	0%	100%	0.00005	2.03E-03	E	Marginal	EF
Q2	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	630000	tonnes/year	0%	100%	0.00005	9.99E-04	E	Marginal	EF
Q2	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	3500	tonnes/day	0%	1.4%	0.00027	1.53E-04	D	Marginal	EF
Q3	SE	Screening - screen 1 (Crushing Plant 1)	limestone	PM	PM	24 hr	3500	tonnes/day	0%	100%	0.00110	4.46E-02	E	Marginal	EF
Q3	SE	Screening - screen 1 (Crushing Plant 1)	limestone	PM	PM	annual	630000	tonnes/year	0%	100%	0.00110	2.20E-02	E	Marginal	EF
Q3	SE	Screening - screen 1 (Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	3500	tonnes/day	0%	100%	0.00005	2.03E-03	E	Marginal	EF
Q3	SE	Screening - screen 1 (Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	630000	tonnes/year	0%	100%	0.00005	9.99E-04	E	Marginal	EF

Calculation Sheet 3
Emission Rates - Crushing and Screening

Q3	SE	Screening - screen 1 (Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	3500	tonnes/day	0%	1.4%	0.00037	2.10E-04	D	Marginal	EF
Q4	SE	Crushing - crusher 2 (Cone Crushers, Crushing Plant 1)	limestone	PM	PM	24 hr	525	tonnes/day	0%	100%	0.00060	3.65E-03	E	Marginal	EF
Q4	SE	Crushing - crusher 2 (Cone Crushers, Crushing Plant 1)	limestone	PM	PM	annual	94500	tonnes/year	0%	100%	0.00060	1.80E-03	E	Marginal	EF
Q4	SE	Crushing - crusher 2 (Cone Crushers, Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	525	tonnes/day	0%	100%	0.00005	3.04E-04	E	Marginal	EF
Q4	SE	Crushing - crusher 2 (Cone Crushers, Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	94500	tonnes/year	0%	100%	0.00005	1.50E-04	E	Marginal	EF
Q4	SE	Crushing - crusher 2 (Cone Crushers, Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	525	tonnes/day	0%	1.4%	0.00027	2.30E-05	D	Marginal	EF
Q5	SE	Screening - screen 2 (Crushing Plant 1)	limestone	PM	PM	24 hr	525	tonnes/day	0%	100%	0.00110	6.68E-03	E	Marginal	EF
Q5	SE	Screening - screen 2 (Crushing Plant 1)	limestone	PM	PM	annual	94500	tonnes/year	0%	100%	0.00110	3.30E-03	E	Marginal	EF
Q5	SE	Screening - screen 2 (Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	525	tonnes/day	0%	100%	0.00005	3.04E-04	E	Marginal	EF
Q5	SE	Screening - screen 2 (Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	94500	tonnes/year	0%	100%	0.00005	1.50E-04	E	Marginal	EF
Q5	SE	Screening - screen 2 (Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	525	tonnes/day	0%	1.4%	0.00037	3.15E-05	D	Marginal	EF
Q9	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.00060	1.39E-02	E	Marginal	EF
Q9	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	0.00060	6.85E-03	E	Marginal	EF
Q9	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.00005	1.16E-03	E	Marginal	EF
Q9	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	0.00005	5.71E-04	E	Marginal	EF
Q9	SE	Crushing - crusher 1 (Jaw Crusher, Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	0.00027	8.75E-05	D	Marginal	EF
Q12	SE	Crushing - crusher 2 (Cone Crusher, Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.00060	1.39E-02	E	Marginal	EF
Q12	SE	Crushing - crusher 2 (Cone Crusher, Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	0.00060	6.85E-03	E	Marginal	EF
Q12	SE	Crushing - crusher 2 (Cone Crusher, Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.00005	1.16E-03	E	Marginal	EF
Q12	SE	Crushing - crusher 2 (Cone Crusher, Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	0.00005	5.71E-04	E	Marginal	EF
Q12	SE	Crushing - crusher 2 (Cone Crusher, Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	0.00027	8.75E-05	D	Marginal	EF
Q13	SE	Screening - screen 1 (Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.00110	2.55E-02	E	Marginal	EF
Q13	SE	Screening - screen 1 (Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	0.00110	1.26E-02	E	Marginal	EF
Q13	SE	Screening - screen 1 (Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.00005	1.16E-03	E	Marginal	EF
Q13	SE	Screening - screen 1 (Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	0.00005	5.71E-04	E	Marginal	EF
Q13	SE	Screening - screen 1 (Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	0.00037	1.20E-04	D	Marginal	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)															
P1-Q4	SA	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00060	6.94E-02	E	Marginal	EF
P1-Q4	SA	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00060	3.81E-02	E	Marginal	EF
P1-Q4	SA	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P1-Q4	SA	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P1-Q4	SA	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00027	4.38E-04	D	Marginal	EF
P1-Q5	SA	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00110	1.27E-01	E	Marginal	EF
P1-Q5	SA	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00110	6.98E-02	E	Marginal	EF
P1-Q5	SA	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P1-Q5	SA	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P1-Q5	SA	Screening - screen 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00037	6.00E-04	D	Marginal	EF
P1-Q6	SA	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00060	1.04E-02	E	Marginal	EF
P1-Q6	SA	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00060	5.71E-03	E	Marginal	EF
P1-Q6	SA	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P1-Q6	SA	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P1-Q6	SA	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00027	6.56E-05	D	Marginal	EF
P1-Q7	SA	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00110	1.91E-02	E	Marginal	EF
P1-Q7	SA	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00110	1.05E-02	E	Marginal	EF
P1-Q7	SA	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P1-Q7	SA	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P1-Q7	SA	Screening - screen 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00037	8.99E-05	D	Marginal	EF
Quarry Operations - Scenario B (Phase 3)															
P2-Q4	SB	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00060	6.94E-02	E	Marginal	EF
P2-Q4	SB	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00060	3.81E-02	E	Marginal	EF
P2-Q4	SB	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P2-Q4	SB	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P2-Q4	SB	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00027	4.38E-04	D	Marginal	EF
P2-Q5	SB	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00110	1.27E-01	E	Marginal	EF
P2-Q5	SB	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00110	6.98E-02	E	Marginal	EF
P2-Q5	SB	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P2-Q5	SB	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P2-Q5	SB	Screening - screen 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00037	6.00E-04	D	Marginal	EF
P2-Q6	SB	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00060	1.04E-02	E	Marginal	EF
P2-Q6	SB	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00060	5.71E-03	E	Marginal	EF

Calculation Sheet 3
Emission Rates - Crushing and Screening

P2-Q6	SB	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P2-Q6	SB	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P2-Q6	SB	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00027	6.56E-05	D	Marginal	EF
P2-Q7	SB	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00110	1.91E-02	E	Marginal	EF
P2-Q7	SB	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00110	1.05E-02	E	Marginal	EF
P2-Q7	SB	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P2-Q7	SB	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P2-Q7	SB	Screening - screen 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00037	8.99E-05	D	Marginal	EF
Quarry Operations - Scenario C (Phase 4 & 6)															
P3-Q4	SC	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00060	6.94E-02	E	Marginal	EF
P3-Q4	SC	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00060	3.81E-02	E	Marginal	EF
P3-Q4	SC	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P3-Q4	SC	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P3-Q4	SC	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00027	4.38E-04	D	Marginal	EF
P3-Q5	SC	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00110	1.27E-01	E	Marginal	EF
P3-Q5	SC	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00110	6.98E-02	E	Marginal	EF
P3-Q5	SC	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P3-Q5	SC	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P3-Q5	SC	Screening - screen 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00037	6.00E-04	D	Marginal	EF
P3-Q6	SC	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00060	1.04E-02	E	Marginal	EF
P3-Q6	SC	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00060	5.71E-03	E	Marginal	EF
P3-Q6	SC	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P3-Q6	SC	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P3-Q6	SC	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00027	6.56E-05	D	Marginal	EF
P3-Q7	SC	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00110	1.91E-02	E	Marginal	EF
P3-Q7	SC	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00110	1.05E-02	E	Marginal	EF
P3-Q7	SC	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P3-Q7	SC	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P3-Q7	SC	Screening - screen 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00037	8.99E-05	D	Marginal	EF
Quarry Operations - Scenario D (Phase 5)															
P4-Q4	SD	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00060	6.94E-02	E	Marginal	EF
P4-Q4	SD	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00060	3.81E-02	E	Marginal	EF
P4-Q4	SD	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P4-Q4	SD	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P4-Q4	SD	Crushing - crusher 1 (Jaw Crusher, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00027	4.38E-04	D	Marginal	EF
P4-Q5	SD	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.00110	1.27E-01	E	Marginal	EF
P4-Q5	SD	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.00110	6.98E-02	E	Marginal	EF
P4-Q5	SD	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.00005	5.79E-03	E	Marginal	EF
P4-Q5	SD	Screening - screen 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.00005	3.17E-03	E	Marginal	EF
P4-Q5	SD	Screening - screen 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.00037	6.00E-04	D	Marginal	EF
P4-Q6	SD	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00060	1.04E-02	E	Marginal	EF
P4-Q6	SD	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00060	5.71E-03	E	Marginal	EF
P4-Q6	SD	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P4-Q6	SD	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P4-Q6	SD	Crushing - crusher 2 (Cone Crushers, Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00027	6.56E-05	D	Marginal	EF
P4-Q7	SD	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	1500	tonnes/day	0%	100%	0.00110	1.91E-02	E	Marginal	EF
P4-Q7	SD	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	300000	tonnes/year	0%	100%	0.00110	1.05E-02	E	Marginal	EF
P4-Q7	SD	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	1500	tonnes/day	0%	100%	0.00005	8.68E-04	E	Marginal	EF
P4-Q7	SD	Screening - screen 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	300000	tonnes/year	0%	100%	0.00005	4.76E-04	E	Marginal	EF
P4-Q7	SD	Screening - screen 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	1500	tonnes/day	0%	1.4%	0.00037	8.99E-05	D	Marginal	EF

Calculation Sheet 2
Emission Rates - Conveyor Transfers

Emissions from conveyor transfers were calculated using emission factors in US EPA AP-42, Section 11.9.2, Sand and Gravel Processing (August 2004). The material is washed or maintains a high moisture content with a low silt content; as a result the Emission factor for controlled conveyor transfer U.S. EPA AP-42, Section 11.19.2, "Crushed Stone Processing and Pulverized Mineral Processing," August 2004 was used.

A maximum concentration of respirable crystalline silica (quartz) in PM10 of 1.4% was used for drops or transfers of aggregate material (limestone).

Controlled Contaminant Emissions (g/s) = Contaminant Emission Factor (kg/tonne) x Loading Rate (tonnes/day) x (1-Control Efficiency, %) x (1000g/kg) x Percent of Contaminant / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

	Scenario	24 hr		Annual		
Maximum production rate of the HMA Plant HMA	HMA	2,000	tonnes/day	140,000	tonnes/year	
Maximum processing rate of the crusher (HMA plant) Crushed RAP	HMA	2,000	tonnes/day	60,000	tonnes/year	
Maximum processing rate of Crushing Plant 1 (Quarry) limestone	SE	3,500	tonnes/day	630,000	tonnes/year	
Maximum processing rate of Crushing Plant 2 (Quarry) limestone	SE	2,000	tonnes/day	360,000	tonnes/year	
Maximum processing rate of Crushing Plant 1 & 2 (Quarry) limestone	SA	10,000	tonnes/day	2,000,000	tonnes/year	c
Maximum processing rate of Crushing Plant 1 & 2 (Quarry) limestone	SB	10,000	tonnes/day	2,000,000	tonnes/year	
Maximum processing rate of Crushing Plant 1 & 2 (Quarry) limestone	SC	10,000	tonnes/day	2,000,000	tonnes/year	
Maximum processing rate of Crushing Plant 1 & 2 (Quarry) limestone	SD	10,000	tonnes/day	2,000,000	tonnes/year	

Percentage of Material in HMA

Percentage of Coarse Aggregate	**in HMA**	25.0	%
Percentage of Sand	**in HMA**	50.0	%
Percentage of RAP	**in HMA**	20.0	%
Percentage of Asphalt Cement	**in HMA**	5.0	%

Source I.D.	Scenario	Source Description	Material	Contaminants	CAS #	Averaging Period	Maximum Loading Rate	Maximum Loading Rate Units	Additional Control Efficiency (%)	% Contaminant	Emission Factor (kg/tonne)	Controlled Emissions (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant															
BT2	HMA	Material transfer from RAP bins to conveyor [C2]	RAP	PM	PM	24 hr	400	tonnes/day	0%	100%	0.0000700	3.24E-04	E	Marginal	EF
BT2	HMA	Material transfer from RAP bins to conveyor [C2]	RAP	PM	PM	annual	28000	tonnes/year	0%	100%	0.0000700	6.22E-05	E	Marginal	EF
BT2	HMA	Material transfer from RAP bins to conveyor [C2]	RAP	PM2.5	PM2.5	24 hr	400	tonnes/day	0%	100%	0.0000065	3.01E-05	E	Marginal	EF
BT2	HMA	Material transfer from RAP bins to conveyor [C2]	RAP	PM2.5	PM2.5	annual	28000	tonnes/year	0%	100%	0.0000065	5.77E-06	E	Marginal	EF
CT1A	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Coarse Aggregate	PM	PM	24 hr	500	tonnes/day	0%	100%	0.0000700	4.05E-04	E	Marginal	EF
CT1A	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Coarse Aggregate	PM	PM	annual	35000	tonnes/year	0%	100%	0.0000700	7.77E-05	E	Marginal	EF
CT1A	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Coarse Aggregate	PM2.5	PM2.5	24 hr	500	tonnes/day	0%	100%	0.0000065	3.76E-05	E	Marginal	EF
CT1A	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Coarse Aggregate	PM2.5	PM2.5	annual	35000	tonnes/year	0%	100%	0.0000065	7.21E-06	E	Marginal	EF
CT1A	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Coarse Aggregate	RCS	14808-60-7	24 hr	500	tonnes/day	0%	1.4%	0.0000230	1.86E-06	D	Marginal	EF
CT1B	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Sand	PM	PM	24 hr	1000	tonnes/day	0%	100%	0.0000700	8.10E-04	E	Marginal	EF
CT1B	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Sand	PM	PM	annual	70000	tonnes/year	0%	100%	0.0000700	1.55E-04	E	Marginal	EF
CT1B	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Sand	PM2.5	PM2.5	24 hr	1000	tonnes/day	0%	100%	0.0000065	7.52E-05	E	Marginal	EF
CT1B	HMA	Material transfer from inclined conveyor [C1] to rotary drum dryer/mixer	Sand	PM2.5	PM2.5	annual	70000	tonnes/year	0%	100%	0.0000065	1.44E-05	E	Marginal	EF
CT2	HMA	Material transfer from inclined conveyor [C3] to rotary drum dryer/mixer	RAP	PM	PM	24 hr	400	tonnes/day	0%	100%	0.0000700	3.24E-04	E	Marginal	EF
CT2	HMA	Material transfer from inclined conveyor [C3] to rotary drum dryer/mixer	RAP	PM	PM	annual	28000	tonnes/year	0%	100%	0.0000700	6.22E-05	E	Marginal	EF
CT2	HMA	Material transfer from inclined conveyor [C3] to rotary drum dryer/mixer	RAP	PM2.5	PM2.5	24 hr	400	tonnes/day	0%	100%	0.0000065	3.01E-05	E	Marginal	EF
CT2	HMA	Material transfer from inclined conveyor [C3] to rotary drum dryer/mixer	RAP	PM2.5	PM2.5	annual	28000	tonnes/year	0%	100%	0.0000065	5.77E-06	E	Marginal	EF
HMA Plant Third Party Mobile Crushing Operations															
CR3-3	HMA	Material transfer from screening discharge conveyor to stacker	Crushed RAP	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0000700	1.62E-03	E	Marginal	EF
CR3-3	HMA	Material transfer from screening discharge conveyor to stacker	Crushed RAP	PM	PM	annual	60000	tonnes/year	0%	100%	0.0000700	1.33E-04	E	Marginal	EF
CR3-3	HMA	Material transfer from screening discharge conveyor to stacker	Crushed RAP	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0000065	1.50E-04	E	Marginal	EF
CR3-3	HMA	Material transfer from screening discharge conveyor to stacker	Crushed RAP	PM2.5	PM2.5	annual	60000	tonnes/year	0%	100%	0.0000065	1.24E-05	E	Marginal	EF

Calculation Sheet 2
Emission Rates - Conveyor Transfers

Existing Quarry Operations - Crushing Operations														
Q6	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 1)	limestone	PM	PM	24 hr	3500	tonnes/day	0%	100%	0.0000700	2.84E-03	E	Marginal	EF
Q6	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 1)	limestone	PM	PM	annual	630000	tonnes/year	0%	100%	0.0000700	1.40E-03	E	Marginal	EF
Q6	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	3500	tonnes/day	0%	100%	0.0000065	2.63E-04	E	Marginal	EF
Q6	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	630000	tonnes/year	0%	100%	0.0000065	1.30E-04	E	Marginal	EF
Q6	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	3500	tonnes/day	0%	1.4%	0.0000230	1.30E-05	D	Marginal	EF
Q7	SE	Material transfer from stacker 1 to stacker 2 (Crushing Plant 1)	limestone	PM	PM	24 hr	3500	tonnes/day	0%	100%	0.0000700	2.84E-03	E	Marginal	EF
Q7	SE	Material transfer from stacker 1 to stacker 2 (Crushing Plant 1)	limestone	PM	PM	annual	630000	tonnes/year	0%	100%	0.0000700	1.40E-03	E	Marginal	EF
Q7	SE	Material transfer from stacker 1 to stacker 2 (Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	3500	tonnes/day	0%	100%	0.0000065	2.63E-04	E	Marginal	EF
Q7	SE	Material transfer from stacker 1 to stacker 2 (Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	630000	tonnes/year	0%	100%	0.0000065	1.30E-04	E	Marginal	EF
Q7	SE	Material transfer from stacker 1 to stacker 2 (Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	3500	tonnes/day	0%	1.4%	0.0000230	1.30E-05	D	Marginal	EF
Q10	SE	Material transfer from discharge conveyor to conveyor 1 (Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0000700	1.62E-03	E	Marginal	EF
Q10	SE	Material transfer from discharge conveyor to conveyor 1 (Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	0.0000700	7.99E-04	E	Marginal	EF
Q10	SE	Material transfer from discharge conveyor to conveyor 1 (Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0000065	1.50E-04	E	Marginal	EF
Q10	SE	Material transfer from discharge conveyor to conveyor 1 (Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	0.0000065	7.42E-05	E	Marginal	EF
Q10	SE	Material transfer from discharge conveyor to conveyor 1 (Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	0.0000230	7.45E-06	D	Marginal	EF
Q11	SE	Material transfer from conveyor 1 to conveyor 2 (Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0000700	1.62E-03	E	Marginal	EF
Q11	SE	Material transfer from conveyor 1 to conveyor 2 (Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	0.0000700	7.99E-04	E	Marginal	EF
Q11	SE	Material transfer from conveyor 1 to conveyor 2 (Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0000065	1.50E-04	E	Marginal	EF
Q11	SE	Material transfer from conveyor 1 to conveyor 2 (Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	0.0000065	7.42E-05	E	Marginal	EF
Q11	SE	Material transfer from conveyor 1 to conveyor 2 (Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	0.0000230	7.45E-06	D	Marginal	EF
Q14	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0000700	1.62E-03	E	Marginal	EF
Q14	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	0.0000700	7.99E-04	E	Marginal	EF
Q14	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0000065	1.50E-04	E	Marginal	EF
Q14	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	0.0000065	7.42E-05	E	Marginal	EF
Q14	SE	Material transfer from discharge conveyor to stacker 1 (Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	0.0000230	7.45E-06	D	Marginal	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)														
P1-Q8	SA	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P1-Q8	SA	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P1-Q8	SA	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P1-Q8	SA	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P1-Q8	SA	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
P1-Q9	SA	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P1-Q9	SA	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P1-Q9	SA	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P1-Q9	SA	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P1-Q9	SA	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
Quarry Operations - Scenario B (Phase 3)														
P2-Q8	SB	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P2-Q8	SB	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P2-Q8	SB	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P2-Q8	SB	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P2-Q8	SB	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
P2-Q9	SB	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P2-Q9	SB	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P2-Q9	SB	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P2-Q9	SB	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P2-Q9	SB	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
Quarry Operations - Scenario C (Phase 4 & 6)														
P3-Q8	SC	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P3-Q8	SC	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P3-Q8	SC	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P3-Q8	SC	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P3-Q8	SC	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
P3-Q9	SC	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P3-Q9	SC	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P3-Q9	SC	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P3-Q9	SC	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P3-Q9	SC	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
Quarry Operations - Scenario D (Phase 5)														
P4-Q8	SD	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P4-Q8	SD	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P4-Q8	SD	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF

Calculation Sheet 2
Emission Rates - Conveyor Transfers

P4-Q8	SD	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P4-Q8	SD	Material transfer from discharge conveyor to stacker 1 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF
P4-Q9	SD	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0000700	8.10E-03	E	Marginal	EF
P4-Q9	SD	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0000700	4.44E-03	E	Marginal	EF
P4-Q9	SD	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0000065	7.52E-04	E	Marginal	EF
P4-Q9	SD	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0000065	4.12E-04	E	Marginal	EF
P4-Q9	SD	Material transfer from stacker 1 to stacker 2 (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0000230	3.73E-05	D	Marginal	EF

Notes:

(1) The material is washed or maintains a high moisture content; as a result the PM emission factor for controlled conveyor transfer from U.S. EPA AP-42, Section 11.19.2, "Crushed Stone Processing and Pulverized Mineral Processing," August 2004, Table 11.19.2-1 was used.

(2) Data quality of the emission estimates determined as per Ministry Guideline A-10, Section 9.2 Data Quality

(3) EF - Emission Factor

Calculation Sheet 1D - Rock Truck Unloading

Emissions from rock transfer to stockpiles were estimated using emission factors in US EPA AP-42, Section 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing, August 2004. The Truck Unloading - Fragmented Stone emission factor (0.000008 kg/tonne for PM10) in Table 11.19.2-1 was used.

A maximum concentration of respirable crystalline silica (quartz) in PM10 of 1.4% was used for limestone.

The PM and PM2.5 Emission Factors were calculated assuming the following:
EF(PM) = 2.1 x EF(PM10)
EF(PM2.5) = 0.5 x EF(PM10)

Maximum Contaminant Emissions (g/s) = Contaminant Emission Factor (kg/tonne) x Loading Rate (tonnes/day) x (1-Control Efficiency, %) x (1000g/kg) x Percent of Contaminant / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

			Scenario	24 hr		Scenario	Annual	
Maximum processing rate of the crushers (Quarry)	**Crushing Plant 1**	limestone	SE	3,500	tonnes/day	SE	630,000	tonnes/day
Maximum processing rate of the crushers (Quarry)	**Crushing Plant 2**	limestone	SE	2,000	tonnes/day	SE	360,000	tonnes/day
Maximum processing rate of the crushers (Quarry)	**Crushing Plants 1&2**	limestone	SA	10,000	tonnes/day	SA	2,000,000	tonnes/day
Maximum processing rate of the crushers (Quarry)	**Crushing Plants 1&2**	limestone	SB	10,000	tonnes/day	SB	2,000,000	tonnes/day
Maximum processing rate of the crushers (Quarry)	**Crushing Plants 1&2**	limestone	SC	10,000	tonnes/day	SC	2,000,000	tonnes/day
Maximum processing rate of the crushers (Quarry)	**Crushing Plants 1&2**	limestone	SD	10,000	tonnes/day	SD	2,000,000	tonnes/day

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS#	Averaging Period	Maximum Loading Rate	Maximum Loading Rate Units	Additional Control Efficiency (%)	% Contaminant	Emission Factor (kg/tonne)	Controlled Emissions (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
Existing Quarry Operations - Crushing Operations															
Q1	SE	Front-end loader(s) to hoppers (Crushing Plant 1)	limestone	PM	PM	24 hr	3500	tonnes/day	0%	100%	1.68E-05	6.81E-04	E	Marginal	EF
Q1	SE	Front-end loader(s) to hoppers (Crushing Plant 1)	limestone	PM	PM	annual	630000	tonnes/year	0%	100%	1.68E-05	3.36E-04	E	Marginal	EF
Q1	SE	Front-end loader(s) to hoppers (Crushing Plant 1)	limestone	PM2.5	PM2.5	24 hr	3500	tonnes/day	0%	100%	4.00E-06	1.62E-04	E	Marginal	EF
Q1	SE	Front-end loader(s) to hoppers (Crushing Plant 1)	limestone	PM2.5	PM2.5	annual	630000	tonnes/year	0%	100%	4.00E-06	7.99E-05	E	Marginal	EF
Q1	SE	Front-end loader(s) to hoppers (Crushing Plant 1)	limestone	RCS	14808-60-7	24 hr	3500	tonnes/day	0%	1.4%	8.00E-06	4.54E-06	E	Marginal	EF
Q8	SE	Front-end loader(s) to hoppers (Crushing Plant 2)	limestone	PM	PM	24 hr	2000	tonnes/day	0%	100%	1.68E-05	3.89E-04	E	Marginal	EF
Q8	SE	Front-end loader(s) to hoppers (Crushing Plant 2)	limestone	PM	PM	annual	360000	tonnes/year	0%	100%	1.68E-05	1.92E-04	E	Marginal	EF
Q8	SE	Front-end loader(s) to hoppers (Crushing Plant 2)	limestone	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	4.00E-06	9.26E-05	E	Marginal	EF
Q8	SE	Front-end loader(s) to hoppers (Crushing Plant 2)	limestone	PM2.5	PM2.5	annual	360000	tonnes/year	0%	100%	4.00E-06	4.57E-05	E	Marginal	EF
Q8	SE	Front-end loader(s) to hoppers (Crushing Plant 2)	limestone	RCS	14808-60-7	24 hr	2000	tonnes/day	0%	1.4%	8.00E-06	2.59E-06	E	Marginal	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)															
P1-Q1	SA	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P1-Q1	SA	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P1-Q1	SA	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P1-Q1	SA	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P1-Q1	SA	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P1-Q2	SA	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P1-Q2	SA	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P1-Q2	SA	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P1-Q2	SA	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P1-Q2	SA	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P1-Q3	SA	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P1-Q3	SA	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P1-Q3	SA	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P1-Q3	SA	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P1-Q3	SA	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
Quarry Operations - Scenario B (Phase 3)															
P2-Q1	SB	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P2-Q1	SB	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P2-Q1	SB	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P2-Q1	SB	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P2-Q1	SB	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P2-Q2	SB	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P2-Q2	SB	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P2-Q2	SB	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P2-Q2	SB	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P2-Q2	SB	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P2-Q3	SB	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P2-Q3	SB	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P2-Q3	SB	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P2-Q3	SB	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P2-Q3	SB	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF

Calculation Sheet 1D - Rock Truck Unloading

Quarry Operations - Scenario C (Phase 4 & 6)														
P3-Q1	SC	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P3-Q1	SC	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P3-Q1	SC	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P3-Q1	SC	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P3-Q1	SC	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P3-Q2	SC	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P3-Q2	SC	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P3-Q2	SC	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P3-Q2	SC	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P3-Q2	SC	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P3-Q3	SC	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P3-Q3	SC	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P3-Q3	SC	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P3-Q3	SC	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P3-Q3	SC	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
Quarry Operations - Scenario D (Phase 5)														
P4-Q1	SD	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P4-Q1	SD	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P4-Q1	SD	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P4-Q1	SD	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P4-Q1	SD	Front-end loader rock transfer to haul truck(s) (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P4-Q2	SD	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P4-Q2	SD	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P4-Q2	SD	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P4-Q2	SD	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P4-Q2	SD	Rock transfer haul truck(s) to stockpiles (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF
P4-Q3	SD	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000.0	tonnes/day	0%	100%	1.68E-05	1.94E-03	E	Marginal	EF
P4-Q3	SD	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000.0	tonnes/year	0%	100%	1.68E-05	1.07E-03	E	Marginal	EF
P4-Q3	SD	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000.0	tonnes/day	0%	100%	4.00E-06	4.63E-04	E	Marginal	EF
P4-Q3	SD	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000.0	tonnes/year	0%	100%	4.00E-06	2.54E-04	E	Marginal	EF
P4-Q3	SD	Front-end loader(s) to hoppers (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000.0	tonnes/day	0%	1.4%	8.00E-06	1.30E-05	E	Marginal	EF

Calculation Sheet 1C - Dust Collectors (Drilling)

Emissions from the dust collector that controlls the emissions from drilling operations were estimated using the methodology in the Ministry Procedure. An outlet loading rate of 20 mg/m ^{3} was assumed for the dust collector.

To convert from cfm to m^3/s, divide by 2118.9 CFM/m^3/s.

Maximum Daily Contaminant Emissions (g/s) = Exhaust Flow Rate (m^3/s) x Outlet Loading (mg/m^3) x (g/1000mg) x (daily operating hours/24hr) x Percent of Contaminant

Maximum Contaminant Annual Controlled Emissions (g/s) = Exhaust Flow Rate (m3/s) x Outlet Loading (mg/m3) x (g/1000mg) x (daily operating hours/24hr) x (operating days/year) x Percent of Contaminant

Scenarios SE, SA, SB, SC, SD | Operating Days/Year | 185

Source I.D.	Scenario	Source Description	Material	Contaminant	CAS#	Averaging Period	Exhaust Flow Rate (CFM)	Operating Hours (hr/day)	Outlet Loading Rate (mg/m^3)	% Contaminant	Controlled Emissions (g/s)	ESDM Data Quality	Estimation Technique
Existing Quarry Operations - Crushing Operations													
QD-DC1	SE	Drilling - Dust Collector 1	limestone	PM	PM	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
QD-DC1	SE	Drilling - Dust Collector 1	limestone	PM	PM	annual	1236.0	11	20	100%	2.71E-03	Average	EC
QD-DC1	SE	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
QD-DC1	SE	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	annual	1236.0	11	20	100%	2.71E-03	Average	EC
QD-DC1	SE	Drilling - Dust Collector 1	limestone	RCS	14808-60-7	24 hr	1236.0	11	20	1.4%	7.49E-05	Average	EC
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)													
P1-QD-DC1	SA	Drilling - Dust Collector 1	limestone	PM	PM	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P1-QD-DC1	SA	Drilling - Dust Collector 1	limestone	PM	PM	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P1-QD-DC1	SA	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P1-QD-DC1	SA	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P1-QD-DC1	SA	Drilling - Dust Collector 1	limestone	RCS	14808-60-7	24 hr	1236.0	11	20	1.4%	7.49E-05	Average	EC
Quarry Operations - Scenario B (Phase 3)													
P2-QD-DC1	SB	Drilling - Dust Collector 1	limestone	PM	PM	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P2-QD-DC1	SB	Drilling - Dust Collector 1	limestone	PM	PM	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P2-QD-DC1	SB	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P2-QD-DC1	SB	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P2-QD-DC1	SB	Drilling - Dust Collector 1	limestone	RCS	14808-60-7	24 hr	1236.0	11	20	1.4%	7.49E-05	Average	EC
Quarry Operations - Scenario C (Phase 4 & 6)													
P3-QD-DC1	SC	Drilling - Dust Collector 1	limestone	PM	PM	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P3-QD-DC1	SC	Drilling - Dust Collector 1	limestone	PM	PM	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P3-QD-DC1	SC	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P3-QD-DC1	SC	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P3-QD-DC1	SC	Drilling - Dust Collector 1	limestone	RCS	14808-60-7	24 hr	1236.0	11	20	1.4%	7.49E-05	Average	EC
Quarry Operations - Scenario D (Phase 5)													
P4-QD-DC1	SD	Drilling - Dust Collector 1	limestone	PM	PM	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P4-QD-DC1	SD	Drilling - Dust Collector 1	limestone	PM	PM	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P4-QD-DC1	SD	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	24 hr	1236.0	11	20	100%	5.35E-03	Average	EC
P4-QD-DC1	SD	Drilling - Dust Collector 1	limestone	PM2.5	PM2.5	annual	1236.0	11	20	100%	2.71E-03	Average	EC
P4-QD-DC1	SD	Drilling - Dust Collector 1	limestone	RCS	14808-60-7	24 hr	1236.0	11	20	1.4%	7.49E-05	Average	EC

Calculation Sheet 1B - Drilling

Drilling Emissions (g/s) = Emission Factor (kg/hole) x number of holes/day x 1000 (g/kg) x Percent of Contaminant / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

Operating Days						
185	Existing Scenario	SE	50	holes/day	9250	holes/year
185	Scenario A	SA	50	holes/day	9250	holes/year
185	Scenario B	SB	50	holes/day	9250	holes/year
185	Scenario C	SC	50	holes/day	9250	holes/year
185	Scenario D	SD	50	holes/day	9250	holes/year

Source ID	Scenario	Source Description	Material	Contaminant	CAS	Averaging Period	Emission Factor [(1), (2)]	Control Efficiency[(3)]	% Contaminant	Emission Rate
							kg/hole	%	%	g/s
Existing Quarry Operations - Crushing Operations										
QD	SE	Drilling	limestone	PM	PM	24 hr	0.59	97%	100%	1.02E-02
QD	SE	Drilling	limestone	PM	PM	annual	0.59	97%	100%	5.19E-03
QD	SE	Drilling	limestone	PM2.5	PM2.5	24 hr	0.30	97%	100%	5.21E-03
QD	SE	Drilling	limestone	PM2.5	PM2.5	annual	0.30	97%	100%	2.64E-03
QD	SE	Drilling	limestone	RCS	14808-60-7	24 hr	0.30	97%	1.4%	7.29E-05
	Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)									
P1-QD	SA	Drilling	limestone	PM	PM	24 hr	0.59	97%	100%	1.02E-02
P1-QD	SA	Drilling	limestone	PM	PM	annual	0.59	97%	100%	5.19E-03
P1-QD	SA	Drilling	limestone	PM2.5	PM2.5	24 hr	0.30	97%	100%	5.21E-03
P1-QD	SA	Drilling	limestone	PM2.5	PM2.5	annual	0.30	97%	100%	2.64E-03
P1-QD	SA	Drilling	limestone	RCS	14808-60-7	24 hr	0.30	97%	1.4%	7.29E-05
	Quarry Operations - Scenario B (Phase 3)									
P2-QD	SB	Drilling	limestone	PM	PM	24 hr	0.59	97%	100%	1.02E-02
P2-QD	SB	Drilling	limestone	PM	PM	annual	0.59	97%	100%	5.19E-03
P2-QD	SB	Drilling	limestone	PM2.5	PM2.5	24 hr	0.30	97%	100%	5.21E-03
P2-QD	SB	Drilling	limestone	PM2.5	PM2.5	annual	0.30	97%	100%	2.64E-03
P2-QD	SB	Drilling	limestone	RCS	14808-60-7	24 hr	0.30	97%	1.4%	7.29E-05
	Quarry Operations - Scenario C (Phase 4 & 6)									
P3-QD	SC	Drilling	limestone	PM	PM	24 hr	0.59	97%	100%	1.02E-02
P3-QD	SC	Drilling	limestone	PM	PM	annual	0.59	97%	100%	5.19E-03
P3-QD	SC	Drilling	limestone	PM2.5	PM2.5	24 hr	0.30	97%	100%	5.21E-03
P3-QD	SC	Drilling	limestone	PM2.5	PM2.5	annual	0.30	97%	100%	2.64E-03
P3-QD	SC	Drilling	limestone	RCS	14808-60-7	24 hr	0.30	97%	1.4%	7.29E-05
	Quarry Operations - Scenario D (Phase 5)									
P4-QD	SD	Drilling	limestone	PM	PM	24 hr	0.59	97%	100%	1.02E-02
P4-QD	SD	Drilling	limestone	PM	PM	annual	0.59	97%	100%	5.19E-03
P4-QD	SD	Drilling	limestone	PM2.5	PM2.5	24 hr	0.30	97%	100%	5.21E-03
P4-QD	SD	Drilling	limestone	PM2.5	PM2.5	annual	0.30	97%	100%	2.64E-03
P4-QD	SD	Drilling	limestone	RCS	14808-60-7	24 hr	0.30	97%	1.4%	7.29E-05

(1) Emission factors taken from US EPA AP42, Section 11.9 Western Surface Coal Mining, Table 11.9-4

(2) PM10 and PM2.5 emission factors are from "Determination of Emissions from the Mineral Extracting Industry", Alan DeSalvio and Richard Wales, 2003

(3) A control efficiency of 97% is assumed for the dust collector that controlls the emissions from drilling operations

Calculation Sheet 1A - Blasting

Blasting Gas Emissions (g/s) = Emission Factor (g/tonne explosives) x Mass of explosives (tonne)/Time to clear air (s) / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

Blasting Particulate Emissions (g/s) = Emission Factor Constant (kg/m^2) x (Area per Blast)$^{1.5}$ (m^2) x 1000 (g/kg) x number of blasts/day x Percent of Contaminant / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

	SE	SA	SB	SC	SD		SE	SA	SB	SC	SD	
Extraction Rate	30,000	30,000	30,000	30,000	30,000	**tonne/day**	600,000	2,000,000	2,000,000	2,000,000	2,000,000	**tonne/year**
	1	1	1	1	1	Number of Blast(s)/day	74	74	74	74	74	Number of Blast(s)/
Blasting Depth	20.0	20.0	20.0	20.0	20.0	m	20.0	20.0	20.0	20.0	20.0	m
Rock Density	2.7	2.7	2.7	2.7	2.7	tonne/m^3	2.7	2.7	2.7	2.7	2.7	tonne/m^3
Blasting Face Area/Blast	555.6	555.6	555.6	555.6	555.6	m^2/Blast	555.6	555.6	555.6	555.6	555.6	m^2/Blast
Time to clear air for a blast	3600	3600	3600	3600	3600	s	3600	3600	3600	3600	3600	s
Mass of ANFO Used	12000	12000	12000	12000	12000	kg/day (all blasts)	888000	888000	888000	888000	888000	kg/year (all blasts)
Mass of ANFO Used	12000	12000	12000	12000	12000	kg/blast	12000	12000	12000	12000	12000	tonne/blast

Source ID	Scenario	Source Description	Material	Contaminant	CAS	Averaging Period	Emission Factor	Emission Rate
							g/kg explosives	g/s
Existing Quarry Operations - Crushing Operations								
QB	SE	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	1 hr	0.00067	2.23E-03
QB	SE	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	24 hr	0.00067	9.31E-05
QB	SE	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	annual	0.00067	1.89E-05
QB	SE	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	1 hr	7.29	2.43E+01
QB	SE	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	24 hr	7.29	1.01E+00
QB	SE	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	annual	7.29	2.05E-01
	Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)							
P1-QB	SA	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	1 hr	0.00067	2.23E-03
P1-QB	SA	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	24 hr	0.00067	9.31E-05
P1-QB	SA	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	annual	0.00067	1.89E-05
P1-QB	SA	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	1 hr	7.29	2.43E+01
P1-QB	SA	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	24 hr	7.29	1.01E+00
P1-QB	SA	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	annual	7.29	2.05E-01
	Quarry Operations - Scenario B (Phase 3)							
P2-QB	SB	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	1 hr	0.00067	2.23E-03
P2-QB	SB	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	24 hr	0.00067	9.31E-05
P2-QB	SB	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	annual	0.00067	1.89E-05
P2-QB	SB	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	1 hr	7.29	2.43E+01
P2-QB	SB	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	24 hr	7.29	1.01E+00
P2-QB	SB	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	annual	7.29	2.05E-01
	Quarry Operations - Scenario C (Phase 4 & 6)							
P3-QB	SC	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	1 hr	0.00067	2.23E-03
P3-QB	SC	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	24 hr	0.00067	9.31E-05
P3-QB	SC	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	annual	0.00067	1.89E-05
P3-QB	SC	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	1 hr	7.29	2.43E+01
P3-QB	SC	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	24 hr	7.29	1.01E+00
P3-QB	SC	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	annual	7.29	2.05E-01
	Quarry Operations - Scenario D (Phase 5)							
P4-QB	SD	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	1 hr	0.00067	2.23E-03
P4-QB	SD	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	24 hr	0.00067	9.31E-05
P4-QB	SD	Blasting	Emulsion (Centra Gold 70) [1]	NOx	10102-44-0	annual	0.00067	1.89E-05
P4-QB	SD	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	1 hr	7.29	2.43E+01
P4-QB	SD	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	24 hr	7.29	1.01E+00
P4-QB	SD	Blasting	Emulsion (Centra Gold 70) [1]	CO	630-08-0	annual	7.29	2.05E-01

Calculation Sheet 1A - Blasting

Source ID	Scenario	Source Description	Material	Contaminant	CAS	Averaging Period	Emission Factor Constant [2] per Blast	Area per Blast [3]	Control Efficiency	Particulate Size Scaling Ratio [2]	% Contaminant	Emission Rate
							kg/m^2	m^2/blast	%		%	g/s
Existing Quarry Operations - Crushing Operations												
QB	SE	Blasting	limestone	PM	PM	24 hr	0.00022	555.556	0%	1.00	100%	3.33E-02
QB	SE	Blasting	limestone	PM	PM	annual	0.00022	555.556	0%	1.00	100%	6.76E-03
QB	SE	Blasting	limestone	PM2.5	PM2.5	24 hr	0.00022	555.556	0%	0.03	100%	1.00E-03
QB	SE	Blasting	limestone	PM2.5	PM2.5	annual	0.00022	555.556	0%	0.03	100%	2.03E-04
QB	SE	Blasting	limestone	RCS	14808-60-7	24 hr	0.00022	555.556	0%	0.52	1.4%	2.43E-04
	Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)											
P1-QB	SA	Blasting	limestone	PM	PM	24 hr	0.00022	555.556	0%	1.00	100%	3.33E-02
P1-QB	SA	Blasting	limestone	PM	PM	annual	0.00022	555.556	0%	1.00	100%	6.76E-03
P1-QB	SA	Blasting	limestone	PM2.5	PM2.5	24 hr	0.00022	555.556	0%	0.03	100%	1.00E-03
P1-QB	SA	Blasting	limestone	PM2.5	PM2.5	annual	0.00022	555.556	0%	0.03	100%	2.03E-04
P1-QB	SA	Blasting	limestone	RCS	14808-60-7	24 hr	0.00022	555.556	0%	0.52	1.4%	2.43E-04
	Quarry Operations - Scenario B (Phase 3)											
P2-QB	SB	Blasting	limestone	PM	PM	24 hr	0.00022	555.556	0%	1.00	100%	3.33E-02
P2-QB	SB	Blasting	limestone	PM	PM	annual	0.00022	555.556	0%	1.00	100%	6.76E-03
P2-QB	SB	Blasting	limestone	PM2.5	PM2.5	24 hr	0.00022	555.556	0%	0.03	100%	1.00E-03
P2-QB	SB	Blasting	limestone	PM2.5	PM2.5	annual	0.00022	555.556	0%	0.03	100%	2.03E-04
P2-QB	SB	Blasting	limestone	RCS	14808-60-7	24 hr	0.00022	555.556	0%	0.52	1.4%	2.43E-04
	Quarry Operations - Scenario C (Phase 4 & 6)											
P3-QB	SC	Blasting	limestone	PM	PM	24 hr	0.00022	555.556	0%	1.00	100%	3.33E-02
P3-QB	SC	Blasting	limestone	PM	PM	annual	0.00022	555.556	0%	1.00	100%	6.76E-03
P3-QB	SC	Blasting	limestone	PM2.5	PM2.5	24 hr	0.00022	555.556	0%	0.03	100%	1.00E-03
P3-QB	SC	Blasting	limestone	PM2.5	PM2.5	annual	0.00022	555.556	0%	0.03	100%	2.03E-04
P3-QB	SC	Blasting	limestone	RCS	14808-60-7	24 hr	0.00022	555.556	0%	0.52	1.4%	2.43E-04
	Quarry Operations - Scenario D (Phase 5)											
P4-QB	SD	Blasting	limestone	PM	PM	24 hr	0.00022	555.556	0%	1.00	100%	3.33E-02
P4-QB	SD	Blasting	limestone	PM	PM	annual	0.00022	555.556	0%	1.00	100%	6.76E-03
P4-QB	SD	Blasting	limestone	PM2.5	PM2.5	24 hr	0.00022	555.556	0%	0.03	100%	1.00E-03
P4-QB	SD	Blasting	limestone	PM2.5	PM2.5	annual	0.00022	555.556	0%	0.03	100%	2.03E-04
P4-QB	SD	Blasting	limestone	RCS	14808-60-7	24 hr	0.00022	555.556	0%	0.52	1.4%	2.43E-04

[1] Emission factors provided by Orica, 2019.

[2] US EPA AP42, section 42, Table 11.9-2.

Calculation Sheet 1
Drop Emission Rates

Emission factors from dropping aggregate materials were calculated using the US EPA AP-42 Drop Equation EF = k (0.0016) (U/2.2)^1.3/(M/2)^1.4 (kg/tonne) (U.S. EPA, AP-42, Section 13.2.4 *Aggregate Handling and Storage Pile* ,November 2006, Equation 1), where k = 0.8 prorated for particulate matter, k=0.35 for PM10 and k=0.053 for PM2.5, U is wind speed (m/s) and M is the moisture content of the aggregate material (%). These emissions have been estimated for each AERMOD wind category using the maximum wind speed for each category. For Category F, the maximum hourly wind speed for the regional meteorological surface data file was used.

A maximum concentration of respirable crystalline silica (quartz) in PM10 of 1.4% was used for drops or transfers of aggregate material (limestone).

Controlled Contaminant Emissions (g/s) = Contaminant Emission Factor (kg/tonne) x Loading Rate (tonnes/day) x (1-Control Efficiency, %) x 1000g/kg x Percent of Contaminant / Averaging Period Converted to Seconds [years to seconds/days to seconds/hours to seconds]

		Scenario	24 hr		Scenario	Annual	
Maximum production rate of the HMA Plant	**HMA**	**HMA**	2,000	tonnes/day	**HMA**	140,000	tonnes/year
Maximum processing rate of the crusher (HMA plant)	**Crushed RAP**	**HMA**	2,000	tonnes/day	**HMA**	60,000	tonnes/year
Maximum processing rate of the Crushing Plant 1 & 2 (Quarry)	**limestone**	**SE**	5,500	tonnes/day	**SE**	990,000	tonnes/year
Maximum processing rate of the Crushing Plant 1 & 2 (Quarry)	**limestone**	**SA**	10,000	tonnes/day	**SA**	2,000,000	tonnes/year
Maximum processing rate of the Crushing Plant 1 & 2 (Quarry)	**limestone**	**SB**	10,000	tonnes/day	**SB**	2,000,000	tonnes/year
Maximum processing rate of the Crushing Plant 1 & 2 (Quarry)	**limestone**	**SC**	10,000	tonnes/day	**SC**	2,000,000	tonnes/year
Maximum processing rate of the Crushing Plant 1 & 2 (Quarry)	**limestone**	**SD**	10,000	tonnes/day	**SD**	2,000,000	tonnes/year
Maximum shipping rate (Quarry - extensions)	**limestone**	**SA, SB, SC, SD**	8,000	tonnes/day	**SA, SB, SC, SD**	2,000,000	tonnes/year

Moisture Content

Mositure Content of Coarse Aggregate	4.8	%
Mositure Content of Sand	4.8	%
Mositure Content of RAP	4.0	%
Mositure Content of Uncrushed RAP	4.0	%
Mositure Content of Crushed RAP	4.0	%
Mositure Content of Limestone	4.8	%
Mositure Content of Sand/Coarse Aggregate	4.8	%

Percentage of Material in HMA

Percentage of Coarse Aggregate	**in HMA**	25.0	%
Percentage of Sand	**in HMA**	50.0	%
Percentage of RAP	**in HMA**	20.0	%
Percentage of Asphalt Cement	**in HMA**	5.0	%

	A	B	C	D	E	F
Maximum Wind Speed for Category (m/s)	1.54	3.09	5.14	8.23	10.8	18.5
Factor for Variable Emissions	0.04	0.10	0.19	0.35	0.50	1.00

Source I.D.	Scenario	Source Description	Material	Contaminants	CAS #	Averaging Period	Maximum Loading Rate	Maximum Loading Rate Units	Additional Control Efficiency (%)	% of Contaminant	Emission Factor (kg/tonne)	Controlled Emissions (g/s)	U.S. EPA AP-42 Data Quality	ESDM Data Quality	Estimation Technique
Hot Mix Asphalt (HMA) Plant															
SP1A	HMA	Delivery truck(s) to stockpiles	Coarse Aggregate	PM	PM	24 hr	500	tonnes/day	0%	100%	0.0060	3.46E-02	A	Above Average	EF
SP1A	HMA	Delivery truck(s) to stockpiles	Coarse Aggregate	PM	PM	annual	35000	tonnes/year	0%	100%	0.0060	6.64E-03	A	Above Average	EF
SP1A	HMA	Delivery truck(s) to stockpiles	Coarse Aggregate	PM2.5	PM2.5	24 hr	500	tonnes/day	0%	100%	0.0004	2.29E-03	A	Above Average	EF

Calculation Sheet 1
Drop Emission Rates

SP1A	HMA	Delivery truck(s) to stockpiles	Coarse Aggregate	PM2.5	PM2.5	annual	35000	tonnes/year	0%	100%	0.0004	4.40E-04	A	Above Average	EF
SP1A	HMA	Delivery truck(s) to stockpiles	Coarse Aggregate	RCS	14808-60-7	24 hr	500	tonnes/day	0%	1.4%	0.0026	2.12E-04	A	Above Average	EF
SP1B	HMA	Delivery truck(s) to stockpiles	Sand	PM	PM	24 hr	1000	tonnes/day	0%	100%	0.0060	6.93E-02	A	Above Average	EF
SP1B	HMA	Delivery truck(s) to stockpiles	Sand	PM	PM	annual	70000	tonnes/year	0%	100%	0.0060	1.33E-02	A	Above Average	EF
SP1B	HMA	Delivery truck(s) to stockpiles	Sand	PM2.5	PM2.5	24 hr	1000	tonnes/day	0%	100%	0.0004	4.59E-03	A	Above Average	EF
SP1B	HMA	Delivery truck(s) to stockpiles	Sand	PM2.5	PM2.5	annual	70000	tonnes/year	0%	100%	0.0004	8.80E-04	A	Above Average	EF
B1A	HMA	Front-end loader material drop to cold feed bins	Coarse Aggregate	PM	PM	24 hr	500	tonnes/day	0%	100%	0.0060	3.46E-02	A	Above Average	EF
B1A	HMA	Front-end loader material drop to cold feed bins	Coarse Aggregate	PM	PM	annual	35000	tonnes/year	0%	100%	0.0060	6.64E-03	A	Above Average	EF
B1A	HMA	Front-end loader material drop to cold feed bins	Coarse Aggregate	PM2.5	PM2.5	24 hr	500	tonnes/day	0%	100%	0.0004	2.29E-03	A	Above Average	EF
B1A	HMA	Front-end loader material drop to cold feed bins	Coarse Aggregate	PM2.5	PM2.5	annual	35000	tonnes/year	0%	100%	0.0004	4.40E-04	A	Above Average	EF
B1A	HMA	Front-end loader material drop to cold feed bins	Coarse Aggregate	RCS	14808-60-7	24 hr	500	tonnes/day	0%	1.4%	0.0026	2.12E-04	A	Above Average	EF
B1B	HMA	Front-end loader material drop to cold feed bins	Sand	PM	PM	24 hr	1000	tonnes/day	0%	100%	0.0060	6.93E-02	A	Above Average	EF
B1B	HMA	Front-end loader material drop to cold feed bins	Sand	PM	PM	annual	70000	tonnes/year	0%	100%	0.0060	1.33E-02	A	Above Average	EF
B1B	HMA	Front-end loader material drop to cold feed bins	Sand	PM2.5	PM2.5	24 hr	1000	tonnes/day	0%	100%	0.0004	4.59E-03	A	Above Average	EF
B1B	HMA	Front-end loader material drop to cold feed bins	Sand	PM2.5	PM2.5	annual	70000	tonnes/year	0%	100%	0.0004	8.80E-04	A	Above Average	EF
B2	HMA	Front-end loader material drop to cold feed bins	RAP	PM	PM	24 hr	400	tonnes/day	0%	100%	0.0077	3.58E-02	A	Above Average	EF
B2	HMA	Front-end loader material drop to cold feed bins	RAP	PM	PM	annual	28000	tonnes/year	0%	100%	0.0077	6.86E-03	A	Above Average	EF
B2	HMA	Front-end loader material drop to cold feed bins	RAP	PM2.5	PM2.5	24 hr	400	tonnes/day	0%	100%	0.0005	2.37E-03	A	Above Average	EF
B2	HMA	Front-end loader material drop to cold feed bins	RAP	PM2.5	PM2.5	annual	28000	tonnes/year	0%	100%	0.0005	4.54E-04	A	Above Average	EF
HMA Plant Third Party Mobile Crushing Operations															
CR1	HMA	Delivery truck(s) to stockpiles	Uncrushed RAP	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0077	1.79E-01	A	Above Average	EF
CR1	HMA	Delivery truck(s) to stockpiles	Uncrushed RAP	PM	PM	annual	60000	tonnes/year	0%	100%	0.0077	1.47E-02	A	Above Average	EF
CR1	HMA	Delivery truck(s) to stockpiles	Uncrushed RAP	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0005	1.18E-02	A	Above Average	EF
CR1	HMA	Delivery truck(s) to stockpiles	Uncrushed RAP	PM2.5	PM2.5	annual	60000	tonnes/year	0%	100%	0.0005	9.74E-04	A	Above Average	EF
CR2	HMA	Front-end loader transfer to crusher feed hopper	Uncrushed RAP	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0077	1.79E-01	A	Above Average	EF
CR2	HMA	Front-end loader transfer to crusher feed hopper	Uncrushed RAP	PM	PM	annual	60000	tonnes/year	0%	100%	0.0077	1.47E-02	A	Above Average	EF
CR2	HMA	Front-end loader transfer to crusher feed hopper	Uncrushed RAP	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0005	1.18E-02	A	Above Average	EF
CR2	HMA	Front-end loader transfer to crusher feed hopper	Uncrushed RAP	PM2.5	PM2.5	annual	60000	tonnes/year	0%	100%	0.0005	9.74E-04	A	Above Average	EF

Calculation Sheet 1
Drop Emission Rates

CR4-1	HMA	Material drop from stacker to product stockpile	Crushed RAP	PM	PM	24 hr	2000	tonnes/day	0%	100%	0.0077	1.79E-01	A	Above Average	EF
CR4-1	HMA	Material drop from stacker to product stockpile	Crushed RAP	PM	PM	annual	60000	tonnes/year	0%	100%	0.0077	1.47E-02	A	Above Average	EF
CR4-1	HMA	Material drop from stacker to product stockpile	Crushed RAP	PM2.5	PM2.5	24 hr	2000	tonnes/day	0%	100%	0.0005	1.18E-02	A	Above Average	EF
CR4-1	HMA	Material drop from stacker to product stockpile	Crushed RAP	PM2.5	PM2.5	annual	60000	tonnes/year	0%	100%	0.0005	9.74E-04	A	Above Average	EF
Existing Quarry Operations - Crushing Operations															
Q15	SE	Material transfer from stacker to product piles (Crushing Plant 1 & 2)	limestone	PM	PM	24 hr	5500	tonnes/day	0%	100%	0.0060	3.81E-01	A	Above Average	EF
Q15	SE	Material transfer from stacker to product piles (Crushing Plant 1 & 2)	limestone	PM	PM	annual	990000	tonnes/year	0%	100%	0.0060	1.88E-01	A	Above Average	EF
Q15	SE	Material transfer from stacker to product piles (Crushing Plant 1 & 2)	limestone	PM2.5	PM2.5	24 hr	5500	tonnes/day	0%	100%	0.0004	2.52E-02	A	Above Average	EF
Q15	SE	Material transfer from stacker to product piles (Crushing Plant 1 & 2)	limestone	PM2.5	PM2.5	annual	990000	tonnes/year	0%	100%	0.0004	1.24E-02	A	Above Average	EF
Q15	SE	Material transfer from stacker to product piles (Crushing Plant 1 & 2)	limestone	RCS	14808-60-7	24 hr	5500	tonnes/day	0%	1.4%	0.0026	2.33E-03	A	Above Average	EF
Q16	SE	Material transfer to shipping trucks (Crushing Plant 1 & 2)	limestone	PM	PM	24 hr	5500	tonnes/day	0%	100%	0.0060	3.81E-01	A	Above Average	EF
Q16	SE	Material transfer to shipping trucks (Crushing Plant 1 & 2)	limestone	PM	PM	annual	1320000	tonnes/year	0%	100%	0.0060	2.51E-01	A	Above Average	EF
Q16	SE	Material transfer to shipping trucks (Crushing Plant 1 & 2)	limestone	PM2.5	PM2.5	24 hr	5500	tonnes/day	0%	100%	0.0004	2.52E-02	A	Above Average	EF
Q16	SE	Material transfer to shipping trucks (Crushing Plant 1 & 2)	limestone	PM2.5	PM2.5	annual	1320000	tonnes/year	0%	100%	0.0004	1.66E-02	A	Above Average	EF
Q16	SE	Material transfer to shipping trucks (Crushing Plant 1 & 2)	limestone	RCS	14808-60-7	24 hr	5500	tonnes/day	0%	1.4%	0.0026	2.33E-03	A	Above Average	EF
Quarry Operations - Scenario A (Phase 1a/1b & Phase 2)															
P1-Q10	SA	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0060	6.93E-01	A	Above Average	EF
P1-Q10	SA	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P1-Q10	SA	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0004	4.59E-02	A	Above Average	EF
P1-Q10	SA	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P1-Q10	SA	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0026	4.24E-03	A	Above Average	EF
P1-Q11	SA	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	24 hr	8000	tonnes/day	0%	100%	0.0060	5.54E-01	A	Above Average	EF
P1-Q11	SA	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P1-Q11	SA	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	8000	tonnes/day	0%	100%	0.0004	3.67E-02	A	Above Average	EF
P1-Q11	SA	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P1-Q11	SA	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	8000	tonnes/day	0%	1.4%	0.0026	3.39E-03	A	Above Average	EF
Quarry Operations - Scenario B (Phase 3)															
P2-Q10	SB	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0060	6.93E-01	A	Above Average	EF
P2-Q10	SB	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF

P2-Q10	SB	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0004	4.59E-02	A	Above Average	EF
P2-Q10	SB	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P2-Q10	SB	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0026	4.24E-03	A	Above Average	EF
P2-Q11	SB	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	24 hr	8000	tonnes/day	0%	100%	0.0060	5.54E-01	A	Above Average	EF
P2-Q11	SB	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P2-Q11	SB	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	8000	tonnes/day	0%	100%	0.0004	3.67E-02	A	Above Average	EF
P2-Q11	SB	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P2-Q11	SB	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	8000	tonnes/day	0%	1.4%	0.0026	3.39E-03	A	Above Average	EF
Quarry Operations - Scenario C (Phase 4 & 6)															
P3-Q10	SC	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0060	6.93E-01	A	Above Average	EF
P3-Q10	SC	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P3-Q10	SC	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0004	4.59E-02	A	Above Average	EF
P3-Q10	SC	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P3-Q10	SC	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0026	4.24E-03	A	Above Average	EF
P3-Q11	SC	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	24 hr	8000	tonnes/day	0%	100%	0.0060	5.54E-01	A	Above Average	EF
P3-Q11	SC	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P3-Q11	SC	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	8000	tonnes/day	0%	100%	0.0004	3.67E-02	A	Above Average	EF
P3-Q11	SC	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P3-Q11	SC	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	8000	tonnes/day	0%	1.4%	0.0026	3.39E-03	A	Above Average	EF
Quarry Operations - Scenario D (Phase 5)															
P4-Q10	SD	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	24 hr	10000	tonnes/day	0%	100%	0.0060	6.93E-01	A	Above Average	EF
P4-Q10	SD	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P4-Q10	SD	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	10000	tonnes/day	0%	100%	0.0004	4.59E-02	A	Above Average	EF
P4-Q10	SD	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P4-Q10	SD	Material transfer from stacker 2 to product pile (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	10000	tonnes/day	0%	1.4%	0.0026	4.24E-03	A	Above Average	EF
P4-Q11	SD	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	24 hr	8000	tonnes/day	0%	100%	0.0060	5.54E-01	A	Above Average	EF
P4-Q11	SD	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM	PM	annual	2000000	tonnes/year	0%	100%	0.0060	3.80E-01	A	Above Average	EF
P4-Q11	SD	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	24 hr	8000	tonnes/day	0%	100%	0.0004	3.67E-02	A	Above Average	EF

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P4-Q11	SD	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	PM2.5	PM2.5	annual	2000000	tonnes/year	0%	100%	0.0004	2.51E-02	A	Above Average	EF
P4-Q11	SD	Material transfer to shipping trucks (Crushing Plants 1&2)	limestone	RCS	14808-60-7	24 hr	8000	tonnes/day	0%	1.4%	0.0026	3.39E-03	A	Above Average	EF

Notes:

(1) A moisture content of 4.8% (moisture upper limit for drop equation) has been assumed for the washed/wet aggregates to maintain the data quality rating of A (U.S. EPA, AP-42, Section 13.2.4 "Aggregate Handling and Storage Piles," November 2006).

(2) A moisture content of 4% was assumed for moist/sticky aggregate (e.g. reclaimed asphalt paving)

(3) Data quality of the emission estimates determined as per MInistry Guideline A-10, Section 9.2 Data Quality

(4) EF - Emission Factor

Nelson Burlington Quarry Air Quality Study - Data Input Sheet

Average Rates	Scenario	Hourly	Daily	Annual
HMA Production Rate (tonnes)	**HMA Scenario**	265	2,000	140,000
Coarse Aggregate Delivery (tonne)	HMA	66	500	35,000
Sand Delivery (tonne)	HMA	133	1,000	70,000
AC Delivery (tonne)	HMA	13	100	28,000
Front-end Loader Aggregate Transfer (tonne)	HMA	199	1,500	105,000
Front-end Loader RAP Transfer (tonne)	HMA	53	400	28,000
Crushing Operations Processing Rate (tonnes)	**HMA Scenario**	167	2,000	60,000
RAP Delivery (tonne)	HMA	167	2,000	60,000
Front-end Loader RAP Transfer (tonne)	HMA	167	2,000	60,000
Quarry Operations Processing Rate Limestone (tonnes)	**Existing Scenario - Crushing**	500	5,500	990,000
Processed Limestone Shipping (tonne)	SE	500	5,500	990,000
Front-end Loader Limestone Transfer (tonne)	SE	500	5,500	990,000
Quarry Operations Aggregate Depot (tonnes)	**Existing Scenario - Aggregate Depot**	-	-	-
Processed Aggregate Shipping (tonne)	SE	-	-	-
Front-end Loader Aggregate Transfer (tonne)	SE	-	-	-
Quarry Operations Processing Rate Limestone (tonnes)	**Expansion Phase 1a/1b & Phase 2**	909	10,000	2,000,000
Processed Limestone Shipping (tonne)	SA	727	8,000	2,000,000
Front-end Loader Limestone Transfer (tonne)	SA	909	10,000	2,000,000
Quarry Operations Processing Rate Limestone (tonnes)	**Expansion Phase 3**	909	10,000	2,000,000
Processed Limestone Shipping (tonne)	SB	727	8,000	2,000,000
Front-end Loader Limestone Transfer (tonne)	SB	909	10,000	2,000,000
Quarry Operations Processing Rate Limestone (tonnes)	**Expansion Phase 4 & Phase 6**	909	10,000	2,000,000
Processed Limestone Shipping (tonne)	SC	727	8,000	2,000,000
Front-end Loader Limestone Transfer (tonne)	SC	909	10,000	2,000,000
Quarry Operations Processing Rate Limestone (tonnes)	**Expansion Phase 5**	909	10,000	2,000,000
Processed Limestone Shipping (tonne)	SD	727	8,000	2,000,000
Front-end Loader Limestone Transfer (tonne)	SD	909	10,000	2,000,000
Quarry Operations Transfers (tonnes)	**Existing Scenario**	-	-	-
Limestone Transfer (tonne)	SE	-	-	-
Quarry OperationsTransfers (tonnes)	**Expansion Phase 1a/1b & Phase 2**	909	10,000	2,000,000
Limestone Transfer (tonne)	SA	909	10,000	2,000,000
Quarry OperationsTransfers (tonnes)	**Expansion Phase 3**	909	10,000	2,000,000
Limestone Transfer (tonne)	SB	909	10,000	2,000,000
Quarry OperationsTransfers (tonnes)	**Expansion Phase 4 & Phase 6**	909	10,000	2,000,000
Limestone Transfer (tonne)	SC	909	10,000	2,000,000
Quarry OperationsTransfers (tonnes)	**Expansion Phase 5**	909	10,000	2,000,000
Limestone Transfer (tonne)	SD	909	10,000	2,000,000

Number of Trucks/Trips	Scenario	Operation	Trip ID	Trip Distance - Unpaved (km)	Trip Distance - Paved (km)	Total Trip Distance (km)	Hourly	Daily	Annual
HMA Plant	**HMA**								
Number of Aggregate Trucks	HMA	HMA production	HMA-DEL	0.600	2.000	2.600	9	68	4773
Number of AC Trucks	HMA	HMA production	HMA-AC	0.440	2.000	2.440	1	3	700
Number of HMA Trucks	HMA	HMA production	HMA-SHIPP	0.300	2.000	2.300	7	50	3500
Number of Aggregate Front-end Loaders	HMA	HMA production	HMA-FL-A	0.180	0.000	0.180	40	300	21000
Number of RAP Front-end Loaders	HMA	HMA production	HMA-FL-RAP	0.150	0.000	0.150	11	80	5600
Third Party RAP Crushing	**HMA**								
Number of RAP Delivery Trucks	HMA	HMA Third-party crushing	HMA-DEL	0.480	2.000	2.480	8	91	2727
Number of RAP Front-end Loaders	HMA	HMA Third-party crushing	HMA-FL-RAP	0.120	0.000	0.120	33	400	12000
Quarry	**Existing Scenario - Crushing**								
Number of Limestone Front-end Loaders	SE	SE-Quarry Operations	Q-FL	0.200	0.000	0.200	33	367	66000
Number of Fill Trucks	SE	SE-Quarry Operations	Q-FILL-E	2.600	2.000	4.600	17	202	37370
Number of Processed Limestone Shipping Trucks	SE	SE-Quarry Operations	Q-SHIPP	1.400	2.000	3.400	17	183	33000
Quarry	**Expansion Phase 1a/1b & Phase 2**								
Number of Limestone Haul Trucks	SA	SA-Quarry Operations	Q-HT	1.300	0.000	1.300	13	143	28571
Number of Limestone Haul Trucks	SA	SA-Quarry Operations	Q-HT-E	0.980	0.000	0.980	13	143	28571
Number of Passanger Cars	SA	SA-Quarry Operations	Q-CAR	1.400	2.000	3.400	0	0	0
Number of Limestone Front-end Loaders	SA	SA-Quarry Operations	Q-FL	0.200	0.000	0.200	61	667	133333
Number of Fill Trucks	SA	SA-Quarry Operations	Q-FILL	1.300	0.000	1.300	17	202	37370
Number of Fill Trucks	SA	SA-Quarry Operations	Q-FILL-E	2.380	2.000	4.380	17	202	37370
Number of Processed Limestone Shipping Trucks	SA	SA-Quarry Operations	Q-SHIPP	1.400	2.000	3.400	50	267	66667
Quarry	**Expansion Phase 3**								
Number of Limestone Haul Trucks	SB	SB-Quarry Operations	Q-HT	0.740	0.000	0.740	13	143	28571
Number of Limestone Haul Trucks	SB	SB-Quarry Operations	Q-HT-E	1.860	0.000	1.860	13	143	28571
Number of Limestone Front-end Loaders	SB	SB-Quarry Operations	Q-FL	0.200	0.000	0.200	61	667	133333
Number of Fill Trucks	SB	SB-Quarry Operations	Q-FILL	0.740	0.000	0.740	17	202	37370
Number of Fill Trucks	SB	SB-Quarry Operations	Q-FILL-E	3.260	2.000	5.260	17	202	37370
Number of Processed Limestone Shipping Trucks	SB	SB-Quarry Operations	Q-SHIPP	1.400	2.000	3.400	50	267	66667
Quarry	**Expansion Phase 4 & Phase 6**								
Number of Limestone Haul Trucks	SC	SC-Quarry Operations	Q-HT	1.300	0.000	1.300	13	143	28571
Number of Limestone Haul Trucks	SC	SC-Quarry Operations	Q-HT-E	2.100	0.000	2.100	13	143	28571
Number of Limestone Front-end Loaders	SC	SC-Quarry Operations	Q-FL	0.200	0.000	0.200	61	667	133333
Number of Fill Trucks	SC	SC-Quarry Operations	Q-FILL	1.300	0.000	1.300	17	202	37370
Number of Fill Trucks	SC	SC-Quarry Operations	Q-FILL-E	3.500	2.000	5.500	17	202	37370
Number of Processed Limestone Shipping Trucks	SC	SC-Quarry Operations	Q-SHIPP	1.400	2.000	3.400	50	267	66667
Quarry	**Expansion Phase 5**								
Number of Limestone Haul Trucks	SD	SD-Quarry Operations	Q-HT	0.800	0.000	0.800	13	143	28571
Number of Limestone Haul Trucks	SD	SD-Quarry Operations	Q-HT-E	2.000	0.000	2.000	13	143	28571
Number of Limestone Front-end Loaders	SD	SD-Quarry Operations	Q-FL	0.200	0.000	0.200	61	667	133333
Number of Fill Trucks	SD	SD-Quarry Operations	Q-FILL	0.800	0.000	0.800	17	202	37370
Number of Fill Trucks	SD	SD-Quarry Operations	Q-FILL-E	3.400	2.000	5.400	17	202	37370
Number of Processed Limestone Shipping Trucks	SD	SD-Quarry Operations	Q-SHIPP	1.400	2.000	3.400	50	267	66667

Truck Type		Trip ID	Empty Vehicle Weight	Load Weight	Loaded Vehicle Weight
HMA Aggregate/RAP Trucks		HMA-DEL	14	22	36
HMA RAP Shipping Trucks		HMA-RAP	14	22	36
HMA AC Trucks		HMA-AC	15	40	55
HMA Shipping Trucks		HMA-SHIPP	15	40	55
HMA Front-end Loader		HMA-FL-A	12	5	17
HMA Front-end Loader		HMA-FL-RAP	12	5	17
Quarry Front-end Loader		Q-FL	34	15	49
Quarry Limestone Haul Trucks		Q-HT	109	70	179
Quarry Limestone Haul Trucks		Q-HT-E	109	70	179
Quarry Processed Limestone Shipping Trucks		Q-SHIPP	12	30	42
Quarry Fill Delivery Trucks		Q-FILL	14	22	36
Quarry Fill Delivery Trucks		Q-FILL-E	14	22	36
Quarry Aggregate Delivery Trucks (Depot)		Q-DEL	10	35	45

Nelson Burlington Quarry Air Quality Study - Data Input Sheet

Input Data

HMA Mix Temperature		325	°F		
		Breathing Loss		Working Loss	
Average AC Surface Temperature		301.0	°F	325.0	°F
AC Minimum Tank Temperature		277.0	°F	325.0	°F
AC Maximum Tank Temperature		325.0	°F	325.0	°F
Bulk AC Tank Temperature		300.0	°F	325.0	°F
Asphalt Volatility (V) - Annual		0.50			
Asphalt Volatility (V) - Daily		1.00			
Asphalt Volatility (V) - Hourly		1.00			
Percentage of coarse aggregate in HMA		25.0	%		
Percentage of sand in HMA		50.0	%		
Percentage of RAP in HMA		20.0	%		
Percentage of Asphalt Cement in HMA		5.0	%		

HMA Plant Operations

Annual Production

Maximum production rate of the HMA Plant		140,000	tonnes/yr
HMA Loadout from Batch Tower		140,000	tonnes/yr

Daily Production

Maximum production rate of the HMA Plant		2,000	tonnes/day
HMA Loadout from Batch Tower		2,000	tonnes/day

Hourly Production

Maximum production rate of the HMA Plant		265	tonnes/hour
HMA Loadout from Batch Tower		265	tonnes/hour

Third Party Crusher Operations

Daily Production

Maximum processing rate of the crusher	Crushed RAP	2,000	tonnes/day
Diesel Generator Operating Schedule		12	hours/day

Annual Production

Maximum processing rate of the crusher	Crushed RAP	60,000	tonnes/year
Diesel Generator Operating Schedule		360	hours/year

Quarry Crushing Operations - Existing Scenario

Daily Production

Maximum extraction rate	limestone	30,000	tonnes/day
Maximum processing rate of Crushing Plant 1	limestone	3,500	tonnes/day
Maximum processing rate of Crushing Plant 2	limestone	2,000	tonnes/day

Nelson Burlington Quarry Air Quality Study - Data Input Sheet

Diesel Generators Operating Schedule		11	hours/day

Annual Production

Maximum extraction rate	limestone	600,000	tonnes/year
Maximum processing rate of Crushing Plant 1	limestone	630,000	tonnes/year
Maximum processing rate of Crushing Plant 2	limestone	360,000	tonnes/year
Diesel Generators Operating Schedule		2,035	hours/year

Quarry Crushing Operations - Scenario A (Extension Phase 1a/1b & Phase 2)

Daily Production

Maximum extraction rate	limestone	30,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	10,000	tonnes/day
Maximum shipping rate	limestone	8,000	tonnes/day
Diesel Generators Operating Schedule		11	hours/day

Annual Production

Maximum extraction rate	limestone	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	2,000,000	tonnes/year
Diesel Generators Operating Schedule		2,035	hours/year

Quarry Crushing Operations - Scenario B (Extension Phase 3)

Daily Production

Maximum extraction rate	limestone	30,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	10,000	tonnes/day
Maximum shipping rate	limestone	8,000	tonnes/day
Diesel Generators Operating Schedule		11	hours/day

Annual Production

Maximum extraction rate	limestone	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	2,000,000	tonnes/year
Diesel Generators Operating Schedule		2,035	hours/year

Quarry Crushing Operations - Scenario C (Extension Phase 4 & Phase 6)

Daily Production

Maximum extraction rate	limestone	30,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	10,000	tonnes/day
Maximum shipping rate	limestone	8,000	tonnes/day
Diesel Generators Operating Schedule		11	hours/day

Annual Production

Nelson Burlington Quarry Air Quality Study - Data Input Sheet

Maximum extraction rate	limestone	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	2,000,000	tonnes/year
Diesel Generators Operating Schedule		2,035	hours/year

Quarry Crushing Operations - Scenario D (Extension Phase 5)

Daily Production

Maximum extraction rate	limestone	30,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	10,000	tonnes/day
Maximum shipping rate	limestone	8,000	tonnes/day
Diesel Generators Operating Schedule		11	hours/day

Annual Production

Maximum extraction rate	limestone	2,000,000	tonnes/year
Maximum processing rate of Crushing Plant 1 & 2	limestone	2,000,000	tonnes/year
Diesel Generators Operating Schedule		2,035	hours/year

Appendix C

MOVES Emission Factors

MOVES Emission Factors

Year	Vehicle Type	Source Type ID	Contaminant	CAS Number	Idle (g/VMT)	Travel Onsite (g/VMT)
2019	HMA/AC truck	52	PM10 [Note 1]	PM	3.18E+00	1.59E+00
2019	HMA/AC truck	52	PM2.5	PM2.5	1.61E+00	5.34E-01
2019	HMA/AC truck	52	NO_2	10102-44-0	3.01E+01	8.41E+00
2019	HMA/AC truck	52	SO_2	7446-09-5	1.12E-01	3.30E-02
2019	HMA/AC truck	52	Benzene	71-43-2	8.93E-02	2.81E-02
2019	HMA/AC truck	52	Benzo(a)pyrene	50-32-8	2.70E-04	7.09E-05
2019	HMA/AC truck	52	CO	630-08-0	2.93E+01	1.01E+01
2019	Aggregate/Limestone/RAP truck	53	PM10 [Note 1]	PM	3.75E+00	1.88E+00
2019	Aggregate/Limestone/RAP truck	53	PM2.5	PM2.5	1.86E+00	6.09E-01
2019	Aggregate/Limestone/RAP truck	53	NO_2	10102-44-0	3.59E+01	9.41E+00
2019	Aggregate/Limestone/RAP truck	53	SO_2	7446-09-5	1.25E-01	3.43E-02
2019	Aggregate/Limestone/RAP truck	53	Benzene	71-43-2	6.80E-02	1.95E-02
2019	Aggregate/Limestone/RAP truck	53	Benzo(a)pyrene	50-32-8	3.00E-04	7.77E-05
2019	Aggregate/Limestone/RAP truck	53	CO	630-08-0	2.19E+01	6.82E+00

Notes:

1. It is assumed that total suspended particulate (PM) is equivalent to PM10.

MOVES Emission Factors for Non-Road Engines - g/hp-hr

			Range					
			1	**2**	**3**	**4**	**5**	**6**
Power Range (HP)	Min		1207	751	603	302	174	101
	Max			1207	751	603	302	174
Exhaust Emission Standards (Tier 4) (g/HP-hr)	Non-methane hydrocarbons (NMHC)		0.14	0.14	0.14	0.14	0.14	0.14
	NOx		2.6	2.6	0.30	0.30	0.30	0.30
	PM		0.03	0.03	0.015	0.015	0.015	0.015
	CO		2.6	2.6	2.61	2.61	2.61	3.70
	VOC/NMHC Ratio		1.3058	1.3058	1.3058	1.3058	1.3058	1.3058
	VOCs		0.183	0.183	0.183	0.183	0.183	0.183
PAHs/VOC (g/HP-hr)	**Contaminant**	**MOVES Ratio**						
	Benzene	0.01291	2.36E-03	2.36E-03	2.36E-03	2.36E-03	2.36E-03	2.36E-03
	Benzo(a)pyrene	3.30E-06	9.90E-08	9.90E-08	4.95E-08	4.95E-08	4.95E-08	4.95E-08

Reference: US EPA, Speciation Profiles and Toxic Emission Factors for Non-road Engines, November 2015.
Applicability: Off-road fuel vehicles such as front-end loaders, quarry trucks, bulldozers, excavators, etc.

Benzene EF = EF(NMHC) x VOC/NMHC Ratio x MOVES Ratio (benzene/VOC)
BaP EF = EF(PM) x MOVES Ratio (BaP/PM)

Appendix D

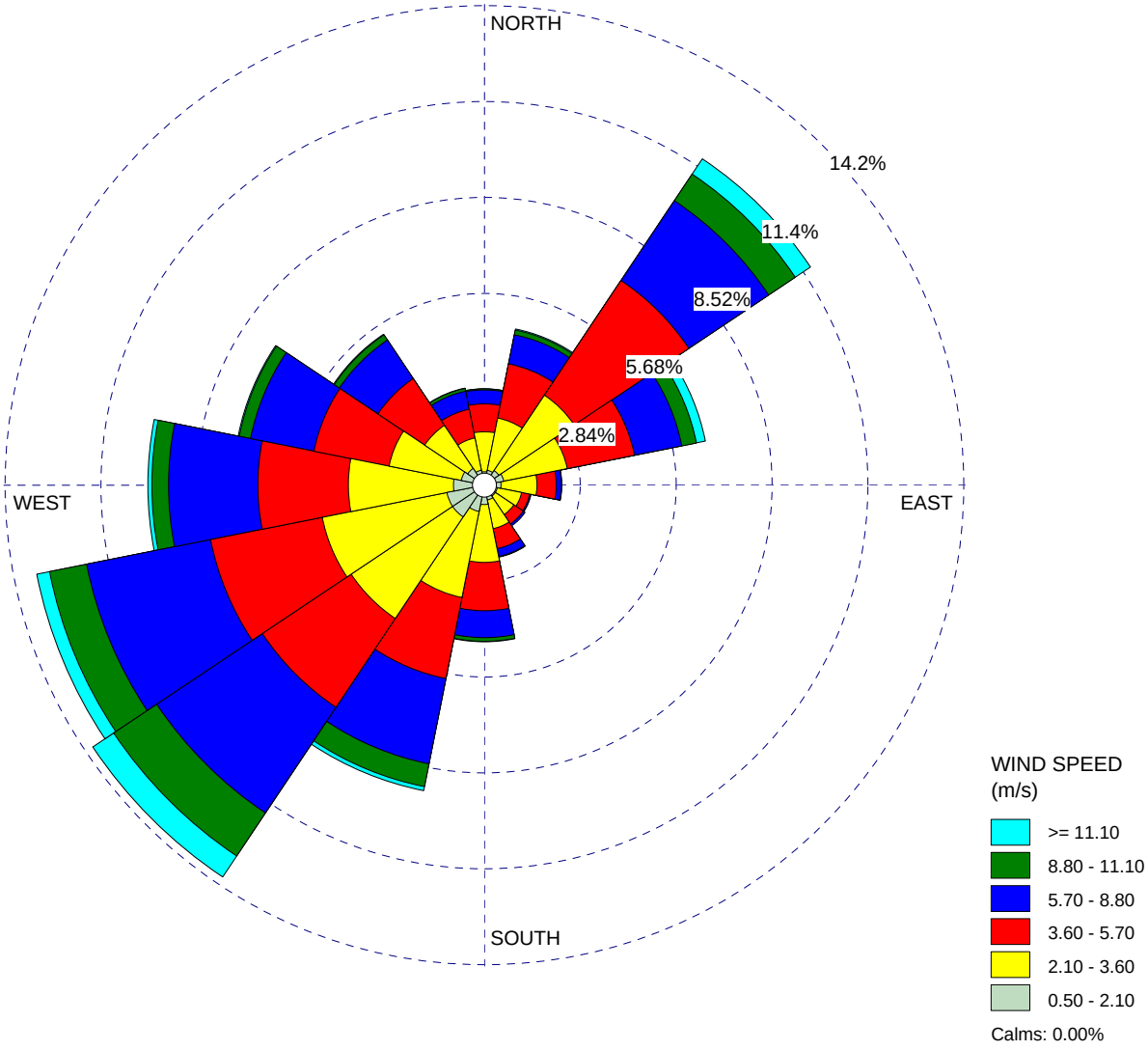
AERMOD Supporting Files

WIND ROSE PLOT:

Nelson Aggregate Co. - Burlington Quarry
Ministry Site Specific Meteorological Data

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS: AERMET 16216r	DATA PERIOD: **Start Date: 01/01/2014 - 00:00** **End Date: 31/12/2018 - 23:59**	COMPANY NAME: **BCX Environmental Consulting**	
		MODELER: **RU**	
	CALM WINDS: **0.00%**	TOTAL COUNT: **43824 hrs.**	
	AVG. WIND SPEED: **4.58 m/s**	DATE: **11/11/2019**	PROJECT NO.: **1080-02.01**

AERMOD Modelling Source Emission Rates (Existing Scenario)

Source Type	Modelling Source ID	Scenario	Modelling Source Description	Maximum Daily Emission Rate (g/s)							Maximum Annual Emission Rate (g/s)							Maximum Hourly Emission Rate (g/s)		
				PM	PM2.5	RCS	NOx	SO_2	B(a)P	Benzene	PM	PM2.5	NOx	SO_2	B(a)P	Benzene	Nickel	NOx	SO_2	CO
				24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	Annual	Annual	Annual	Annual	Annual	Annual	Annual	1 hr	1 hr	1 hr
OPEN_PIT	PTDR_HMA	HMA	Existing Pit Drop Points HMA	7.80E-01	5.17E-02	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-02	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_HMA	HMA	Existing Pit Other Sources HMA	6.02E-01	6.06E-02	1.86E-06	1.00E-01	2.35E-02	7.02E-07	2.45E-04	8.48E-02	6.63E-03	3.75E-02	3.41E-03	6.17E-08	2.67E-05	0.00E+00	2.27E-01	6.32E-02	9.93E-02
OPEN_PIT	PTDR_QE	SE	Existing Pit Drop Points - Quarry	7.62E-01	5.05E-02	4.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.38E-01	2.90E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_QE	SE	Existing Pit Other Sources - Quarry	1.98E+00	8.62E-02	1.16E-03	1.65E-01	3.31E-02	1.28E-06	3.93E-04	9.78E-01	4.16E-02	5.80E-02	1.62E-02	4.37E-07	1.50E-04	0.00E+00	3.49E-01	7.21E-02	2.43E+01
POINT	BH_HMA	HMA	Existing HMA dryer baghouse	4.86E-01	2.94E-01	0.00E+00	2.89E-01	0.00E+00	3.59E-09	3.24E-03	9.32E-02	5.64E-02	5.55E-02	0.00E+00	6.88E-10	6.22E-04	6.66E-06	9.20E-01	0.00E+00	0.00E+00
POINT	GEN_HMA	HMA	Existing Pit HMA RAP crusher generator	9.47E-03	9.47E-03	0.00E+00	1.77E-01	5.88E-02	3.80E-08	0.00E+00	7.10E-03	7.10E-03	1.33E-01	4.41E-02	2.85E-08	0.00E+00	0.00E+00	3.54E-01	1.18E-01	3.28E-01
POINT	GEN1_QE	SE	Existing Limestone Crushing Plant 1 (Big) Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	0.00E+00	1.88E+00	1.53E-01	1.08E+00
POINT	GEN2_QE	SE	Existing Limestone Crushing Plant 2 (small) Generator	1.92E-02	1.92E-02	0.00E+00	5.76E-01	4.71E-02	1.05E-07	0.00E+00	1.44E-02	1.44E-02	4.32E-01	3.53E-02	7.89E-08	0.00E+00	0.00E+00	1.26E+00	1.03E-01	7.26E-01

Note:

1. Emissions for material drop points (highlighted in blue) have been calculated for the six AERMOD wind categories. Emission rates for Category F are presented in this table. Variable emission multipliers are presented in Calculation Sheet 1.

AERMOD Modelling Source Emission Rates (Scenario A)

Source Type	Modelling Source ID	Scenario	Modelling Source Description	Maximum Daily Emission Rate (g/s)							Maximum Annual Emission Rate (g/s)					Maximum Hourly Emission Rate (g/s)		
				PM	PM2.5	RCS	NOx	SO_2	B(a)P	Benzene	PM	PM2.5	NOx	SO_2	B(a)P	NOx	SO_2	CO
				24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	Annual	Annual	Annual	Annual	Annual	1 hr	1 hr	1 hr
OPEN_PIT	PTDR_HMA	HMA	Existing Pit Drop Points HMA	7.80E-01	5.17E-02	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-02	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_HMA	HMA	Existing Pit Other Sources HMA	6.02E-01	6.06E-02	1.86E-06	1.00E-01	2.35E-02	7.02E-07	2.45E-04	8.48E-02	6.63E-03	3.75E-02	3.41E-03	6.17E-08	2.27E-01	6.32E-02	9.93E-02
OPEN_PIT	PTDR_QE	SA	Existing Pit Drop Points - Quarry	1.25E+00	8.26E-02	7.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-01	5.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_QE	SA	Existing Pit Other Sources - Quarry	2.87E+00	1.09E-01	1.29E-03	3.19E-01	7.84E-02	1.39E-06	6.09E-04	1.65E+00	6.13E-02	1.56E-01	4.29E-02	6.03E-07	9.35E-01	1.72E-01	0.00E+00
OPEN_PIT	PTOS_QA	SA	ScA quarry other sources	1.18E+00	4.79E-02	4.03E-04	2.08E-01	2.49E-02	2.85E-07	2.40E-04	6.16E-01	2.45E-02	1.05E-01	1.36E-02	7.84E-08	4.57E-01	5.44E-02	2.43E+01
POINT	BH_HMA	HMA	Existing HMA dryer baghouse	4.86E-01	2.94E-01	0.00E+00	2.89E-01	0.00E+00	3.59E-09	3.24E-03	9.32E-02	5.64E-02	5.55E-02	0.00E+00	6.88E-10	9.20E-01	0.00E+00	0.00E+00
POINT	GEN_HMA	HMA	Existing Pit HMA RAP crusher generator	9.47E-03	9.47E-03	0.00E+00	1.77E-01	5.88E-02	3.80E-08	0.00E+00	7.10E-03	7.10E-03	1.33E-01	4.41E-02	2.85E-08	3.54E-01	1.18E-01	3.28E-01
POINT	GEN1_QEX	SA	ScA/B/C/D Crushing Plant 1 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	1.88E+00	1.53E-01	1.08E+00
POINT	GEN2_QEX	SA	ScA/B/C/D Crushing Plant 2 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	1.88E+00	1.53E-01	1.08E+00

Note:

1 Emissions for material drop points (highlighted in blue) have been calculated for the six AERMOD wind categories. Emission rates for Category F are presented in this table. Variable emission multipliers are presented in Calculation Sheet 1.

AERMOD Modelling Source Emission Rates (Scenario B)

Source Type	Modelling Source ID	Scenario	Modelling Source Description	Maximum Daily Emission Rate (g/s)							Maximum Annual Emission Rate (g/s)						Maximum Hourly Emission Rate (g/s)		
				PM	PM2.5	RCS	NOx	SO_2	B(a)P	Benzene	PM	PM2.5	NOx	SO_2	B(a)P	Benzene	NOx	SO_2	CO
				24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	Annual	Annual	Annual	Annual	Annual	Annual	1 hr	1 hr	1 hr
OPEN_PIT	PTDR_HMA	HMA	Existing Pit Drop Points HMA	7.80E-01	5.17E-02	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-02	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_HMA	HMA	Existing Pit Other Sources HMA	6.02E-01	6.06E-02	1.86E-06	1.00E-01	2.35E-02	7.02E-07	2.45E-04	8.48E-02	6.63E-03	3.75E-02	3.41E-03	6.17E-08	2.67E-05	2.27E-01	6.32E-02	9.93E-02
OPEN_PIT	PTDR_QE	SB	Existing Pit Drop Points - Quarry	1.25E+00	8.26E-02	7.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-01	5.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_QE	SB	Existing Pit Other Sources - Quarry	3.63E+00	1.33E-01	1.29E-03	4.50E-01	9.53E-02	1.50E-06	7.42E-04	2.05E+00	7.39E-02	2.27E-01	5.21E-02	6.56E-07	3.70E-04	1.22E+00	2.09E-01	0.00E+00
OPEN_PIT	PTOS_QB	SB	ScB quarry other sources	6.96E-01	3.29E-02	4.03E-04	1.28E-01	1.42E-02	2.34E-07	1.45E-04	3.58E-01	1.65E-02	6.01E-02	7.76E-03	4.48E-08	6.05E-05	2.76E-01	3.10E-02	2.43E+01
POINT	BH_HMA	HMA	Existing HMA dryer baghouse	4.86E-01	2.94E-01	0.00E+00	2.89E-01	0.00E+00	3.59E-09	3.24E-03	9.32E-02	5.64E-02	5.55E-02	0.00E+00	6.88E-10	6.22E-04	9.20E-01	0.00E+00	0.00E+00
POINT	GEN_HMA	HMA	Existing Pit HMA RAP crusher generator	9.47E-03	9.47E-03	0.00E+00	1.77E-01	5.88E-02	3.80E-08	0.00E+00	7.10E-03	7.10E-03	1.33E-01	4.41E-02	2.85E-08	0.00E+00	3.54E-01	1.18E-01	3.28E-01
POINT	GEN1_QEX	SB	ScA/B/C/D Crushing Plant 1 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	1.88E+00	1.53E-01	1.08E+00
POINT	GEN2_QEX	SB	ScA/B/C/D Crushing Plant 2 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	1.88E+00	1.53E-01	1.08E+00

Note:

1 Emissions for material drop points (highlighted in blue) have been calculated for the six AERMOD wind categories. Emission rates for Category F are presented in this table. Variable emission multipliers are presented in Calculation Sheet 1.

AERMOD Modelling Source Emission Rates (Scenario C)

Source Type	Modelling Source ID	Scenario	Modelling Source Description	Maximum Daily Emission Rate (g/s)							Maximum Annual Emission Rate (g/s)						Maximum Hourly Emission Rate (g/s)		
				PM	PM2.5	RCS	NOx	SO_2	B(a)P	Benzene	PM	PM2.5	NOx	SO_2	B(a)P	Benzene	NOx	SO_2	CO
				24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	Annual	Annual	Annual	Annual	Annual	Annual	1 hr	1 hr	1 hr
OPEN_PIT	PTDR_HMA	HMA	Existing Pit Drop Points HMA	7.80E-01	5.17E-02	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-02	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_HMA	HMA	Existing Pit Other Sources HMA	6.02E-01	6.06E-02	1.86E-06	1.00E-01	2.35E-02	7.02E-07	2.45E-04	8.48E-02	6.63E-03	3.75E-02	3.41E-03	6.17E-08	2.67E-05	2.27E-01	6.32E-02	9.93E-02
OPEN_PIT	PTDR_QE	SC	Existing Pit Drop Points - Quarry	1.25E+00	8.26E-02	7.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-01	5.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_QE	SC	Existing Pit Other Sources - Quarry	3.84E+00	1.39E-01	1.29E-03	4.86E-01	9.99E-02	1.53E-06	7.78E-04	2.17E+00	7.74E-02	2.46E-01	5.47E-02	6.70E-07	3.90E-04	1.30E+00	2.19E-01	0.00E+00
OPEN_PIT	PTOS_QC	SC	ScC quarry other sources	1.18E+00	4.81E-02	4.03E-04	2.11E-01	2.50E-02	3.00E-07	2.30E-04	6.16E-01	2.45E-02	1.05E-01	1.36E-02	7.84E-08	1.06E-04	4.57E-01	5.44E-02	2.43E+01
POINT	BH_HMA	HMA	Existing HMA dryer baghouse	4.86E-01	2.94E-01	0.00E+00	2.89E-01	0.00E+00	3.59E-09	3.24E-03	9.32E-02	5.64E-02	5.55E-02	0.00E+00	6.88E-10	6.22E-04	9.20E-01	0.00E+00	0.00E+00
POINT	GEN_HMA	HMA	Existing Pit HMA RAP crusher generator	9.47E-03	9.47E-03	0.00E+00	1.77E-01	5.88E-02	3.80E-08	0.00E+00	7.10E-03	7.10E-03	1.33E-01	4.41E-02	2.85E-08	0.00E+00	3.54E-01	1.18E-01	3.28E-01
POINT	GEN1_QEX	SC	ScA/B/C/D Crushing Plant 1 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	1.88E+00	1.53E-01	1.08E+00
POINT	GEN2_QEX	SC	ScA/B/C/D Crushing Plant 2 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	1.88E+00	1.53E-01	1.08E+00

Note:

1 Emissions for material drop points (highlighted in blue) have been calculated for the six AERMOD wind categories. Emission rates for Category F are presented in this table. Variable emission multipliers are presented in Calculation Sheet 1.

AERMOD Modelling Source Emission Rates (Scenario D)

Source Type	Modelling Source ID	Scenario	Modelling Source Description	Maximum Daily Emission Rate (g/s)							Maximum Annual Emission Rate (g/s)						Maximum Hourly Emission Rate (g/s)		
				PM	PM2.5	RCS	NOx	SO_2	B(a)P	Benzene	PM	PM2.5	NOx	SO_2	B(a)P	Benzene	NOx	SO_2	CO
				24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	24 hr	Annual	Annual	Annual	Annual	Annual	Annual	1 hr	1 hr	1 hr
OPEN_PIT	PTDR_HMA	HMA	Existing Pit Drop Points HMA	7.80E-01	5.17E-02	4.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.08E-02	6.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_HMA	HMA	Existing Pit Other Sources HMA	6.02E-01	6.06E-02	1.86E-06	1.00E-01	2.35E-02	7.02E-07	2.45E-04	8.48E-02	6.63E-03	3.75E-02	3.41E-03	6.17E-08	2.67E-05	2.27E-01	6.32E-02	9.93E-02
OPEN_PIT	PTDR_QE	SD	Existing Pit Drop Points - Quarry	1.25E+00	8.26E-02	7.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-01	5.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
OPEN_PIT	PTOS_QE	SD	Existing Pit Other Sources - Quarry	3.76E+00	1.36E-01	1.29E-03	4.71E-01	9.80E-02	1.52E-06	7.63E-04	2.12E+00	7.59E-02	2.38E-01	5.36E-02	6.64E-07	3.82E-04	1.29E+00	2.18E-01	0.00E+00
OPEN_PIT	PTOS_QD	SD	ScD quarry other sources	7.48E-01	3.45E-02	4.03E-04	1.37E-01	1.54E-02	2.41E-07	1.54E-04	3.85E-01	1.73E-02	6.49E-02	8.39E-03	4.84E-08	6.54E-05	4.43E-01	5.44E-02	2.43E+01
POINT	BH_HMA	HMA	Existing HMA dryer baghouse	4.86E-01	2.94E-01	0.00E+00	2.89E-01	0.00E+00	3.59E-09	3.24E-03	9.32E-02	5.64E-02	5.55E-02	0.00E+00	6.88E-10	6.22E-04	9.20E-01	0.00E+00	0.00E+00
POINT	GEN_HMA	HMA	Existing Pit HMA RAP crusher generator	9.47E-03	9.47E-03	0.00E+00	1.77E-01	5.88E-02	3.80E-08	0.00E+00	7.10E-03	7.10E-03	1.33E-01	4.41E-02	2.85E-08	0.00E+00	3.54E-01	1.18E-01	3.28E-01
POINT	GEN1_QEX	SD	ScA/B/C/D Crushing Plant 1 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	1.88E+00	1.53E-01	1.08E+00
POINT	GEN2_QEX	SD	ScA/B/C/D Crushing Plant 2 Generator	2.87E-02	2.87E-02	0.00E+00	8.60E-01	7.03E-02	1.57E-07	0.00E+00	2.15E-02	2.15E-02	6.45E-01	5.27E-02	1.18E-07	0.00E+00	1.88E+00	1.53E-01	1.08E+00

Note:

1 Emissions for material drop points (highlighted in blue) have been calculated for the six AERMOD wind categories. Emission rates for Category F are presented in this table. Variable emission multipliers are presented in Calculation Sheet 1.

Appendix E

Modelling Results at Receptors

Percentages of Criteria at Sensitive Receptors (Scenario E)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m^3)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			32.7%	72.8%	4.9%	56.5%	12.6%	57.2%	3.1%	91.0%	0.6%	0.6%	33.5%	40.7%	9.3%	21.0%	24.9%	27.7%	0.7%	2.0%	2.9%	13.9%	5.0%	5.0%	6.5%	6.5%	0.6%	24.5%	0.2%	76.2%	81.1%	236.1%	21.6%	314.1%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R1	590428.52	4805587.50	15.7%	56%	1.8%	53%	6.1%	51%	0.96%	89%	0.30%	0.30%	33%	40%	7.3%	19%	13.8%	16.7%	0.47%	1.8%	0.66%	11.7%	3.1%	3.1%	3.9%	3.9%	0.30%	24%	0.058%	76%	40.5%	195%	7.12%	300%
R2	590715.91	4805728.09	13.1%	53%	1.6%	53%	5.4%	50%	0.98%	89%	0.26%	0.26%	29%	37%	5.4%	17%	15.6%	18.5%	0.43%	1.7%	0.86%	11.9%	2.5%	2.5%	3.2%	3.2%	0.26%	24%	0.056%	76%	32.3%	187%	6.80%	299%
R3	590357.58	4805478.22	15.7%	56%	1.5%	53%	6.0%	51%	0.79%	89%	0.30%	0.30%	29%	36%	6.2%	18%	11.2%	14.1%	0.41%	1.7%	0.55%	11.6%	3.2%	3.2%	4.1%	4.1%	0.30%	24%	0.049%	76%	40.0%	195%	5.92%	298%
R4	590307.77	4805411.02	15.8%	56%	1.3%	53%	6.0%	51%	0.71%	89%	0.30%	0.30%	25%	32%	4.9%	17%	10.0%	12.9%	0.34%	1.6%	0.50%	11.5%	3.3%	3.3%	4.2%	4.2%	0.30%	24%	0.042%	76%	40.3%	195%	5.34%	298%
R5	590307.86	4805232.30	13.5%	54%	0.9%	52%	5.2%	50%	0.51%	88%	0.26%	0.26%	20%	27%	4.3%	16%	8.3%	11.2%	0.30%	1.6%	0.37%	11.4%	3.0%	3.0%	3.9%	3.9%	0.26%	24%	0.031%	76%	34.5%	190%	3.73%	296%
R6	590268.71	4805171.18	12.7%	53%	0.8%	52%	4.8%	49%	0.47%	88%	0.24%	0.24%	18%	26%	3.7%	16%	8.5%	11.3%	0.26%	1.5%	0.35%	11.4%	3.0%	3.0%	3.9%	3.9%	0.24%	24%	0.029%	76%	32.6%	188%	3.47%	296%
R7	590101.81	4805169.13	14.0%	54%	1.0%	53%	5.3%	50%	0.55%	88%	0.29%	0.29%	16%	23%	3.2%	15%	9.7%	12.6%	0.25%	1.5%	0.40%	11.4%	3.7%	3.7%	4.8%	4.8%	0.26%	24%	0.033%	76%	35.8%	191%	4.08%	297%
R8	590039.80	4805108.86	11.4%	52%	0.9%	53%	4.3%	49%	0.52%	88%	0.30%	0.30%	15%	23%	2.8%	15%	9.6%	12.4%	0.24%	1.5%	0.39%	11.4%	3.9%	3.9%	5.0%	5.0%	0.21%	24%	0.031%	76%	29.0%	184%	3.82%	296%
R9	590051.99	4805042.66	10.5%	51%	0.8%	52%	3.7%	48%	0.45%	88%	0.28%	0.28%	15%	22%	2.7%	14%	8.9%	11.8%	0.23%	1.5%	0.34%	11.4%	3.6%	3.6%	4.7%	4.7%	0.18%	24%	0.027%	76%	25.0%	180%	3.29%	296%
R10	589949.68	4804950.27	9.8%	50%	0.7%	52%	3.5%	48%	0.39%	88%	0.26%	0.26%	14%	21%	2.5%	14%	8.9%	11.8%	0.21%	1.5%	0.33%	11.3%	3.5%	3.5%	4.5%	4.5%	0.18%	24%	0.022%	76%	21.2%	176%	2.80%	295%
R12	589649.06	4804788.02	7.2%	47%	0.5%	52%	3.1%	48%	0.34%	88%	0.15%	0.15%	13%	21%	2.4%	14%	7.1%	10.0%	0.17%	1.5%	0.33%	11.3%	2.8%	2.8%	3.6%	3.6%	0.18%	24%	0.018%	76%	17.2%	172%	2.36%	295%
R13	589565.47	4804836.84	6.7%	47%	0.6%	52%	2.9%	47%	0.38%	88%	0.16%	0.16%	13%	20%	2.0%	14%	7.6%	10.4%	0.16%	1.5%	0.37%	11.4%	2.8%	2.8%	3.6%	3.6%	0.17%	24%	0.020%	76%	16.6%	172%	2.59%	295%
R14	589552.40	4804850.98	6.7%	47%	0.6%	52%	2.9%	47%	0.39%	88%	0.16%	0.16%	14%	21%	2.0%	14%	7.7%	10.6%	0.17%	1.5%	0.37%	11.4%	2.8%	2.8%	3.6%	3.6%	0.17%	24%	0.020%	76%	16.6%	172%	2.65%	295%
R15	589487.71	4804854.82	6.2%	46%	0.6%	52%	2.6%	47%	0.39%	88%	0.16%	0.16%	13%	20%	1.9%	14%	7.6%	10.5%	0.16%	1.4%	0.38%	11.4%	2.7%	2.7%	3.5%	3.5%	0.16%	24%	0.020%	76%	16.3%	171%	2.67%	295%
R16	589391.42	4804818.71	6.0%	46%	0.6%	52%	2.4%	47%	0.38%	88%	0.15%	0.15%	13%	20%	1.8%	14%	7.0%	9.9%	0.15%	1.4%	0.36%	11.4%	2.6%	2.6%	3.3%	3.3%	0.15%	24%	0.020%	76%	15.5%	171%	2.56%	295%
R17	589341.30	4804854.89	6.0%	46%	0.6%	52%	2.4%	47%	0.39%	88%	0.16%	0.16%	13%	20%	1.9%	14%	6.5%	9.3%	0.15%	1.4%	0.37%	11.4%	2.5%	2.5%	3.3%	3.3%	0.15%	24%	0.022%	76%	15.5%	170%	2.65%	295%
R18	589237.00	4804804.05	5.6%	46%	0.6%	52%	2.3%	47%	0.37%	88%	0.15%	0.15%	13%	20%	1.9%	14%	6.2%	9.1%	0.15%	1.4%	0.35%	11.4%	2.4%	2.4%	3.1%	3.1%	0.15%	24%	0.020%	76%	14.6%	170%	2.47%	295%
R19	589214.42	4804827.86	5.7%	46%	0.6%	52%	2.3%	47%	0.38%	88%	0.15%	0.15%	13%	20%	1.9%	14%	6.2%	9.1%	0.16%	1.4%	0.36%	11.4%	2.4%	2.4%	3.1%	3.1%	0.14%	24%	0.022%	76%	14.6%	170%	2.51%	295%
R20	589161.88	4804859.47	5.6%	46%	0.6%	52%	2.4%	47%	0.39%	88%	0.14%	0.14%	12%	20%	1.9%	14%	6.3%	9.2%	0.17%	1.5%	0.37%	11.4%	2.4%	2.4%	3.1%	3.1%	0.14%	24%	0.022%	76%	14.5%	169%	2.55%	295%
R21	589148.36	4804897.75	5.9%	46%	0.6%	52%	2.5%	47%	0.40%	88%	0.15%	0.15%	12%	19%	2.0%	14%	6.4%	9.2%	0.18%	1.5%	0.37%	11.4%	2.4%	2.4%	3.1%	3.1%	0.15%	24%	0.024%	76%	14.5%	169%	2.63%	295%
R22	589087.10	4804971.33	6.4%	47%	0.7%	52%	2.7%	47%	0.43%	88%	0.14%	0.14%	12%	20%	2.3%	14%	6.4%	9.3%	0.20%	1.5%	0.39%	11.4%	2.5%	2.5%	3.2%	3.2%	0.15%	24%	0.027%	76%	15.0%	170%	2.74%	295%
R23	589148.96	4805035.30	7.0%	47%	0.7%	52%	2.9%	48%	0.46%	88%	0.16%	0.16%	13%	20%	2.4%	14%	6.8%	9.7%	0.21%	1.5%	0.41%	11.4%	2.6%	2.6%	3.3%	3.3%	0.16%	24%	0.029%	76%	16.0%	171%	2.98%	295%
R24	589128.67	4805086.01	7.3%	47%	0.8%	52%	3.1%	48%	0.48%	88%	0.16%	0.16%	13%	20%	2.6%	14%	6.9%	9.8%	0.22%	1.5%	0.42%	11.4%	2.6%	2.6%	3.3%	3.3%	0.17%	24%	0.029%	76%	17.6%	173%	3.10%	296%
R25	589105.01	4805060.41	7.0%	47%	0.7%	52%	3.0%	48%	0.46%	88%	0.15%	0.15%	13%	20%	2.5%	14%	6.8%	9.6%	0.21%	1.5%	0.41%	11.4%	2.5%	2.5%	3.3%	3.3%	0.17%	24%	0.029%	76%	16.9%	172%	2.99%	295%
R26	589133.34	4805172.65	7.8%	48%	0.8%	52%	3.4%	48%	0.52%	88%	0.17%	0.17%	13%	20%	2.8%	15%	7.4%	10.3%	0.23%	1.5%	0.45%	11.5%	2.7%	2.7%	3.4%	3.4%	0.18%	24%	0.033%	76%	20.9%	176%	3.36%	296%
R27	588993.00	4805046.07	6.5%	47%	0.7%	52%	3.0%	48%	0.44%	88%	0.13%	0.13%	12%	19%	2.5%	14%	6.5%	9.4%	0.20%	1.5%	0.39%	11.4%	2.4%	2.4%	3.1%	3.1%	0.17%	24%	0.029%	76%	17.3%	172%	2.79%	295%
R28	588933.88	4805108.89	7.2%	47%	0.7%	52%	3.1%	48%	0.45%	88%	0.14%	0.14%	12%	19%	2.6%	14%	6.3%	9.2%	0.22%	1.5%	0.40%	11.4%	2.3%	2.3%	3.0%	3.0%	0.17%	24%	0.031%	76%	19.4%	174%	2.81%	295%
R29	589053.75	4804987.00	6.4%	47%	0.7%	52%	2.8%	47%	0.43%	88%	0.14%	0.14%	12%	20%	2.4%	14%	6.5%	9.3%	0.20%	1.5%	0.39%	11.4%	2.4%	2.4%	3.1%	3.1%	0.16%	24%	0.027%	76%	15.4%	170%	2.74%	295%
R30	589022.84	4805021.77	6.5%	47%	0.7%	52%	2.9%	48%	0.44%	88%	0.13%	0.13%	12%	19%	2.5%	14%	6.6%	9.5%	0.20%	1.5%	0.39%	11.4%	2.4%	2.4%	3.1%	3.1%	0.17%	24%	0.029%	76%	16.3%	171%	2.78%	295%
R31	588909.44	4805151.99	7.7%	48%	0.7%	52%	3.3%	48%	0.46%	88%	0.15%	0.15%	12%	19%	2.6%	14%	6.4%	9.3%	0.22%	1.5%	0.40%	11.4%	2.2%	2.2%	2.9%	2.9%	0.19%	24%	0.031%	76%	20.6%	176%	2.83%	295%
R32	588882.16	4805178.52	8.0%	48%	0.7%	52%	3.4%	48%	0.46%	88%	0.16%	0.16%	12%	19%	2.6%	14%	6.5%	9.4%	0.23%	1.5%	0.39%	11.4%	2.2%	2.2%	2.8%	2.8%	0.21%	24%	0.033%	76%	21.3%	176%	2.81%	295%
R33	588837.60	4805190.59	8.1%	48%	0.7%	52%	3.4%	48%	0.45%	88%	0.16%	0.16%	12%	19%	2.6%	14%	6.3%	9.2%	0.23%	1.5%	0.38%	11.4%	2.2%	2.2%	2.8%	2.8%	0.22%	24%	0.031%	76%	21.6%	177%	2.72%	295%
R34	588906.04	4805227.93	8.5%	49%	0.7%	52%	3.6%	48%	0.48%	88%	0.17%	0.17%	12%	19%	2.7%	14%	6.6%	9.4%	0.23%	1.5%	0.41%	11.4%	2.2%	2.2%	2.9%	2.9%	0.22%	24%	0.033%	76%	22.7%	178%	2.94%	295%
R35	588863.99	4805271.68	8.8%	49%	0.7%	52%	3.7%	48%	0.47%	88%	0.17%	0.17%	12%	19%	2.6%	14%	6.5%	9.4%	0.24%	1.5%	0.40%	11.4%	2.3%	2.3%	2.9%	2.9%	0.24%	24%	0.036%	76%	23.6%	179%	2.89%	295%
R36	588774.77	4805264.86	8.5%	49%	0.7%	52%	3.6%	48%	0.44%	88%	0.17%	0.17%	12%	19%	2.5%	14%	6.1%	8.9%	0.23%	1.5%	0.37%	11.4%	2.2%	2.2%	2.8%	2.8%	0.24%	24%	0.033%	76%	22.7%	178%	2.63%	295%
R37	588767.37	4805274.62	8.6%	49%	0.7%	52%	3.7%	48%	0.44%	88%	0.17%	0.17%	12%	19%	2.5%	14%	6.1%	8.9%	0.23%	1.5%	0.37%	11.4%	2.2%	2.2%	2.8%	2.8%	0.24%	24%	0.033%	76%	22.8%	178%	2.62%	295%
R38	588739.80	4805301.49	8.6%	49%	0.7%	52%	3.7%	48%	0.43%	88%	0.17%	0.17%	12%	19%	2.4%	14%	6.0%	8.9%	0.24%	1.5%	0.37%	11.4%	2.2%	2.2%	2.8%	2.8%	0.24%	24%	0.033%	76%	22.9%	178%	2.57%	295%
R39	588701.19	4805324.41	8.5%	49%	0.6%	52%	3.8%	48%	0.42%	88%	0.17%	0.17%	12%	19%	2.4%	14%	6.2%	9.0%	0.23%	1.5%	0.36%	11.4%	2.2%	2.2%	2.8%	2.8%	0.23%	24%	0.033%	76%	22.8%	178%	2.48%	295%
R40	588676.08	4805360.64	8.4%	49%	0.6%	52%	3.8%	48%	0.41%	88%	0.16%	0.16%	12%	19%	2.2%	14%	6.1%	9.0%	0.23%	1.5%	0.35%	11.4%	2.2%	2.2%	2.8%	2.8%	0.24%	24%	0.033%	76%	23.0%	178%	2.43%	295%
R41	588628.93	4805409.57	8.3%	48%	0.6%	52%	3.8%	48%	0.40%	88%	0.16%	0.16%	13%	20%	2.1%	14%	6.2%	9.1%	0.22%	1.5%	0.34%	11.4%	2.2%	2.2%	2.9%	2.9%	0.24%	24%	0.031%	76%	23.0%	178%	2.33%	295%
R42	588586.22	4805444.06	8.3%	48%	0.6%	52%	3.7%	48%	0.38%	88%	0.16%	0.16%	13%	20%	2.1%	14%	6.3%	9.1%	0.23%	1.5%	0.33%	11.3%	2.2%	2.2%	2.9%	2.9%	0.24%	24%	0.031%	76%	22.9%	178%	2.23%	295%
R43	588557.06	4805464.32	8.1%	48%	0.5%	52%	3.6%	48%	0.37%	88%	0.15%	0.15%	13%	20%	2.0%	14%	6.2%	9.1%	0.23%	1.5%	0.32%	11.3%	2.2%	2.2%	2.9%	2.9%	0.23%	24%	0.029%	76%	22.6%	178%	2.16%	295%
R44	588670.10	4805576.40	9.2%	49%	0.6%	52%	4.0%	49%	0.42%	88%	0.18%	0.18%	12%	19%	2.0%	14%	6.5%	9.3%	0.23%	1.5%	0.34%	11.3%	2.5%	2.5%	3.2%	3.2%	0.26%	24%	0.033%	76%	25.3%	180%	2.48%	295%
R45	588670.28	4805615.19	9.1%	49%	0.6%	52%	4.0%	49%	0.42%	88%	0.18%	0.18%	12%	19%	2.0%	14%	6.7%	9.5%	0.23%	1.5%	0.33%	11.3%	2.5%	2.5%	3.3%	3.3%	0.26%	24%	0.033%	76%	25.2%	180%	2.49%	295%
R46	589003.59	4805937.72	17.1%	57%	1.1%	53%	6.9%	52%	0.68%	89%	0.32%	0.32%	14%	21%	2.7%	14%	8.6%	11.4%	0.32%	1.6%	0.48%	11.5%	3.3%	3.3%	4.3%	4.3%	0.34%	24%	0.056%	76%	47.3%	202%	4.44%	297%
R47	589041.99	4805974.72	18.2%	58%	1.2%	53%	7.4%	52%	0.73%	89%	0.34%	0.34%	14%	21%	2.8%	15%	8.8%	11.7%	0.34%	1.6%	0.51%	11.5%	3.5%	3.5%	4.5%	4.5%	0.36%	24%	0.058%	76%	50.4%	205%	4.76%	297%
R48	589293.19	4806505.50	12.6%	53%	0.8%	52%	5.4%	50%	0.49%	88%	0.24%	0.24%	17%	24%	2.8%	15%	9.1%	12.0%	0.35%	1.6%	0.41%	11.4%	2.9%	2.9%	3.7%	3.7%	0.33%	24%	0.036%	76%	35.0%	190%	3.50%	296%
R49	589219.60	4806515.59	11.7%	52%	0.7%	52%	4.8%	49%	0.41%	88%	0.22%	0.22%	16%	23%	2.7%	14%	8.7%	11.6%	0.31%	1.6%	0.35%	11.4%	2.8%	2.8%	3.6%	3.6%	0.28%	24%	0.029%	76%	32.4%	187%	2.95%	295%
R50	589338.17	4806485.88	13.6%	54%	1.0%	53%	6.0%	51%	0.58%	89%	0.26%	0.26%	17%	24%	3.1%	15%	9.4%	12.2%	0.40%	1.7%	0.47%	11.5%	3.0%	3.0%	3.9%	3.9%	0.38%	24%	0.040%	76%	38.6%	194%	4.09%	297%
R51	589518.84	4806584.75	16.5%	57%	1.5%	53%	6.8%	51%	0.80%	89%	0.32%	0.32%	17%	24%	3.5%	15%	12.1%	14.9%	0.41%	1.7%	0.58%	11.6%	3.3%	3.3%	4.2%	4.2%	0.44%	24%	0.056%	76%	45.9%	201%	5.90%	298%
R52	589557.86	4806649.65	16.4%	57%	1.4%	53%	6.8%	51%	0.77%	89%	0.33%	0.33%	18%	25%	3.2%	15%	11.9%	14.8%	0.39%	1.7%	0.55%	11.6%	3.2%	3.2%	4.2%	4.2%	0.42%	24%	0.053%	76%	45.7%	201%	5.68%	298%
R53	589474.48	4806602.41	14.8%	55%	1.2%	53%	6.1%	51%	0.65%	89%	0.29%	0.29%	17%	24%	3.3%	15%	12.1%	15.0%	0.38%	1.7%	0.48%	11.5%	3.1%	3.1%	4.0%	4.0%	0.36%	24%	0.044%	76%	41.1%	196%	4.77%	297%
R54	589897.77	4807374.19	10.6%	51%	0.8%	52%	4.6%	49%	0.46%	88%	0.25%	0.25%	17%	24%	2.6%	14%	10.3%	13.2%	0.25%	1.5%	0.36%	11.4%	2.7%	2.7%	3.5%	3.5%	0.31%	24%	0.033%	76%	27.5%	183%	3.14%	296%
R55	590214.06	4807506.19	11.7%	52%	1.0%	53%	5.0%	50%	0.64%	89%	0.22%	0.22%	16%	23%	2.6%	14%	10.7%	13.6%	0.30%	1.6%	0.57%	11.6%	3.2%	3.2%	4.1%	4.1%	0.31%	24%	0.049%	76%	30.7%	186%	4.08%	297%
R56	590337.28	4807588.62	10.1%	50%	1.0%	53%	4.4%	49%	0.62%	89%	0.19%	0.19%	18%	25%	2.7%	14%	9.6%	12.5%	0.25%	1.5%	0.55%	11.6%	2.9%	2.9%	3.7%	3.7%	0.33%	24%	0.049%	76%	26.8%	182%	3.93%	296%
R57	590735.46	4807580.37	9.5%	50%	1.1%	53%	4.2%	49%	0.73%	89%	0.17%	0.17%	18%	25%	2.8%	15%	7.8%	10.6%	0.27%	1.6%	0.69%	11.7%	2.5%	2.5%	3.2%	3.2%	0.33%	24%	0.051%	76%	25.5%	181%	4.61%	297%
R58	590836.21	4807430.87	9.9%	50%	1.3%	53%	4.2%	49%	0.90%	89%	0.19%	0.19%	20%	27%	2.9%	15%	8.8%	11.6%	0.27%	1.6%	0.87%	11.9%	2.7%	2.7%	3.4%	3.4%	0.25%	24%	0.062%	76%	25.4%	180%	5.60%	298%
R59	590841.35	4807247.63	11.6%	52%	1.7%	53%	4.6%	49%	1.14%	89%	0.23%	0.23%	18%	25%	3.1%	15%	8.8%	11.6%	0.28%	1.6%	1.09%	12.1%	2.9%	2.9%	3.7%	3.7%	0.35%	24%	0.078%	76%	27.4%	182%	7.14%	300%
R60	590953.11	4807285.94	10.9%	51%	1.6%	53%	4.4%	49%	1.05%	89%	0.22%	0.22%	21%	28%	2.9%	15%	9.3%	12.2%	0.25%	1.5%	1.01%	12.0%	2.7%	2.7%	3.5%	3.5%	0.32%	24%	0.073%	76%	25.7%	181%	6.54%	299%
R61	590858.15	4807196.55	12.1%	52%	1.8%	53%	4.8%	49%	1.21%	89%	0.24%	0.24%	18%	25%	3.2%	15%	8.9%	11.7%	0.26%	1.6%	1.14%	12.2%	2.9%	2.9%	3.7%	3.7%	0.38%	24%	0.084%	76%	28.8%	184%	7.61%	300%
R62	590899.99	4807147.81	12.3%	52%	1.9%	53%	4.9%	49%	1.26%	89%	0.25%	0.25%	23%	30%	3.5%	15%	10.0%	12.9%	0.28%	1.6%	1.19%	12.2%	3.0%	3.0%	3.9%	3.9%	0.39%	24%	0.087%	76%	29.9%	185%	7.92%	300%
R63	590908.06	4807085.06	12.6%	53%	2.0%	54%	5.0%	50%	1.34%	89%	0.25%	0.25%	26%	33%	3.8%	16%	11.0%	13.9%	0.31%	1.6%	1.24%	12.3%	3.0%	3.0%	3.9%	3.9%	0.43%	24%	0.093%	76%	30.8%	186%	8.43%	301%
R64	590967.33	4807021.48	12.7%	53%	2.1%	54%	5.3%	50%	1.36%	89%	0.27%	0.27%	28%	36%	4.4%	16%	12.6%	15.5%	0.32%	1.6%	1.23%	12.2%	3.0%	3.0%	3.8%	3.8%	0.39%	24%	0.091%	76%	31.3%	186%	8.68%	301%
R65	590865.33	4806894.56	14.6%	55%	2.7%	54%	5.9%	51%	1.67%	90%	0.31%	0.31%	29%	36%	5.2%	17%	13.1%	15.9%	0.36%	1.6%	1.47%	12.5%	3.3%	3.3%	4.2%	4.2%	0.50%	24%	0.107%	76%	36.1%	191%	11.02%	304%
R66	590875.79	4806848.38	14.9%	55%	2.8%	54%	6.2%	51%	1.75%	90%	0.32%	0.32%	28%	35%	5.6%	17%	12.9%	15.7%	0.40%	1.7%	1.56%	12.6%	3.3%	3.3%	4.3%	4.3%	0.47%	24%	0.109%	76%	39.9%	195%	11.63%	304%
R67	590920.31	4806789.89	16.0%	56%	2.8%	54%	6.8%	51%	1.81%	90%	0.35%	0.35%	30%	37%	5.8%	18%	13.8%	16.6%	0.45%	1.7%	1.66%	12.7%	3.4%	3.4%	4.4%	4.4%	0.36%	24%	0.107%	76%	43.6%	199%	12.02%	305%
R68	590961.66	4806888.64	13.7%	54%	2.4%	54%	5.8%	50%	1.56%	89%	0.30%	0.30%	29%	36%	5.0%	17%	13.2%	16.0%	0.40%	1.7%	1.41%	12.4%	3.1%	3.1%	4.0%	4.0%	0.44%	24%	0.096%	76%	35.2%	190%	10.23%	303%
R69	590903.03	4806672.93	20.4%	61%	3.4%	55%	8.8%	53%	2.16%	90%	0.43%	0.43%	31%	38%	6.5%	18%	14.7%	17.5%	0.56%	1.8%	2.03%	13.0%	3.8%	3.8%	4.9%	4.9%	0.42%	24%	0.120%	76%	55.5%	211%	14.47%	307%
R70	590963.12	4806680.26	18.9%	59%	3.1%	55%	8.2%	53%	2.00%	90%	0.41%	0.41%	29%	36%	6.7%	18%	13.8%	16.7%	0.52%	1.8%	1.91%	12.9%	3.7%	3.7%	4.7%	4.7%	0.40%	24%	0.111%	76%	51.4%	206%	13.36%	306%
R71	591025.30	4806745.59	16.3%	56%	2.7%	54%	6.9%	52%	1.75%	90%	0.37%	0.37%	28%	35%	6.0%	18%	13.2%	16.1%	0.45%	1.7%	1.66%	12.7%	3.5%	3.5%	4.4%	4.4%	0.34%	24%	0.100%	76%	43.7%	199%	11.59%	304%
R72	591093.90	4806613.91	17.0%	57%	2.6%	54%	8.0%	53%	1.72%	90%	0.36%	0.36%	33%	41%	5.8%	18%	14.4%	17.3%	0.50%	1.8%	1.66%	12.7%	3.3%	3.3%	4.3%	4.3%	0.42%	24%	0.096%	76%	47.3%	202%	11.36%	304%
R73	591080.34	4806562.13	19.4%	60%	2.8%	54%	8.5%	53%	1.82%	90%	0.38%	0.38%	31%	39%	5.9%	18%	14.2%	17.1%	0.49%	1.8%	1.72%	12.7%	3.7%	3.7%	4.8%	4.8%	0.42%	24%	0.098%	76%	54.1%	209%	12.20%	305%
R74	590955.72	4806489.27	25.7%	66%	3.8%	55%	10.2%	55%	2.34%	90%	0.49%	0.49%	29%	37%	6.7%	18%	14.4%	17.2%	0.59%	1.9%	2.12%	13.1%	4.4%	4.4%	5.6%	5.6%	0.48%	24%	0.124%	76%	67.9%	223%	16.12%	309%
R75	591005.07	4806448.29	25.7%	66%	3.4%	55%	10.2%	55%	2.14%	90%	0.49%	0.49%	28%	36%	6.4%	18%	13.9%	16.8%	0.56%	1.8%	1.98%	13.0%	4.2%	4.2%	5.4%	5.4%	0.47%	24%	0.113%	76%	65.4%	220%	14.71%	307%
R76	590884.05	4806449.67	29.9%	70%	4.5%	56%	11.8%	56%	2.75%	91%	0.57%	0.57%	31%	38%	7.3%	19%	15.5%	18.4%	0.65%	1.9%	2.43%	13.4%	4.8%	4.8%	6.1%	6.1%	0.54%	24%	0.147%	76%	76.9%	232%	19.23%	312%
R77	590883.54	4806430.39	30.6%	71%	4.5%	56%	12.0%	57%	2.77%	91%	0.58%	0.58%	30%	37%	7.1%	19%	15.2%	18.1%	0.65%	1.9%	2.45%	13.5%	4.9%	4.9%	6.3%	6.3%	0.55%	24%	0.147%	76%	78.5%	234%	19.31%	312%
R78	590891.65	4806348.55	29.1%	69%	4.0%	56%	11.4%	56%	2.52%	90%	0.56%	0.56%	26%	34%	8.1%	20%	13.7%	16.6%	0.61%	1.9%	2.38%	13.4%	4.5%	4.5%	5.7%	5.7%	0.54%	24%	0.127%	76%	72.9%	228%	17.37%	310%
R79	590869.78	4806365.29	30.7%	71%	4.3%	56%	11.9%	56%	2.72%	91%	0.59%	0.59%	28%	35%	7.7%	20%	13.9%	16.7%	0.62%	1.9%	2.52%	13.5%	4.8%	4.8%	6.1%	6.1%	0.56%	24%	0.138%	76%	76.5%	232%	18.86%	311%
R80	590867.26	4806331.34	29.6%	70%	4.1%	56%	11.6%	56%	2.61%	91%	0.57%	0.57%	27%	34%	8.7%	20%	14.1%	16.9%	0.62%	1.9%	2.48%	13.5%	4.5%	4.5%	5.8%	5.8%	0.55%	24%	0.131%	76%	74.1%	229%	17.98%	310%
R81	590803.61	4806333.49	32.7%	73%	4.9%	57%	12.6%	57%	3.11%	91%	0.62%	0.62%	30%	38%	9.3%	21%	15.0%	17.9%	0.64%	1.9%	2.91%	13.9%	5.0%	5.0%	6.5%	6.5%	0.60%	24%	0.156%	76%	81.1%	236%	21.59%	314%
R82	590868.28	4806278.10	27.6%	68%	3.7%	55%	11.2%	56%	2.38%	90%	0.53%	0.53%	28%	35%	6.8%	19%	13.8%	16.6%	0.65%	1.9%	2.29%	13.3%	4.0%	4.0%	5.2%	5.2%	0.51%	24%	0.118%	76%	69.9%	225%	16.26%	309%
R83	590864.42	4806258.79	27.1%	67%	3.6%	55%	11.0%	56%	2.31%	90%	0.51%	0.51%	27%	34%	7.3%	19%	13.7%	16.6%	0.65%	1.9%	2.23%	13.2%	3.9%	3.9%	5.1%	5.1%	0.50%	24%	0.116%	76%	68.7%	224%	15.80%	308%
R84	590831.33	4806209.69	26.4%	67%	3.5%	55%	10.9%	55%	2.27%	90%	0.50%	0.50%	27%	34%	7.5%	19%	14.9%	17.8%	0.67%	2.0%	2.18%	13.2%	3.9%	3.9%	5.0%	5.0%	0.48%	24%	0.113%	76%	67.5%	223%	15.53%	308%

Percentages of Criteria at Sensitive Receptors (Scenario E)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			32.7%	72.8%	4.9%	56.5%	12.6%	57.2%	3.1%	91.0%	0.6%	0.6%	33.5%	40.7%	9.3%	21.0%	24.9%	27.7%	0.7%	2.0%	2.9%	13.9%	5.0%	5.0%	6.5%	6.5%	0.6%	24.5%	0.2%	76.2%	81.1%	236.1%	21.6%	314.1%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R85	590817.26	4806242.44	28.3%	68%	3.9%	55%	11.5%	56%	2.53%	90%	0.54%	0.54%	29%	36%	8.2%	20%	14.6%	17.5%	0.70%	2.0%	2.46%	13.5%	4.1%	4.1%	5.2%	5.2%	0.52%	24%	0.124%	76%	71.9%	227%	17.30%	310%
R86	590874.92	4806136.21	22.2%	62%	2.8%	54%	8.9%	54%	1.80%	90%	0.42%	0.42%	26%	33%	6.8%	19%	14.8%	17.7%	0.60%	1.9%	1.75%	12.8%	3.5%	3.5%	4.5%	4.5%	0.40%	24%	0.091%	76%	56.4%	211%	12.29%	305%
R87	591051.40	4806231.39	20.3%	60%	2.3%	54%	8.6%	53%	1.48%	89%	0.38%	0.38%	26%	33%	6.0%	18%	12.5%	15.3%	0.54%	1.8%	1.41%	12.4%	3.3%	3.3%	4.2%	4.2%	0.39%	24%	0.078%	76%	52.1%	207%	10.07%	303%
R88	590857.90	4806098.80	21.3%	61%	2.7%	54%	8.4%	53%	1.75%	90%	0.41%	0.41%	26%	33%	7.0%	19%	14.4%	17.3%	0.60%	1.9%	1.71%	12.7%	3.4%	3.4%	4.3%	4.3%	0.39%	24%	0.089%	76%	53.9%	209%	11.90%	304%
R89	590831.13	4806085.17	21.5%	62%	2.7%	54%	8.5%	53%	1.80%	90%	0.41%	0.41%	27%	34%	7.4%	19%	14.4%	17.3%	0.61%	1.9%	1.76%	12.8%	3.4%	3.4%	4.4%	4.4%	0.39%	24%	0.091%	76%	54.5%	209%	12.26%	305%
R90	590794.58	4805959.59	18.0%	58%	2.3%	54%	7.1%	52%	1.46%	89%	0.34%	0.34%	26%	33%	6.0%	18%	11.6%	14.4%	0.47%	1.8%	1.37%	12.4%	3.0%	3.0%	3.8%	3.8%	0.32%	24%	0.076%	76%	45.5%	201%	10.05%	303%
R91	590797.37	4805895.64	16.0%	56%	2.0%	54%	6.4%	51%	1.27%	89%	0.32%	0.32%	25%	32%	5.7%	18%	11.2%	14.0%	0.45%	1.7%	1.17%	12.2%	2.8%	2.8%	3.6%	3.6%	0.28%	24%	0.067%	76%	39.4%	194%	8.71%	301%
R92	591122.86	4805917.21	13.2%	53%	1.3%	53%	5.6%	50%	0.85%	89%	0.26%	0.26%	19%	27%	4.8%	17%	11.5%	14.4%	0.41%	1.7%	0.81%	11.8%	2.4%	2.4%	3.0%	3.0%	0.26%	24%	0.047%	76%	32.4%	187%	5.67%	298%
R93	591390.75	4805924.41	11.2%	51%	1.0%	53%	5.0%	50%	0.65%	89%	0.21%	0.21%	18%	25%	3.8%	16%	10.3%	13.1%	0.35%	1.6%	0.63%	11.6%	2.1%	2.1%	2.7%	2.7%	0.25%	24%	0.038%	76%	27.3%	182%	4.27%	297%
R94	591469.94	4806107.41	11.8%	52%	1.1%	53%	5.3%	50%	0.74%	89%	0.23%	0.23%	21%	28%	4.1%	16%	9.9%	12.8%	0.37%	1.7%	0.72%	11.7%	2.3%	2.3%	3.0%	3.0%	0.25%	24%	0.042%	76%	29.3%	184%	4.83%	297%
R95	591624.05	4806094.57	10.3%	50%	0.9%	52%	4.7%	49%	0.62%	89%	0.20%	0.20%	22%	30%	3.7%	15%	9.8%	12.7%	0.32%	1.6%	0.61%	11.6%	2.1%	2.1%	2.7%	2.7%	0.24%	24%	0.036%	76%	25.4%	180%	4.01%	296%
R96	591554.49	4806013.23	10.6%	51%	0.9%	52%	4.8%	49%	0.61%	89%	0.20%	0.20%	21%	29%	3.7%	15%	10.1%	13.0%	0.33%	1.6%	0.60%	11.6%	2.1%	2.1%	2.7%	2.7%	0.24%	24%	0.036%	76%	26.1%	181%	3.99%	296%
R97	591668.99	4806053.90	9.9%	50%	0.8%	52%	4.5%	49%	0.57%	89%	0.19%	0.19%	21%	28%	3.5%	15%	9.2%	12.1%	0.31%	1.6%	0.56%	11.6%	2.0%	2.0%	2.5%	2.5%	0.23%	24%	0.033%	76%	24.3%	179%	3.69%	296%
R98	591610.13	4805965.08	10.0%	50%	0.8%	52%	4.5%	49%	0.56%	88%	0.19%	0.19%	21%	28%	3.3%	15%	9.8%	12.7%	0.30%	1.6%	0.54%	11.6%	1.9%	1.9%	2.5%	2.5%	0.23%	24%	0.033%	76%	24.4%	179%	3.62%	296%
R99	591719.29	4806025.01	9.5%	50%	0.8%	52%	4.3%	49%	0.54%	88%	0.18%	0.18%	20%	27%	3.3%	15%	9.2%	12.0%	0.29%	1.6%	0.52%	11.5%	1.9%	1.9%	2.5%	2.5%	0.22%	24%	0.031%	76%	23.4%	178%	3.45%	296%
R100	591749.26	4805984.34	9.4%	50%	0.7%	52%	4.2%	49%	0.51%	88%	0.18%	0.18%	18%	25%	3.0%	15%	9.1%	11.9%	0.28%	1.6%	0.50%	11.5%	1.9%	1.9%	2.5%	2.5%	0.21%	24%	0.029%	76%	23.1%	178%	3.29%	296%
R101	591698.96	4805855.92	9.0%	49%	0.7%	52%	4.0%	49%	0.47%	88%	0.17%	0.17%	16%	23%	2.9%	15%	9.2%	12.0%	0.27%	1.6%	0.46%	11.5%	1.8%	1.8%	2.4%	2.4%	0.21%	24%	0.029%	76%	21.8%	177%	3.06%	296%
R102	591824.17	4805930.83	8.9%	49%	0.7%	52%	3.9%	49%	0.46%	88%	0.17%	0.17%	15%	22%	2.7%	14%	8.5%	11.4%	0.26%	1.5%	0.45%	11.5%	1.8%	1.8%	2.4%	2.4%	0.20%	24%	0.027%	76%	21.6%	177%	2.98%	295%
R103	591805.98	4805838.80	8.5%	49%	0.6%	52%	3.8%	48%	0.43%	88%	0.16%	0.16%	15%	22%	2.7%	14%	8.6%	11.4%	0.25%	1.5%	0.42%	11.4%	1.8%	1.8%	2.3%	2.3%	0.19%	24%	0.027%	76%	20.6%	176%	2.79%	295%
R104	591746.05	4805766.02	8.2%	48%	0.6%	52%	3.7%	48%	0.42%	88%	0.16%	0.16%	14%	21%	2.9%	15%	7.9%	10.8%	0.26%	1.5%	0.41%	11.4%	1.7%	1.7%	2.2%	2.2%	0.19%	24%	0.024%	76%	19.9%	175%	2.72%	295%
R105	592064.72	4805863.19	7.5%	48%	0.5%	52%	3.3%	48%	0.37%	88%	0.14%	0.14%	14%	21%	2.2%	14%	7.9%	10.7%	0.21%	1.5%	0.36%	11.4%	1.7%	1.7%	2.2%	2.2%	0.17%	24%	0.022%	76%	18.2%	173%	2.37%	295%
R106	591457.80	4806263.06	13.7%	54%	1.3%	53%	5.9%	50%	0.86%	89%	0.26%	0.26%	23%	30%	4.1%	16%	10.7%	13.5%	0.37%	1.7%	0.82%	11.8%	2.5%	2.5%	3.3%	3.3%	0.27%	24%	0.049%	76%	35.6%	191%	5.65%	298%
R107	591300.05	4806336.50	17.1%	57%	1.7%	53%	7.2%	52%	1.13%	89%	0.32%	0.32%	23%	31%	5.1%	17%	10.7%	13.6%	0.46%	1.7%	1.07%	12.1%	2.9%	2.9%	3.7%	3.7%	0.33%	24%	0.062%	76%	44.1%	199%	7.56%	300%
R108	591252.74	4806220.96	16.0%	56%	1.6%	53%	6.8%	51%	1.08%	89%	0.30%	0.30%	23%	30%	4.5%	16%	11.1%	14.0%	0.42%	1.7%	1.03%	12.0%	2.8%	2.8%	3.6%	3.6%	0.32%	24%	0.058%	76%	41.1%	196%	7.21%	300%
R109	591205.44	4806270.09	17.7%	58%	1.9%	53%	7.5%	52%	1.22%	89%	0.34%	0.34%	24%	32%	5.3%	17%	11.6%	14.4%	0.48%	1.8%	1.15%	12.2%	3.0%	3.0%	3.9%	3.9%	0.35%	24%	0.067%	76%	45.7%	201%	8.19%	301%
R110	591252.74	4806340.13	18.1%	58%	1.9%	53%	7.6%	52%	1.22%	89%	0.34%	0.34%	24%	32%	5.2%	17%	11.2%	14.1%	0.47%	1.8%	1.16%	12.2%	3.0%	3.0%	3.9%	3.9%	0.34%	24%	0.067%	76%	46.5%	202%	8.22%	301%
R111	591139.92	4806297.13	19.5%	60%	2.2%	54%	8.2%	53%	1.40%	89%	0.37%	0.37%	25%	32%	5.7%	17%	11.5%	14.4%	0.52%	1.8%	1.32%	12.3%	3.2%	3.2%	4.1%	4.1%	0.38%	24%	0.076%	76%	50.1%	205%	9.46%	302%
R112	591122.35	4806325.63	20.5%	61%	2.3%	54%	8.5%	53%	1.50%	89%	0.39%	0.39%	26%	33%	5.8%	18%	12.0%	14.8%	0.53%	1.8%	1.43%	12.4%	3.3%	3.3%	4.2%	4.2%	0.39%	24%	0.080%	76%	52.5%	207%	10.16%	303%
R113	591089.88	4806341.73	21.8%	62%	2.5%	54%	9.0%	54%	1.63%	90%	0.41%	0.41%	27%	34%	5.9%	18%	12.7%	15.6%	0.55%	1.8%	1.55%	12.6%	3.4%	3.4%	4.4%	4.4%	0.41%	24%	0.087%	76%	55.6%	211%	11.09%	304%
R114	591068.77	4806395.97	23.2%	63%	2.8%	54%	9.4%	54%	1.82%	90%	0.44%	0.44%	27%	35%	6.2%	18%	13.0%	15.8%	0.56%	1.8%	1.74%	12.8%	3.6%	3.6%	4.6%	4.6%	0.43%	24%	0.096%	76%	58.9%	214%	12.35%	305%
R115	591097.40	4806450.01	22.6%	63%	2.8%	54%	9.1%	54%	1.79%	90%	0.43%	0.43%	30%	37%	5.8%	18%	13.7%	16.6%	0.53%	1.8%	1.70%	12.7%	3.7%	3.7%	4.8%	4.8%	0.42%	24%	0.096%	76%	57.4%	212%	12.10%	305%
R116	591085.71	4806416.77	22.8%	63%	2.8%	54%	9.3%	54%	1.79%	90%	0.43%	0.43%	29%	37%	6.0%	18%	13.4%	16.3%	0.55%	1.8%	1.71%	12.7%	3.6%	3.6%	4.6%	4.6%	0.42%	24%	0.093%	76%	58.0%	213%	12.13%	305%
R117	591079.53	4806430.99	23.1%	63%	2.8%	54%	9.3%	54%	1.83%	90%	0.44%	0.44%	30%	38%	5.8%	18%	13.9%	16.8%	0.54%	1.8%	1.74%	12.8%	3.7%	3.7%	4.7%	4.7%	0.43%	24%	0.096%	76%	58.6%	214%	12.41%	305%
R118	591150.65	4806443.64	21.3%	61%	2.5%	54%	8.7%	53%	1.62%	90%	0.40%	0.40%	27%	34%	5.5%	17%	12.5%	15.4%	0.52%	1.8%	1.54%	12.6%	3.5%	3.5%	4.5%	4.5%	0.40%	24%	0.087%	76%	54.4%	209%	10.90%	303%
R119	591471.93	4806336.37	14.3%	54%	1.3%	53%	6.1%	51%	0.89%	89%	0.27%	0.27%	24%	31%	4.6%	16%	10.8%	13.6%	0.40%	1.7%	0.85%	11.9%	2.6%	2.6%	3.4%	3.4%	0.28%	24%	0.051%	76%	37.2%	192%	5.87%	298%
R120	591492.86	4806392.79	14.4%	55%	1.4%	53%	6.1%	51%	0.91%	89%	0.27%	0.27%	22%	29%	4.5%	16%	9.9%	12.7%	0.39%	1.7%	0.86%	11.9%	2.6%	2.6%	3.4%	3.4%	0.28%	24%	0.051%	76%	37.4%	192%	5.97%	298%
R121	591535.63	4806441.92	14.1%	54%	1.3%	53%	6.0%	51%	0.89%	89%	0.27%	0.27%	23%	30%	4.2%	16%	10.2%	13.1%	0.37%	1.7%	0.85%	11.9%	2.6%	2.6%	3.4%	3.4%	0.28%	24%	0.051%	76%	36.5%	192%	5.83%	298%
R122	591579.31	4806526.55	13.9%	54%	1.3%	53%	6.0%	51%	0.89%	89%	0.26%	0.26%	23%	30%	4.2%	16%	10.4%	13.2%	0.38%	1.7%	0.86%	11.9%	2.8%	2.8%	3.6%	3.6%	0.28%	24%	0.051%	76%	36.0%	191%	5.82%	298%
R123	591646.64	4806484.69	13.1%	53%	1.2%	53%	5.6%	50%	0.80%	89%	0.25%	0.25%	20%	28%	3.8%	16%	9.5%	12.4%	0.35%	1.6%	0.77%	11.8%	2.6%	2.6%	3.4%	3.4%	0.26%	24%	0.047%	76%	34.1%	189%	5.22%	298%
R124	591773.92	4806328.52	10.5%	51%	0.9%	53%	4.6%	49%	0.63%	89%	0.20%	0.20%	21%	29%	3.5%	15%	9.7%	12.6%	0.31%	1.6%	0.62%	11.6%	2.2%	2.2%	2.9%	2.9%	0.23%	24%	0.038%	76%	27.7%	183%	4.07%	297%
R125	591926.32	4806358.75	9.6%	50%	0.8%	52%	4.2%	49%	0.56%	88%	0.18%	0.18%	20%	27%	3.2%	15%	9.1%	12.0%	0.28%	1.6%	0.55%	11.6%	2.2%	2.2%	2.8%	2.8%	0.20%	24%	0.033%	76%	25.3%	180%	3.59%	296%
R126	592036.41	4805335.50	4.6%	45%	0.3%	52%	2.2%	47%	0.25%	88%	0.09%	0.09%	12%	19%	1.8%	14%	6.8%	9.7%	0.16%	1.4%	0.26%	11.3%	1.3%	1.3%	1.7%	1.7%	0.12%	24%	0.016%	76%	11.1%	166%	1.57%	294%
R127	592165.42	4805344.21	4.5%	45%	0.3%	52%	2.1%	47%	0.24%	88%	0.08%	0.08%	11%	18%	1.9%	14%	6.0%	8.8%	0.16%	1.5%	0.25%	11.3%	1.3%	1.3%	1.7%	1.7%	0.11%	24%	0.016%	76%	10.8%	166%	1.50%	294%
R128	592088.71	4805265.77	4.3%	44%	0.3%	52%	2.1%	47%	0.23%	88%	0.08%	0.08%	11%	19%	1.8%	14%	6.5%	9.3%	0.16%	1.4%	0.24%	11.2%	1.3%	1.3%	1.7%	1.7%	0.11%	24%	0.016%	76%	10.3%	165%	1.45%	294%
R129	592104.40	4805032.16	3.4%	44%	0.3%	52%	1.6%	46%	0.20%	88%	0.07%	0.07%	12%	19%	1.5%	13%	6.2%	9.1%	0.13%	1.4%	0.20%	11.2%	1.2%	1.2%	1.6%	1.6%	0.10%	24%	0.013%	76%	8.4%	163%	1.22%	294%
R130	592121.65	4804904.95	3.1%	43%	0.2%	52%	1.5%	46%	0.18%	88%	0.06%	0.06%	12%	19%	1.2%	13%	6.5%	9.4%	0.11%	1.4%	0.18%	11.2%	1.2%	1.2%	1.6%	1.6%	0.10%	24%	0.011%	76%	8.8%	164%	1.12%	294%
R131	592733.56	4805621.46	3.7%	44%	0.3%	52%	1.7%	46%	0.21%	88%	0.07%	0.07%	9%	16%	1.5%	13%	4.7%	7.5%	0.13%	1.4%	0.21%	11.2%	1.1%	1.1%	1.4%	1.4%	0.09%	24%	0.013%	76%	9.2%	164%	1.26%	294%
R132	591880.73	4804726.91	4.4%	44%	0.2%	52%	2.2%	47%	0.18%	88%	0.08%	0.08%	14%	21%	1.8%	14%	7.6%	10.4%	0.16%	1.5%	0.18%	11.2%	1.2%	1.2%	1.6%	1.6%	0.11%	24%	0.011%	76%	11.9%	167%	1.10%	294%
R133	592084.55	4804243.52	3.8%	44%	0.2%	52%	1.8%	46%	0.13%	88%	0.07%	0.07%	11%	19%	1.4%	13%	6.2%	9.0%	0.14%	1.4%	0.14%	11.1%	1.1%	1.1%	1.5%	1.5%	0.09%	24%	0.009%	76%	10.3%	165%	0.81%	293%
R134	592142.24	4804838.49	3.1%	43%	0.2%	52%	1.4%	46%	0.17%	88%	0.06%	0.06%	11%	19%	1.2%	13%	6.3%	9.1%	0.11%	1.4%	0.17%	11.2%	1.2%	1.2%	1.5%	1.5%	0.10%	24%	0.011%	76%	8.9%	164%	1.07%	294%
R135	592152.71	4804725.17	3.2%	43%	0.2%	52%	1.5%	46%	0.16%	88%	0.06%	0.06%	12%	19%	1.2%	13%	6.5%	9.4%	0.12%	1.4%	0.16%	11.2%	1.2%	1.2%	1.5%	1.5%	0.09%	24%	0.011%	76%	9.2%	164%	1.00%	293%
R136	592229.41	4804808.85	2.9%	43%	0.2%	52%	1.4%	46%	0.17%	88%	0.06%	0.06%	11%	18%	1.2%	13%	6.0%	8.8%	0.10%	1.4%	0.17%	11.2%	1.2%	1.2%	1.5%	1.5%	0.09%	24%	0.011%	76%	8.2%	163%	1.02%	294%
R137	589317.83	4804722.44	5.6%	46%	0.5%	52%	2.3%	47%	0.34%	88%	0.14%	0.14%	13%	20%	1.7%	13%	6.8%	9.6%	0.14%	1.4%	0.33%	11.3%	2.4%	2.4%	3.1%	3.1%	0.15%	24%	0.018%	76%	14.6%	170%	2.29%	295%
R138	589495.01	4804396.18	5.0%	45%	0.3%	52%	2.3%	47%	0.23%	88%	0.10%	0.10%	12%	20%	2.0%	14%	6.1%	9.0%	0.14%	1.4%	0.23%	11.2%	2.4%	2.4%	3.0%	3.0%	0.13%	24%	0.013%	76%	13.6%	169%	1.52%	294%
R139	589125.91	4804733.79	5.2%	45%	0.5%	52%	2.2%	47%	0.35%	88%	0.13%	0.13%	12%	19%	1.7%	14%	6.0%	8.9%	0.15%	1.4%	0.33%	11.3%	2.3%	2.3%	2.9%	2.9%	0.13%	24%	0.020%	76%	13.7%	169%	2.26%	295%
R140	588444.94	4804827.67	5.7%	46%	0.4%	52%	2.6%	47%	0.30%	88%	0.11%	0.11%	12%	19%	2.0%	14%	5.7%	8.6%	0.17%	1.5%	0.28%	11.3%	1.8%	1.8%	2.3%	2.3%	0.18%	24%	0.022%	76%	14.6%	170%	1.72%	294%
R141	588542.38	4804754.86	5.2%	45%	0.4%	52%	2.3%	47%	0.30%	88%	0.10%	0.10%	12%	19%	2.0%	14%	5.5%	8.4%	0.16%	1.5%	0.28%	11.3%	1.8%	1.8%	2.3%	2.3%	0.16%	24%	0.022%	76%	13.3%	168%	1.79%	294%
R142	588090.16	4805534.02	5.2%	45%	0.3%	52%	2.4%	47%	0.23%	88%	0.10%	0.10%	12%	19%	1.8%	14%	6.3%	9.1%	0.17%	1.5%	0.22%	11.2%	1.9%	1.9%	2.5%	2.5%	0.16%	24%	0.018%	76%	14.6%	170%	1.34%	294%
R143	588850.56	4806928.34	6.5%	47%	0.3%	52%	2.7%	47%	0.17%	88%	0.13%	0.13%	14%	22%	2.0%	14%	10.3%	13.1%	0.21%	1.5%	0.16%	11.2%	2.0%	2.0%	2.6%	2.6%	0.14%	24%	0.011%	76%	18.2%	173%	1.17%	294%
R144	588954.41	4807073.96	6.1%	46%	0.3%	52%	2.6%	47%	0.16%	88%	0.11%	0.11%	15%	22%	1.8%	14%	10.1%	12.9%	0.20%	1.5%	0.14%	11.1%	1.9%	1.9%	2.5%	2.5%	0.12%	24%	0.011%	76%	17.2%	172%	1.11%	294%
R145	589453.28	4806793.60	11.7%	52%	0.7%	52%	5.0%	50%	0.42%	88%	0.24%	0.24%	24%	31%	3.1%	15%	24.9%	27.7%	0.44%	1.7%	0.37%	11.4%	2.9%	2.9%	3.7%	3.7%	0.25%	24%	0.029%	76%	32.7%	188%	3.03%	296%
R146	589336.96	4806802.19	10.3%	50%	0.6%	52%	4.4%	49%	0.33%	88%	0.20%	0.20%	20%	27%	2.7%	14%	17.4%	20.2%	0.32%	1.6%	0.29%	11.3%	2.7%	2.7%	3.4%	3.4%	0.21%	24%	0.022%	76%	28.7%	184%	2.38%	295%
R147	589112.04	4806966.65	7.3%	47%	0.3%	52%	3.1%	48%	0.20%	88%	0.14%	0.14%	16%	23%	2.1%	14%	11.2%	14.1%	0.24%	1.5%	0.17%	11.2%	2.2%	2.2%	2.8%	2.8%	0.14%	24%	0.013%	76%	20.5%	176%	1.43%	294%
R148	589817.35	4807475.92	9.0%	49%	0.6%	52%	3.5%	48%	0.34%	88%	0.22%	0.22%	17%	24%	2.5%	14%	8.7%	11.6%	0.23%	1.5%	0.28%	11.3%	2.5%	2.5%	3.2%	3.2%	0.27%	24%	0.024%	76%	21.2%	176%	2.30%	295%
R149	589212.29	4807135.17	6.8%	47%	0.3%	52%	2.8%	47%	0.19%	88%	0.14%	0.14%	20%	27%	1.7%	14%	13.5%	16.4%	0.22%	1.5%	0.17%	11.2%	2.1%	2.1%	2.7%	2.7%	0.15%	24%	0.013%	76%	17.2%	172%	1.34%	294%
R150	589187.15	4807059.80	6.8%	47%	0.3%	52%	3.0%	48%	0.20%	88%	0.13%	0.13%	18%	25%	1.8%	14%	11.6%	14.4%	0.21%	1.5%	0.17%	11.2%	2.1%	2.1%	2.8%	2.8%	0.14%	24%	0.013%	76%	19.0%	174%	1.41%	294%
R151	589216.89	4807005.39	7.3%	47%	0.4%	52%	3.1%	48%	0.21%	88%	0.14%	0.14%	17%	24%	2.0%	14%	11.6%	14.5%	0.24%	1.5%	0.18%	11.2%	2.2%	2.2%	2.9%	2.9%	0.15%	24%	0.013%	76%	20.6%	176%	1.55%	294%
R152	590965.47	4807254.22	11.2%	51%	1.6%	53%	4.5%	49%	1.08%	89%	0.22%	0.22%	18%	25%	3.1%	15%	8.2%	11.1%	0.25%	1.5%	1.03%	12.0%	2.8%	2.8%	3.6%	3.6%	0.34%	24%	0.076%	76%	26.5%	182%	6.76%	299%
R153	590992.57	4807219.38	11.3%	51%	1.7%	53%	4.5%	49%	1.10%	89%	0.23%	0.23%	17%	24%	3.3%	15%	8.0%	10.9%	0.26%	1.5%	1.04%	12.1%	2.9%	2.9%	3.7%	3.7%	0.34%	24%	0.076%	76%	27.1%	182%	6.96%	299%
R154	591025.08	4807154.35	11.7%	52%	1.8%	53%	4.7%	49%	1.16%	89%	0.24%	0.24%	18%	25%	3.7%	15%	9.1%	12.0%	0.28%	1.6%	1.08%	12.1%	2.9%	2.9%	3.8%	3.8%	0.37%	24%	0.078%	76%	28.3%	183%	7.37%	300%
R155	591085.58	4807264.22	10.5%	51%	1.5%	53%	4.3%	49%	1.01%	89%	0.21%	0.21%	20%	27%	3.2%	15%	9.6%	12.5%	0.25%	1.5%	0.97%	12.0%	2.7%	2.7%	3.5%	3.5%	0.31%	24%	0.071%	76%	25.2%	180%	6.32%	299%
R156	591178.47	4807320.73	9.9%	50%	1.4%	53%	4.1%	49%	0.92%	89%	0.20%	0.20%	19%	26%	3.3%	15%	9.2%	12.1%	0.24%	1.5%	0.89%	11.9%	2.6%	2.6%	3.4%	3.4%	0.29%	24%	0.064%	76%	24.1%	179%	5.75%	298%
R157	591128.15	4807474.79	9.2%	49%	1.2%	53%	3.8%	48%	0.81%	89%	0.18%	0.18%	18%	25%	2.6%	14%	8.0%	10.8%	0.22%	1.5%	0.79%	11.8%	2.4%	2.4%	3.1%	3.1%	0.23%	24%	0.056%	76%	21.1%	176%	4.97%	297%
R158	591137.75	4807525.40	8.9%	49%	1.1%	53%	3.7%	48%	0.76%	89%	0.18%	0.18%	17%	24%	2.5%	14%	7.8%	10.7%	0.22%	1.5%	0.75%	11.8%	2.4%	2.4%	3.1%	3.1%	0.21%	24%	0.053%	76%	20.6%	176%	4.70%	297%
R159	591389.55	4807160.03	9.4%	50%	1.4%	53%	4.1%	49%	0.96%	89%	0.24%	0.24%	19%	26%	3.8%	16%	9.4%	12.3%	0.30%	1.6%	0.90%	11.9%	2.7%	2.7%	3.5%	3.5%	0.28%	24%	0.062%	76%	23.6%	179%	6.18%	299%
R160	591232.04	4806971.44	11.3%	51%	1.8%	53%	4.7%	49%	1.21%	89%	0.28%	0.28%	21%	28%	4.2%	16%	10.4%	13.3%	0.34%	1.6%	1.12%	12.1%	3.0%	3.0%	3.9%	3.9%	0.33%	24%	0.073%	76%	27.7%	183%	7.90%	300%
R161	591435.62	4807128.95	9.3%	49%	1.4%	53%	4.0%	49%	0.96%	89%	0.23%	0.23%	19%	26%	3.5%	15%	9.4%	12.3%	0.29%	1.6%	0.90%	11.9%	2.7%	2.7%	3.5%	3.5%	0.28%	24%	0.060%	76%	22.9%	178%	6.15%	299%
R162	591162.85	4806690.32	15.0%	55%	2.3%	54%	7.2%	52%	1.53%	89%	0.33%	0.33%	31%	38%	5.3%	17%	13.5%	16.4%	0.47%	1.8%	1.49%	12.5%	3.2%	3.2%	4.1%	4.1%	0.38%	24%	0.087%	76%	42.0%	197%	10.00%	302%
R163	591210.95	4806729.12	14.4%	55%	2.1%	54%	6.7%	51%	1.43%	89%	0.31%	0.31%	29%	36%	5.1%	17%	12.9%	15.8%	0.45%	1.7%	1.40%	12.4%	3.1%	3.1%	4.1%	4.1%	0.35%	24%	0.080%	76%	40.2%	195%	9.35%	302%
R164	591105.87	4806818.03	13.4%	54%	2.3%	54%	5.8%	50%	1.50%	89%	0.32%	0.32%	27%	34%	5.4%	17%	12.4%	15.3%	0.39%	1.7%	1.43%	12.4%	3.2%	3.2%	4.1%	4.1%	0.31%	24%	0.087%	76%	35.8%	191%	9.87%	302%
R165	591265.91	4806593.73	16.1%	56%	2.1%	54%	7.2%	52%	1.38%	89%	0.31%	0.31%	28%	35%	4.6%	16%	12.7%	15.6%	0.42%	1.7%	1.33%	12.3%	3.4%	3.4%	4.3%	4.3%	0.37%	24%	0.076%	76%	44.4%	199%	9.11%	302%
R166	591287.73	4806665.26	15.4%	55%	2.0%	54%	7.0%	52%	1.34%	89%	0.29%	0.29%	26%	33%	4.4%	16%	12.5%	15.3%	0.44%	1.7%	1.30%	12.3%	3.4%	3.4%	4.4%	4.4%	0.36%	24%	0.076%	76%	42.8%	198%	8.85%	301%
R167	591333.40	4806722.65	14.4%	55%	1.9%	53%	6.5%	51%	1.27%	89%	0.28%	0.28%	23%	31%	4.4%	16%	11.8%	14.6%	0.42%	1.7%	1.23%	12.2%	3.4%	3.4%	4.4%	4.4%	0.32%	24%	0.071%	76%	40.3%	195%	8.33%	301%

Percentages of Criteria at Sensitive Receptors (Scenario E)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			32.7%	72.8%	4.9%	56.5%	12.6%	57.2%	3.1%	91.0%	0.6%	0.6%	33.5%	40.7%	9.3%	21.0%	24.9%	27.7%	0.7%	2.0%	2.9%	13.9%	5.0%	5.0%	6.5%	6.5%	0.6%	24.5%	0.2%	76.2%	81.1%	236.1%	21.6%	314.1%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R168	591234.22	4806518.76	18.4%	58%	2.2%	54%	7.6%	52%	1.44%	89%	0.35%	0.35%	29%	36%	5.0%	17%	13.0%	15.8%	0.46%	1.7%	1.38%	12.4%	3.4%	3.4%	4.3%	4.3%	0.36%	24%	0.078%	76%	47.2%	202%	9.57%	302%
R169	591154.03	4806495.46	20.6%	61%	2.5%	54%	8.4%	53%	1.63%	90%	0.39%	0.39%	29%	36%	5.5%	17%	13.4%	16.2%	0.49%	1.8%	1.55%	12.6%	3.6%	3.6%	4.7%	4.7%	0.39%	24%	0.089%	76%	53.0%	208%	11.00%	303%
R170	592963.29	4806056.44	3.6%	44%	0.3%	52%	1.6%	46%	0.23%	88%	0.08%	0.08%	9%	16%	1.4%	13%	4.6%	7.5%	0.12%	1.4%	0.24%	11.2%	1.1%	1.1%	1.5%	1.5%	0.09%	24%	0.013%	76%	9.7%	165%	1.40%	294%
R171	592548.41	4807420.43	4.5%	45%	0.6%	52%	2.0%	47%	0.40%	88%	0.10%	0.10%	10%	17%	1.6%	13%	4.9%	7.8%	0.14%	1.4%	0.41%	11.4%	1.6%	1.6%	2.1%	2.1%	0.11%	24%	0.024%	76%	11.8%	167%	2.47%	295%
R172	592951.92	4807025.44	4.3%	44%	0.4%	52%	1.9%	46%	0.28%	88%	0.08%	0.08%	9%	16%	1.6%	13%	4.6%	7.5%	0.15%	1.4%	0.30%	11.3%	1.4%	1.4%	1.8%	1.8%	0.09%	24%	0.018%	76%	11.2%	166%	1.69%	294%
R173	592512.22	4807840.43	3.7%	44%	0.5%	52%	1.6%	46%	0.36%	88%	0.09%	0.09%	9%	16%	1.4%	13%	4.4%	7.3%	0.12%	1.4%	0.38%	11.4%	1.4%	1.4%	1.8%	1.8%	0.12%	24%	0.022%	76%	9.3%	164%	2.17%	295%
R174	592241.77	4807860.57	3.9%	44%	0.5%	52%	1.8%	46%	0.40%	88%	0.10%	0.10%	9%	16%	1.8%	14%	4.6%	7.5%	0.14%	1.4%	0.42%	11.4%	1.5%	1.5%	1.9%	1.9%	0.14%	24%	0.027%	76%	11.0%	166%	2.40%	295%
R175	592089.28	4807558.47	4.9%	45%	0.7%	52%	2.1%	47%	0.49%	88%	0.12%	0.12%	10%	17%	1.8%	14%	4.9%	7.8%	0.16%	1.4%	0.50%	11.5%	1.7%	1.7%	2.1%	2.1%	0.14%	24%	0.031%	76%	12.3%	167%	3.06%	296%
R176	593448.24	4806616.60	3.5%	44%	0.3%	52%	1.6%	46%	0.21%	88%	0.06%	0.06%	9%	16%	1.4%	13%	4.4%	7.3%	0.12%	1.4%	0.22%	11.2%	1.2%	1.2%	1.5%	1.5%	0.08%	24%	0.013%	76%	9.6%	165%	1.24%	294%
R177	593312.53	4806745.71	3.9%	44%	0.3%	52%	1.7%	46%	0.22%	88%	0.07%	0.07%	9%	16%	1.5%	13%	4.4%	7.2%	0.14%	1.4%	0.24%	11.2%	1.3%	1.3%	1.6%	1.6%	0.08%	24%	0.013%	76%	10.4%	165%	1.32%	294%
R178	589896.14	4804503.60	6.8%	47%	0.3%	52%	2.3%	47%	0.21%	88%	0.18%	0.18%	12%	20%	1.8%	14%	6.5%	9.4%	0.15%	1.4%	0.20%	11.2%	2.8%	2.8%	3.6%	3.6%	0.13%	24%	0.013%	76%	13.5%	168%	1.46%	294%
R179	589806.86	4804615.64	6.5%	47%	0.4%	52%	2.7%	47%	0.25%	88%	0.17%	0.17%	13%	20%	2.1%	14%	6.3%	9.1%	0.17%	1.5%	0.24%	11.2%	2.9%	2.9%	3.7%	3.7%	0.15%	24%	0.013%	76%	16.2%	171%	1.72%	294%
R180	589696.72	4804647.38	6.4%	47%	0.4%	52%	2.8%	47%	0.28%	88%	0.14%	0.14%	13%	21%	2.4%	14%	6.7%	9.5%	0.17%	1.5%	0.27%	11.3%	2.7%	2.7%	3.5%	3.5%	0.16%	24%	0.016%	76%	16.6%	172%	1.89%	294%
R181	589584.24	4804517.22	5.6%	46%	0.4%	52%	2.5%	47%	0.25%	88%	0.12%	0.12%	13%	20%	2.2%	14%	6.2%	9.1%	0.15%	1.4%	0.25%	11.3%	2.5%	2.5%	3.2%	3.2%	0.15%	24%	0.013%	76%	14.9%	170%	1.68%	294%
R182	589636.85	4804582.64	6.0%	46%	0.4%	52%	2.7%	47%	0.26%	88%	0.13%	0.13%	13%	20%	2.3%	14%	6.4%	9.2%	0.16%	1.4%	0.26%	11.3%	2.6%	2.6%	3.3%	3.3%	0.15%	24%	0.016%	76%	15.7%	171%	1.78%	294%
R183	589520.07	4804445.87	5.2%	45%	0.4%	52%	2.4%	47%	0.24%	88%	0.11%	0.11%	12%	20%	2.1%	14%	6.2%	9.0%	0.15%	1.4%	0.24%	11.3%	2.4%	2.4%	3.1%	3.1%	0.14%	24%	0.013%	76%	14.1%	169%	1.59%	294%
R184	589424.10	4804324.30	4.7%	45%	0.3%	52%	2.1%	47%	0.22%	88%	0.10%	0.10%	12%	19%	1.9%	14%	6.1%	9.0%	0.13%	1.4%	0.23%	11.2%	2.3%	2.3%	2.9%	2.9%	0.13%	24%	0.011%	76%	12.7%	168%	1.44%	294%
R185	589626.45	4804718.61	6.7%	47%	0.5%	52%	2.9%	48%	0.32%	88%	0.14%	0.14%	13%	20%	2.3%	14%	6.8%	9.7%	0.17%	1.5%	0.31%	11.3%	2.7%	2.7%	3.5%	3.5%	0.17%	24%	0.018%	76%	16.5%	171%	2.15%	295%
R186	589475.29	4804698.61	5.6%	46%	0.5%	52%	2.5%	47%	0.33%	88%	0.14%	0.14%	13%	20%	1.8%	14%	7.1%	9.9%	0.15%	1.4%	0.32%	11.3%	2.6%	2.6%	3.3%	3.3%	0.15%	24%	0.018%	76%	15.0%	170%	2.20%	295%
R187	589396.66	4804788.79	5.9%	46%	0.6%	52%	2.4%	47%	0.37%	88%	0.15%	0.15%	13%	20%	1.8%	14%	7.1%	10.0%	0.15%	1.4%	0.35%	11.4%	2.6%	2.6%	3.3%	3.3%	0.15%	24%	0.020%	76%	15.4%	170%	2.47%	295%
R188	589559.04	4804789.94	6.5%	47%	0.6%	52%	2.8%	47%	0.36%	88%	0.15%	0.15%	13%	20%	2.1%	14%	7.5%	10.4%	0.16%	1.4%	0.35%	11.4%	2.7%	2.7%	3.5%	3.5%	0.17%	24%	0.020%	76%	16.2%	171%	2.43%	295%
R189	589464.66	4804561.55	5.3%	45%	0.4%	52%	2.4%	47%	0.28%	88%	0.13%	0.13%	13%	20%	1.9%	14%	6.8%	9.7%	0.15%	1.4%	0.28%	11.3%	2.5%	2.5%	3.2%	3.2%	0.14%	24%	0.016%	76%	13.9%	169%	1.87%	294%
R190	589381.48	4804662.33	5.4%	46%	0.5%	52%	2.3%	47%	0.32%	88%	0.14%	0.14%	13%	20%	1.6%	13%	7.2%	10.0%	0.14%	1.4%	0.32%	11.3%	2.5%	2.5%	3.2%	3.2%	0.14%	24%	0.018%	76%	14.6%	170%	2.14%	295%
R191	589419.87	4804486.37	4.9%	45%	0.4%	52%	2.2%	47%	0.26%	88%	0.12%	0.12%	12%	20%	1.8%	14%	6.7%	9.5%	0.14%	1.4%	0.27%	11.3%	2.4%	2.4%	3.1%	3.1%	0.13%	24%	0.013%	76%	13.1%	168%	1.73%	294%
R192	588195.90	4804357.37	3.7%	44%	0.3%	52%	1.8%	46%	0.22%	88%	0.07%	0.07%	12%	19%	1.5%	13%	5.4%	8.3%	0.13%	1.4%	0.22%	11.2%	1.5%	1.5%	2.0%	2.0%	0.13%	24%	0.016%	76%	9.4%	164%	1.26%	294%
R193	587601.39	4804639.77	4.1%	44%	0.2%	52%	2.0%	47%	0.18%	88%	0.08%	0.08%	11%	18%	1.5%	13%	5.0%	7.9%	0.13%	1.4%	0.17%	11.2%	1.5%	1.5%	2.0%	2.0%	0.13%	24%	0.016%	76%	11.4%	166%	0.95%	293%
R194	587160.07	4805072.46	2.9%	43%	0.2%	52%	1.6%	46%	0.13%	88%	0.06%	0.06%	11%	18%	1.1%	13%	5.3%	8.2%	0.10%	1.4%	0.12%	11.1%	1.4%	1.4%	1.9%	1.9%	0.11%	24%	0.011%	76%	8.2%	163%	0.70%	293%
R195	587350.72	4804886.57	3.5%	44%	0.2%	52%	1.7%	46%	0.15%	88%	0.06%	0.06%	10%	18%	1.2%	13%	4.9%	7.7%	0.13%	1.4%	0.14%	11.2%	1.5%	1.5%	2.0%	2.0%	0.12%	24%	0.013%	76%	9.5%	164%	0.82%	293%
R196	586906.61	4804895.76	2.6%	43%	0.1%	52%	1.5%	46%	0.11%	88%	0.05%	0.05%	10%	18%	1.0%	13%	4.9%	7.8%	0.09%	1.4%	0.10%	11.1%	1.4%	1.4%	1.7%	1.7%	0.10%	24%	0.009%	76%	6.8%	162%	0.61%	293%
R197	587481.04	4806511.43	3.2%	43%	0.1%	52%	1.5%	46%	0.09%	88%	0.06%	0.06%	9%	17%	1.1%	13%	4.5%	7.3%	0.11%	1.4%	0.10%	11.1%	1.3%	1.3%	1.6%	1.6%	0.08%	24%	0.007%	76%	9.4%	164%	0.59%	293%
R198	587364.33	4806419.19	3.0%	43%	0.1%	52%	1.4%	46%	0.09%	88%	0.06%	0.06%	10%	17%	1.2%	13%	5.1%	8.0%	0.11%	1.4%	0.10%	11.1%	1.2%	1.2%	1.6%	1.6%	0.08%	24%	0.007%	76%	8.9%	164%	0.59%	293%
R199	587233.51	4806472.84	2.8%	43%	0.1%	52%	1.4%	46%	0.09%	88%	0.05%	0.05%	10%	17%	1.2%	13%	5.0%	7.8%	0.11%	1.4%	0.09%	11.1%	1.2%	1.2%	1.5%	1.5%	0.08%	24%	0.007%	76%	8.4%	163%	0.55%	293%
R200	587145.04	4806367.42	2.6%	43%	0.1%	52%	1.2%	46%	0.08%	88%	0.05%	0.05%	9%	17%	1.1%	13%	4.9%	7.8%	0.10%	1.4%	0.08%	11.1%	1.2%	1.2%	1.5%	1.5%	0.07%	24%	0.004%	76%	7.7%	163%	0.51%	293%
R201	587045.27	4806250.72	2.4%	43%	0.1%	52%	1.2%	46%	0.08%	88%	0.04%	0.04%	10%	17%	1.0%	13%	4.8%	7.6%	0.09%	1.4%	0.08%	11.1%	1.2%	1.2%	1.5%	1.5%	0.06%	24%	0.004%	76%	7.1%	162%	0.48%	293%
R202	586965.27	4806150.95	2.3%	42%	0.1%	52%	1.1%	46%	0.07%	88%	0.04%	0.04%	10%	17%	1.0%	13%	4.9%	7.7%	0.09%	1.4%	0.08%	11.1%	1.2%	1.2%	1.6%	1.6%	0.06%	24%	0.004%	76%	6.7%	162%	0.46%	293%
R203	587953.83	4806878.51	4.2%	44%	0.1%	52%	2.0%	47%	0.11%	88%	0.08%	0.08%	12%	19%	1.4%	13%	5.5%	8.3%	0.14%	1.4%	0.12%	11.1%	1.5%	1.5%	1.9%	1.9%	0.11%	24%	0.007%	76%	11.7%	167%	0.69%	293%
R204	588739.26	4807221.01	4.7%	45%	0.2%	52%	2.1%	47%	0.12%	88%	0.09%	0.09%	14%	21%	1.5%	13%	8.7%	11.5%	0.17%	1.5%	0.11%	11.1%	1.7%	1.7%	2.2%	2.2%	0.10%	24%	0.009%	76%	13.5%	169%	0.83%	293%
R205	588362.75	4807367.85	3.7%	44%	0.1%	52%	1.6%	46%	0.09%	88%	0.07%	0.07%	13%	20%	1.4%	13%	7.2%	10.1%	0.14%	1.4%	0.08%	11.1%	1.5%	1.5%	2.0%	2.0%	0.08%	24%	0.007%	76%	10.5%	165%	0.59%	293%
R206	588356.16	4807310.43	3.9%	44%	0.1%	52%	1.7%	46%	0.09%	88%	0.08%	0.08%	13%	20%	1.4%	13%	7.4%	10.2%	0.15%	1.4%	0.08%	11.1%	1.6%	1.6%	2.0%	2.0%	0.08%	24%	0.007%	76%	10.9%	166%	0.62%	293%
R207	588840.92	4807474.22	4.3%	44%	0.2%	52%	1.8%	46%	0.11%	88%	0.08%	0.08%	12%	20%	0.9%	13%	7.2%	10.1%	0.10%	1.4%	0.11%	11.1%	1.7%	1.7%	2.2%	2.2%	0.10%	24%	0.007%	76%	11.4%	166%	0.76%	293%
R208	588523.06	4807632.25	3.1%	43%	0.1%	52%	1.3%	46%	0.08%	88%	0.06%	0.06%	11%	19%	0.8%	13%	6.2%	9.1%	0.08%	1.4%	0.09%	11.1%	1.3%	1.3%	1.7%	1.7%	0.07%	24%	0.004%	76%	8.6%	164%	0.56%	293%
R209	588101.83	4807356.50	3.5%	44%	0.1%	52%	1.6%	46%	0.08%	88%	0.07%	0.07%	11%	19%	1.5%	13%	5.9%	8.7%	0.14%	1.4%	0.08%	11.1%	1.4%	1.4%	1.8%	1.8%	0.07%	24%	0.004%	76%	10.0%	165%	0.54%	293%
R210	587963.42	4807222.88	3.6%	44%	0.1%	52%	1.8%	46%	0.09%	88%	0.07%	0.07%	11%	18%	1.5%	13%	5.7%	8.6%	0.14%	1.4%	0.09%	11.1%	1.5%	1.5%	1.9%	1.9%	0.09%	24%	0.004%	76%	10.3%	165%	0.57%	293%
R211	588020.22	4807483.72	3.3%	43%	0.1%	52%	1.5%	46%	0.07%	88%	0.06%	0.06%	12%	19%	1.4%	13%	6.1%	9.0%	0.14%	1.4%	0.07%	11.1%	1.3%	1.3%	1.7%	1.7%	0.07%	24%	0.004%	76%	9.2%	164%	0.48%	293%
R212	587973.02	4807409.31	3.3%	43%	0.1%	52%	1.6%	46%	0.07%	88%	0.06%	0.06%	11%	19%	1.4%	13%	5.9%	8.7%	0.14%	1.4%	0.08%	11.1%	1.4%	1.4%	1.8%	1.8%	0.07%	24%	0.004%	76%	9.5%	164%	0.50%	293%
R213	587929.81	4807367.70	3.3%	43%	0.1%	52%	1.6%	46%	0.08%	88%	0.06%	0.06%	11%	18%	1.4%	13%	5.9%	8.7%	0.14%	1.4%	0.08%	11.1%	1.4%	1.4%	1.8%	1.8%	0.08%	24%	0.004%	76%	9.4%	164%	0.50%	293%
R214	587881.00	4807330.90	3.4%	43%	0.1%	52%	1.7%	46%	0.08%	88%	0.06%	0.06%	11%	18%	1.4%	13%	5.8%	8.7%	0.14%	1.4%	0.08%	11.1%	1.4%	1.4%	1.8%	1.8%	0.08%	24%	0.004%	76%	9.5%	164%	0.51%	293%
R215	587840.20	4807286.09	3.4%	44%	0.1%	52%	1.7%	46%	0.08%	88%	0.06%	0.06%	11%	18%	1.4%	13%	5.7%	8.6%	0.14%	1.4%	0.08%	11.1%	1.4%	1.4%	1.8%	1.8%	0.09%	24%	0.004%	76%	9.7%	165%	0.52%	293%
R216	587785.68	4807211.86	3.5%	44%	0.1%	52%	1.8%	46%	0.08%	88%	0.07%	0.07%	11%	18%	1.4%	13%	5.7%	8.6%	0.14%	1.4%	0.09%	11.1%	1.4%	1.4%	1.8%	1.8%	0.09%	24%	0.004%	76%	10.1%	165%	0.54%	293%
R217	587928.62	4807557.92	3.1%	43%	0.1%	52%	1.4%	46%	0.07%	88%	0.06%	0.06%	12%	19%	1.4%	13%	6.3%	9.2%	0.14%	1.4%	0.07%	11.1%	1.3%	1.3%	1.7%	1.7%	0.06%	24%	0.004%	76%	8.6%	164%	0.44%	293%
R218	587806.32	4807435.62	3.1%	43%	0.1%	52%	1.6%	46%	0.07%	88%	0.06%	0.06%	12%	19%	1.4%	13%	5.9%	8.8%	0.14%	1.4%	0.08%	11.1%	1.3%	1.3%	1.7%	1.7%	0.07%	24%	0.004%	76%	8.9%	164%	0.46%	293%
R219	587738.93	4807320.81	3.3%	43%	0.1%	52%	1.7%	46%	0.08%	88%	0.06%	0.06%	11%	18%	1.4%	13%	5.8%	8.6%	0.14%	1.4%	0.08%	11.1%	1.3%	1.3%	1.7%	1.7%	0.08%	24%	0.004%	76%	9.3%	164%	0.49%	293%
R220	587669.05	4807210.99	3.5%	44%	0.1%	52%	1.8%	46%	0.08%	88%	0.06%	0.06%	12%	19%	1.4%	13%	5.7%	8.6%	0.13%	1.4%	0.09%	11.1%	1.4%	1.4%	1.8%	1.8%	0.09%	24%	0.004%	76%	9.8%	165%	0.51%	293%
R221	587883.70	4807505.51	3.1%	43%	0.1%	52%	1.5%	46%	0.07%	88%	0.06%	0.06%	12%	19%	1.4%	13%	6.1%	9.0%	0.14%	1.4%	0.07%	11.1%	1.3%	1.3%	1.7%	1.7%	0.06%	24%	0.004%	76%	8.9%	164%	0.45%	293%
R222	591562.72	4806745.44	11.9%	52%	1.4%	53%	5.4%	50%	0.98%	89%	0.22%	0.22%	21%	28%	3.5%	15%	10.7%	13.5%	0.36%	1.6%	0.96%	12.0%	3.2%	3.2%	4.1%	4.1%	0.27%	24%	0.056%	76%	33.2%	188%	6.37%	299%
R223	591488.72	4806824.64	11.6%	52%	1.6%	53%	5.1%	50%	1.05%	89%	0.22%	0.22%	21%	29%	3.8%	16%	10.6%	13.5%	0.33%	1.6%	1.03%	12.0%	3.1%	3.1%	4.0%	4.0%	0.26%	24%	0.060%	76%	32.5%	187%	6.85%	299%
R224	591458.08	4806872.05	11.0%	51%	1.6%	53%	4.9%	49%	1.07%	89%	0.23%	0.23%	22%	29%	3.9%	16%	10.7%	13.6%	0.30%	1.6%	1.04%	12.1%	3.0%	3.0%	3.8%	3.8%	0.25%	24%	0.062%	76%	31.1%	186%	6.94%	299%
R225	591234.74	4806903.98	11.4%	52%	1.9%	54%	4.7%	49%	1.27%	89%	0.29%	0.29%	22%	29%	4.7%	16%	10.9%	13.7%	0.34%	1.6%	1.20%	12.2%	3.1%	3.1%	4.0%	4.0%	0.30%	24%	0.076%	76%	30.7%	186%	8.33%	301%
R226	591148.34	4807068.03	11.5%	52%	1.8%	53%	4.9%	49%	1.17%	89%	0.26%	0.26%	18%	25%	4.0%	16%	9.5%	12.4%	0.34%	1.6%	1.07%	12.1%	3.0%	3.0%	3.8%	3.8%	0.35%	24%	0.076%	76%	29.7%	185%	7.59%	300%
R227	591097.65	4807084.65	11.7%	52%	1.8%	53%	4.9%	50%	1.19%	89%	0.26%	0.26%	17%	24%	4.1%	16%	8.9%	11.8%	0.31%	1.6%	1.08%	12.1%	3.0%	3.0%	3.8%	3.8%	0.33%	24%	0.078%	76%	30.0%	185%	7.65%	300%
R228	591077.93	4807117.98	11.6%	52%	1.8%	53%	4.8%	49%	1.16%	89%	0.25%	0.25%	18%	25%	4.1%	16%	9.0%	11.9%	0.29%	1.6%	1.07%	12.1%	3.0%	3.0%	3.8%	3.8%	0.34%	24%	0.078%	76%	29.3%	184%	7.46%	300%
R229	590831.76	4807776.37	8.2%	48%	0.9%	52%	3.8%	48%	0.60%	89%	0.15%	0.15%	18%	25%	2.4%	14%	7.5%	10.4%	0.24%	1.5%	0.57%	11.6%	2.2%	2.2%	2.9%	2.9%	0.27%	24%	0.042%	76%	22.3%	177%	3.73%	296%
R230	590778.59	4807689.25	8.8%	49%	1.0%	53%	4.0%	49%	0.65%	89%	0.16%	0.16%	18%	26%	2.6%	14%	7.5%	10.4%	0.26%	1.5%	0.62%	11.6%	2.3%	2.3%	3.0%	3.0%	0.30%	24%	0.047%	76%	23.9%	179%	4.08%	297%
R231	591027.31	4806131.86	18.4%	59%	2.0%	54%	7.6%	52%	1.35%	89%	0.35%	0.35%	24%	31%	6.0%	18%	13.0%	15.9%	0.54%	1.8%	1.31%	12.3%	3.1%	3.1%	3.9%	3.9%	0.35%	24%	0.071%	76%	47.0%	202%	9.11%	302%
R232	591030.81	4806097.45	17.4%	58%	1.9%	54%	7.2%	52%	1.27%	89%	0.33%	0.33%	22%	29%	6.2%	18%	11.9%	14.8%	0.54%	1.8%	1.23%	12.2%	3.0%	3.0%	3.8%	3.8%	0.33%	24%	0.067%	76%	44.3%	199%	8.60%	301%
R233	591067.56	4806148.19	18.1%	58%	2.0%	54%	7.5%	52%	1.29%	89%	0.34%	0.34%	23%	30%	5.4%	17%	12.2%	15.0%	0.50%	1.8%	1.24%	12.3%	3.0%	3.0%	3.9%	3.9%	0.35%	24%	0.069%	76%	46.2%	201%	8.72%	301%
R234	591086.80	4806172.68	18.2%	58%	2.0%	54%	7.6%	52%	1.30%	89%	0.35%	0.35%	24%	31%	5.2%	17%	11.9%	14.7%	0.46%	1.8%	1.24%	12.3%	3.0%	3.0%	3.9%	3.9%	0.35%	24%	0.069%	76%	46.7%	202%	8.74%	301%
R235	591114.01	4806201.78	18.2%	58%	2.0%	54%	7.7%	52%	1.29%	89%	0.34%	0.34%	25%	32%	5.3%	17%	11.9%	14.7%	0.48%	1.8%	1.23%	12.2%	3.0%	3.0%	3.9%	3.9%	0.36%	24%	0.069%	76%	46.6%	202%	8.69%	301%
R236	591141.40	4806172.91	17.1%	57%	1.8%	53%	7.1%	52%	1.19%	89%	0.32%	0.32%	23%	30%	4.9%	17%	11.3%	14.1%	0.44%	1.7%	1.14%	12.2%	2.9%	2.9%	3.8%	3.8%	0.33%	24%	0.064%	76%	43.7%	199%	8.02%	301%
R237	591157.63	4806158.16	16.5%	57%	1.7%	53%	6.9%	51%	1.14%	89%	0.31%	0.31%	22%	29%	4.8%	17%	11.2%	14.0%	0.45%	1.7%	1.10%	12.1%	2.9%	2.9%	3.7%	3.7%	0.32%	24%	0.062%	76%	42.1%	197%	7.68%	300%
R238	591128.13	4806114.76	16.1%	56%	1.7%	53%	6.7%	51%	1.13%	89%	0.31%	0.31%	20%	27%	5.4%	17%	11.4%	14.2%	0.48%	1.8%	1.09%	12.1%	2.8%	2.8%	3.7%	3.7%	0.31%	24%	0.060%	76%	41.2%	196%	7.56%	300%
R239	591082.85	4806229.12	19.4%	60%	2.2%	54%	8.2%	53%	1.40%	89%	0.37%	0.37%	26%	33%	5.8%	18%	12.2%	15.1%	0.52%	1.8%	1.33%	12.3%	3.2%	3.2%	4.1%	4.1%	0.38%	24%	0.076%	76%	49.9%	205%	9.50%	302%
R240	591226.62	4806240.49	16.8%	57%	1.7%	53%	7.1%	52%	1.14%	89%	0.32%	0.32%	24%	31%	4.9%	17%	11.4%	14.3%	0.45%	1.7%	1.08%	12.1%	2.9%	2.9%	3.8%	3.8%	0.33%	24%	0.062%	76%	43.2%	198%	7.66%	300%
R241	591288.65	4806809.41	13.2%	53%	1.9%	54%	5.8%	50%	1.29%	89%	0.30%	0.30%	23%	30%	4.6%	16%	11.3%	14.2%	0.36%	1.6%	1.25%	12.3%	3.2%	3.2%	4.1%	4.1%	0.28%	24%	0.073%	76%	37.1%	192%	8.46%	301%
R242	591139.67	4806634.66	16.2%	56%	2.4%	54%	7.7%	52%	1.61%	90%	0.33%	0.33%	31%	38%	5.5%	17%	13.9%	16.7%	0.49%	1.8%	1.56%	12.6%	3.3%	3.3%	4.2%	4.2%	0.41%	24%	0.089%	76%	45.2%	200%	10.57%	303%
R243	591293.92	4806466.25	18.0%	58%	1.9%	54%	7.5%	52%	1.28%	89%	0.34%	0.34%	27%	34%	5.2%	17%	12.5%	15.3%	0.47%	1.8%	1.24%	12.2%	3.1%	3.1%	4.0%	4.0%	0.34%	24%	0.071%	76%	46.3%	201%	8.55%	301%
R244	589444.27	4806626.99	13.8%	54%	1.0%	53%	5.7%	50%	0.56%	88%	0.27%	0.27%	17%	24%	3.1%	15%	10.8%	13.6%	0.35%	1.6%	0.42%	11.4%	3.0%	3.0%	3.9%	3.9%	0.30%	24%	0.040%	76%	38.4%	193%	4.09%	297%
R245	589367.00	4806705.19	11.7%	52%	0.7%	52%	4.9%	50%	0.40%	88%	0.22%	0.22%	17%	24%	2.8%	15%	11.0%	13.8%	0.32%	1.6%	0.34%	11.3%	2.8%	2.8%	3.6%	3.6%	0.28%	24%	0.029%	76%	32.5%	187%	2.90%	295%
R246	588976.44	4806919.73	7.1%	47%	0.3%	52%	3.0%	48%	0.19%	88%	0.13%	0.13%	15%	23%	2.2%	14%	11.5%	14.4%	0.23%	1.5%	0.17%	11.2%	2.1%	2.1%	2.7%	2.7%	0.14%	24%	0.013%	76%	20.0%	175%	1.32%	294%
R247	588915.70	4806868.25	7.1%	47%	0.3%	52%	3.0%	48%	0.19%	88%	0.14%	0.14%	15%	22%	2.1%	14%	10.3%	13.1%	0.22%	1.5%	0.18%	11.2%	2.1%	2.1%	2.7%	2.7%	0.15%	24%	0.013%	76%	19.8%	175%	1.31%	294%
R248	588997.02	4807016.50	6.6%	47%	0.3%	52%	2.8%	47%	0.17%	88%	0.12%	0.12%	15%	22%	1.9%	14%	10.4%	13.3%	0.22%	1.5%	0.15%	11.2%	2.0%	2.0%	2.6%	2.6%	0.13%	24%	0.011%	76%	18.6%	174%	1.22%	294%
R249	591337.39	4806901.37	11.0%	51%	1.8%	53%	4.7%	49%	1.17%	89%	0.27%	0.27%	21%	28%	4.4%	16%	10.6%	13.4%	0.32%	1.6%	1.12%	12.1%	3.1%	3.1%	4.0%	4.0%	0.26%	24%	0.069%	76%	30.8%	186%	7.65%	300%
R250	591086.06	4807216.91	10.9%	51%	1.6%	53%	4.5%	49%	1.06%	89%	0.22%	0.22%	21%	28%	3.5%	15%	9.9%	12.7%	0.27%	1.6%	1.00%	12.0%	2.8%	2.8%	3.6%	3.6%	0.33%	24%	0.073%	76%	26.6%	182%	6.66%	299%

Percentages of Criteria at Sensitive Receptors (Scenario E)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			32.7%	72.8%	4.9%	56.5%	12.6%	57.2%	3.1%	91.0%	0.6%	0.6%	33.5%	40.7%	9.3%	21.0%	24.9%	27.7%	0.7%	2.0%	2.9%	13.9%	5.0%	5.0%	6.5%	6.5%	0.6%	24.5%	0.2%	76.2%	81.1%	236.1%	21.6%	314.1%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R251	590926.50	4807386.35	10.3%	50%	1.4%	53%	4.3%	49%	0.94%	89%	0.20%	0.20%	21%	28%	2.9%	15%	9.4%	12.3%	0.25%	1.5%	0.92%	11.9%	2.6%	2.6%	3.4%	3.4%	0.25%	24%	0.064%	76%	23.4%	178%	5.82%	298%
R252	590969.19	4806836.93	14.2%	54%	2.6%	54%	6.1%	51%	1.64%	90%	0.32%	0.32%	28%	35%	5.5%	17%	13.1%	16.0%	0.43%	1.7%	1.50%	12.5%	3.3%	3.3%	4.2%	4.2%	0.39%	24%	0.098%	76%	38.8%	194%	10.85%	303%
R253	590905.98	4807178.59	12.0%	52%	1.8%	53%	4.8%	49%	1.21%	89%	0.24%	0.24%	21%	28%	3.4%	15%	9.4%	12.2%	0.26%	1.5%	1.15%	12.2%	3.0%	3.0%	3.8%	3.8%	0.38%	24%	0.084%	76%	29.1%	184%	7.62%	300%
R254	590899.10	4807138.17	12.3%	52%	1.9%	54%	4.9%	50%	1.27%	89%	0.25%	0.25%	23%	31%	3.6%	15%	10.1%	13.0%	0.28%	1.6%	1.20%	12.2%	3.0%	3.0%	3.9%	3.9%	0.40%	24%	0.089%	76%	30.1%	185%	8.02%	301%
R255	590956.66	4807071.56	12.4%	53%	2.0%	54%	5.0%	50%	1.31%	89%	0.26%	0.26%	26%	33%	3.9%	16%	11.7%	14.6%	0.31%	1.6%	1.21%	12.2%	3.0%	3.0%	3.8%	3.8%	0.40%	24%	0.089%	76%	30.1%	185%	8.30%	301%
R256	590997.27	4807177.52	11.6%	52%	1.8%	53%	4.6%	49%	1.15%	89%	0.23%	0.23%	17%	24%	3.4%	15%	8.6%	11.5%	0.27%	1.6%	1.08%	12.1%	2.9%	2.9%	3.8%	3.8%	0.37%	24%	0.080%	76%	27.9%	183%	7.29%	300%
R257	590917.52	4807307.02	10.9%	51%	1.5%	53%	4.4%	49%	1.04%	89%	0.22%	0.22%	21%	28%	3.0%	15%	9.7%	12.5%	0.26%	1.5%	1.00%	12.0%	2.7%	2.7%	3.5%	3.5%	0.31%	24%	0.071%	76%	25.1%	180%	6.45%	299%
R258	590878.48	4807357.84	10.6%	51%	1.5%	53%	4.4%	49%	0.98%	89%	0.21%	0.21%	20%	27%	2.8%	15%	9.1%	11.9%	0.27%	1.6%	0.95%	12.0%	2.7%	2.7%	3.4%	3.4%	0.26%	24%	0.069%	76%	24.8%	180%	6.10%	299%
R259	590956.33	4807370.47	10.3%	50%	1.4%	53%	4.2%	49%	0.95%	89%	0.20%	0.20%	22%	29%	2.9%	15%	9.8%	12.7%	0.25%	1.5%	0.93%	11.9%	2.6%	2.6%	3.4%	3.4%	0.27%	24%	0.067%	76%	23.6%	179%	5.88%	298%
R260	591082.58	4807189.52	11.1%	51%	1.6%	53%	4.5%	49%	1.09%	89%	0.23%	0.23%	20%	27%	3.7%	15%	9.6%	12.5%	0.28%	1.6%	1.02%	12.0%	2.8%	2.8%	3.7%	3.7%	0.34%	24%	0.073%	76%	27.4%	182%	6.89%	299%
R261	591071.70	4806646.35	17.1%	57%	2.7%	54%	8.0%	53%	1.77%	90%	0.38%	0.38%	32%	39%	6.0%	18%	14.1%	16.9%	0.50%	1.8%	1.72%	12.7%	3.5%	3.5%	4.5%	4.5%	0.41%	24%	0.098%	76%	47.7%	203%	11.70%	304%
R262	591035.97	4806582.50	20.0%	60%	3.0%	55%	8.8%	53%	1.94%	90%	0.42%	0.42%	31%	39%	6.2%	18%	15.1%	18.0%	0.52%	1.8%	1.84%	12.9%	3.9%	3.9%	5.0%	5.0%	0.43%	24%	0.104%	76%	55.7%	211%	13.05%	306%
R263	591117.31	4806692.72	15.2%	55%	2.4%	54%	7.3%	52%	1.61%	90%	0.34%	0.34%	31%	39%	5.6%	17%	13.7%	16.5%	0.47%	1.8%	1.57%	12.6%	3.1%	3.1%	4.1%	4.1%	0.38%	24%	0.091%	76%	42.3%	197%	10.56%	303%
R264	591236.66	4806622.03	16.1%	56%	2.2%	54%	7.4%	52%	1.43%	89%	0.30%	0.30%	28%	35%	4.6%	16%	12.5%	15.4%	0.45%	1.7%	1.38%	12.4%	3.4%	3.4%	4.4%	4.4%	0.38%	24%	0.080%	76%	44.8%	200%	9.46%	302%
R265	591210.05	4806550.57	17.8%	58%	2.3%	54%	7.5%	52%	1.49%	89%	0.34%	0.34%	30%	37%	5.0%	17%	13.2%	16.1%	0.43%	1.7%	1.43%	12.4%	3.4%	3.4%	4.4%	4.4%	0.37%	24%	0.082%	76%	47.3%	202%	9.90%	302%
R266	591169.76	4806533.85	19.1%	59%	2.4%	54%	7.9%	52%	1.59%	90%	0.36%	0.36%	29%	37%	5.2%	17%	13.3%	16.2%	0.45%	1.7%	1.52%	12.5%	3.6%	3.6%	4.6%	4.6%	0.38%	24%	0.087%	76%	50.7%	206%	10.65%	303%
R267	591055.32	4806496.37	22.7%	63%	3.0%	55%	9.1%	54%	1.94%	90%	0.43%	0.43%	28%	35%	5.9%	18%	13.5%	16.4%	0.51%	1.8%	1.81%	12.8%	4.0%	4.0%	5.2%	5.2%	0.42%	24%	0.104%	76%	59.8%	215%	13.19%	306%
R268	590945.40	4806605.50	21.1%	61%	3.4%	55%	9.1%	54%	2.21%	90%	0.45%	0.45%	33%	40%	7.1%	19%	15.5%	18.4%	0.54%	1.8%	2.11%	13.1%	4.0%	4.0%	5.1%	5.1%	0.45%	24%	0.118%	76%	57.2%	212%	14.86%	307%
R269	591153.86	4805932.23	13.2%	53%	1.3%	53%	5.7%	50%	0.84%	89%	0.26%	0.26%	19%	26%	5.1%	17%	11.5%	14.3%	0.42%	1.7%	0.81%	11.8%	2.4%	2.4%	3.0%	3.0%	0.27%	24%	0.047%	76%	32.4%	187%	5.59%	298%
R270	591173.01	4806086.35	14.7%	55%	1.5%	53%	6.4%	51%	1.02%	89%	0.28%	0.28%	20%	27%	5.3%	17%	11.3%	14.1%	0.47%	1.8%	0.99%	12.0%	2.7%	2.7%	3.5%	3.5%	0.30%	24%	0.056%	76%	37.4%	192%	6.80%	299%
R271	590883.45	4806059.73	19.3%	59%	2.3%	54%	7.6%	52%	1.54%	89%	0.37%	0.37%	24%	32%	7.5%	19%	13.8%	16.6%	0.60%	1.9%	1.49%	12.5%	3.2%	3.2%	4.1%	4.1%	0.35%	24%	0.080%	76%	48.7%	204%	10.48%	303%
R272	591084.23	4806254.79	19.9%	60%	2.2%	54%	8.4%	53%	1.45%	89%	0.38%	0.38%	25%	32%	5.8%	18%	12.1%	14.9%	0.53%	1.8%	1.37%	12.4%	3.3%	3.3%	4.2%	4.2%	0.39%	24%	0.078%	76%	51.1%	206%	9.84%	302%
R273	591110.44	4806235.73	18.9%	59%	2.1%	54%	8.0%	53%	1.35%	89%	0.36%	0.36%	25%	32%	5.6%	17%	11.9%	14.8%	0.51%	1.8%	1.28%	12.3%	3.2%	3.2%	4.1%	4.1%	0.37%	24%	0.073%	76%	48.6%	204%	9.16%	302%
R274	591154.50	4806189.68	17.1%	57%	1.8%	53%	7.2%	52%	1.19%	89%	0.32%	0.32%	23%	30%	4.9%	17%	11.3%	14.1%	0.44%	1.7%	1.14%	12.2%	2.9%	2.9%	3.8%	3.8%	0.34%	24%	0.064%	76%	43.9%	199%	8.04%	301%
R275	591271.28	4806254.56	16.3%	56%	1.7%	53%	6.9%	52%	1.08%	89%	0.31%	0.31%	24%	31%	4.9%	17%	11.2%	14.1%	0.44%	1.7%	1.03%	12.0%	2.9%	2.9%	3.7%	3.7%	0.32%	24%	0.060%	76%	42.1%	197%	7.27%	300%
R276	591515.74	4806421.68	14.3%	54%	1.3%	53%	6.1%	51%	0.90%	89%	0.27%	0.27%	23%	30%	4.4%	16%	10.2%	13.1%	0.38%	1.7%	0.86%	11.9%	2.6%	2.6%	3.4%	3.4%	0.28%	24%	0.051%	76%	37.0%	192%	5.91%	298%
R277	591462.49	4806297.83	14.1%	54%	1.3%	53%	6.1%	51%	0.87%	89%	0.27%	0.27%	23%	30%	4.5%	16%	10.6%	13.5%	0.39%	1.7%	0.84%	11.8%	2.6%	2.6%	3.4%	3.4%	0.28%	24%	0.049%	76%	36.6%	192%	5.77%	298%
R278	591626.91	4806044.49	10.2%	50%	0.8%	52%	4.7%	49%	0.59%	89%	0.19%	0.19%	21%	28%	3.6%	15%	9.6%	12.4%	0.32%	1.6%	0.58%	11.6%	2.0%	2.0%	2.6%	2.6%	0.23%	24%	0.033%	76%	25.0%	180%	3.80%	296%
R279	591566.46	4805968.10	10.3%	50%	0.8%	52%	4.6%	49%	0.58%	89%	0.20%	0.20%	20%	27%	3.4%	15%	10.1%	13.0%	0.31%	1.6%	0.57%	11.6%	2.0%	2.0%	2.6%	2.6%	0.23%	24%	0.033%	76%	25.2%	180%	3.79%	296%
R280	591514.80	4806050.53	11.2%	51%	1.0%	53%	5.0%	50%	0.66%	89%	0.21%	0.21%	19%	26%	3.9%	16%	10.0%	12.9%	0.35%	1.6%	0.65%	11.7%	2.2%	2.2%	2.8%	2.8%	0.24%	24%	0.038%	76%	27.8%	183%	4.34%	297%
R281	591496.67	4806080.21	11.5%	52%	1.0%	53%	5.1%	50%	0.70%	89%	0.22%	0.22%	21%	28%	4.0%	16%	10.0%	12.9%	0.36%	1.6%	0.68%	11.7%	2.3%	2.3%	2.9%	2.9%	0.25%	24%	0.040%	76%	28.5%	183%	4.56%	297%
R282	591515.90	4805960.41	10.6%	51%	0.9%	52%	4.7%	49%	0.61%	89%	0.20%	0.20%	19%	26%	3.5%	15%	10.2%	13.1%	0.32%	1.6%	0.59%	11.6%	2.1%	2.1%	2.6%	2.6%	0.24%	24%	0.036%	76%	26.0%	181%	3.95%	296%
R283	591574.70	4805918.10	9.9%	50%	0.8%	52%	4.5%	49%	0.55%	88%	0.19%	0.19%	18%	26%	3.2%	15%	10.1%	12.9%	0.30%	1.6%	0.54%	11.5%	1.9%	1.9%	2.5%	2.5%	0.23%	24%	0.031%	76%	24.2%	179%	3.58%	296%
R284	591633.50	4805907.11	9.6%	50%	0.8%	52%	4.3%	49%	0.52%	88%	0.18%	0.18%	18%	25%	3.1%	15%	9.7%	12.6%	0.28%	1.6%	0.51%	11.5%	1.9%	1.9%	2.5%	2.5%	0.22%	24%	0.031%	76%	23.3%	178%	3.38%	296%
R285	591700.55	4805960.96	9.6%	50%	0.8%	52%	4.3%	49%	0.52%	88%	0.18%	0.18%	19%	26%	3.1%	15%	9.4%	12.2%	0.28%	1.6%	0.51%	11.5%	1.9%	1.9%	2.5%	2.5%	0.21%	24%	0.031%	76%	23.4%	178%	3.36%	296%
R286	591754.40	4805913.15	9.2%	49%	0.7%	52%	4.0%	49%	0.48%	88%	0.18%	0.18%	15%	22%	2.8%	15%	8.8%	11.6%	0.26%	1.6%	0.47%	11.5%	1.9%	1.9%	2.4%	2.4%	0.20%	24%	0.029%	76%	22.3%	177%	3.10%	296%
R287	591656.03	4806002.72	9.8%	50%	0.8%	52%	4.5%	49%	0.55%	88%	0.19%	0.19%	21%	29%	3.3%	15%	9.6%	12.5%	0.30%	1.6%	0.54%	11.6%	1.9%	1.9%	2.5%	2.5%	0.23%	24%	0.033%	76%	24.1%	179%	3.57%	296%
R288	591807.92	4805987.25	9.1%	49%	0.7%	52%	4.0%	49%	0.49%	88%	0.17%	0.17%	17%	24%	2.9%	15%	8.6%	11.5%	0.27%	1.6%	0.48%	11.5%	1.9%	1.9%	2.5%	2.5%	0.20%	24%	0.029%	76%	22.3%	177%	3.16%	296%
R289	592160.67	4804305.92	3.7%	44%	0.2%	52%	1.8%	46%	0.14%	88%	0.07%	0.07%	11%	19%	1.4%	13%	5.9%	8.8%	0.14%	1.4%	0.14%	11.2%	1.1%	1.1%	1.4%	1.4%	0.09%	24%	0.009%	76%	10.2%	165%	0.81%	293%
R290	591994.34	4804188.62	3.7%	44%	0.2%	52%	1.7%	46%	0.13%	88%	0.07%	0.07%	13%	20%	1.4%	13%	6.9%	9.8%	0.14%	1.4%	0.14%	11.1%	1.2%	1.2%	1.5%	1.5%	0.09%	24%	0.009%	76%	10.1%	165%	0.80%	293%
R291	591920.81	4804129.09	3.5%	44%	0.2%	52%	1.7%	46%	0.13%	88%	0.06%	0.06%	14%	21%	1.3%	13%	7.2%	10.0%	0.13%	1.4%	0.13%	11.1%	1.2%	1.2%	1.5%	1.5%	0.09%	24%	0.009%	76%	9.6%	165%	0.78%	293%
R292	591854.27	4804059.05	3.5%	44%	0.2%	52%	1.6%	46%	0.13%	88%	0.06%	0.06%	13%	20%	1.1%	13%	6.8%	9.7%	0.11%	1.4%	0.13%	11.1%	1.2%	1.2%	1.5%	1.5%	0.09%	24%	0.009%	76%	9.3%	164%	0.77%	293%
R293	591767.05	4803967.41	3.5%	44%	0.2%	52%	1.4%	46%	0.12%	88%	0.06%	0.06%	12%	19%	1.4%	13%	5.8%	8.7%	0.12%	1.4%	0.13%	11.1%	1.2%	1.2%	1.5%	1.5%	0.08%	24%	0.009%	76%	9.3%	164%	0.76%	293%
R294	591339.02	4803835.11	3.3%	43%	0.2%	52%	1.4%	46%	0.12%	88%	0.06%	0.06%	12%	19%	1.2%	13%	5.6%	8.5%	0.11%	1.4%	0.12%	11.1%	1.3%	1.3%	1.6%	1.6%	0.07%	24%	0.009%	76%	8.9%	164%	0.77%	293%
R295	590844.25	4803738.73	2.9%	43%	0.2%	52%	1.4%	46%	0.11%	88%	0.06%	0.06%	11%	19%	1.0%	13%	5.3%	8.1%	0.10%	1.4%	0.11%	11.1%	1.5%	1.5%	1.9%	1.9%	0.07%	24%	0.007%	76%	8.2%	163%	0.73%	293%
R296	590246.67	4803815.84	3.9%	44%	0.2%	52%	1.6%	46%	0.12%	88%	0.10%	0.10%	11%	18%	1.9%	14%	5.4%	8.3%	0.13%	1.4%	0.12%	11.1%	1.9%	1.9%	2.5%	2.5%	0.09%	24%	0.007%	76%	9.1%	164%	0.77%	293%
R297	589925.40	4804008.60	5.2%	45%	0.2%	52%	1.6%	46%	0.14%	88%	0.13%	0.13%	11%	19%	1.6%	13%	5.7%	8.5%	0.12%	1.4%	0.14%	11.1%	2.1%	2.1%	2.7%	2.7%	0.10%	24%	0.009%	76%	9.9%	165%	0.92%	293%
R298	590548.68	4803764.43	2.9%	43%	0.2%	52%	1.3%	46%	0.11%	88%	0.07%	0.07%	12%	19%	1.7%	13%	5.6%	8.4%	0.11%	1.4%	0.11%	11.1%	1.7%	1.7%	2.2%	2.2%	0.07%	24%	0.007%	76%	8.2%	163%	0.74%	293%
R299	591101.27	4803770.86	2.8%	43%	0.2%	52%	1.4%	46%	0.11%	88%	0.05%	0.05%	12%	19%	1.4%	13%	5.5%	8.4%	0.12%	1.4%	0.11%	11.1%	1.4%	1.4%	1.8%	1.8%	0.07%	24%	0.007%	76%	7.8%	163%	0.74%	293%
R300	591551.06	4803860.81	3.4%	44%	0.2%	52%	1.4%	46%	0.12%	88%	0.06%	0.06%	12%	19%	1.2%	13%	5.6%	8.4%	0.11%	1.4%	0.12%	11.1%	1.2%	1.2%	1.6%	1.6%	0.07%	24%	0.009%	76%	9.0%	164%	0.76%	293%
R301	586572.95	4805620.11	2.2%	42%	0.1%	52%	1.1%	46%	0.08%	88%	0.04%	0.04%	10%	17%	0.8%	13%	5.1%	7.9%	0.07%	1.4%	0.07%	11.1%	1.3%	1.3%	1.7%	1.7%	0.07%	24%	0.007%	76%	6.3%	161%	0.44%	293%
R302	588597.17	4808143.62	3.0%	43%	0.1%	52%	1.3%	46%	0.07%	88%	0.06%	0.06%	10%	18%	1.0%	13%	5.6%	8.4%	0.10%	1.4%	0.07%	11.1%	1.2%	1.2%	1.5%	1.5%	0.08%	24%	0.004%	76%	7.2%	162%	0.45%	293%
R303	588982.92	4808143.62	4.1%	44%	0.1%	52%	1.9%	46%	0.09%	88%	0.08%	0.08%	11%	18%	1.3%	13%	5.9%	8.8%	0.13%	1.4%	0.09%	11.1%	1.4%	1.4%	1.8%	1.8%	0.10%	24%	0.007%	76%	10.1%	165%	0.56%	293%
R304	589386.61	4808125.68	4.7%	45%	0.2%	52%	2.2%	47%	0.12%	88%	0.11%	0.11%	13%	20%	1.8%	14%	6.3%	9.2%	0.18%	1.5%	0.12%	11.1%	1.6%	1.6%	2.1%	2.1%	0.13%	24%	0.009%	76%	11.9%	167%	0.79%	293%
R305	589772.36	4808125.68	4.9%	45%	0.3%	52%	2.1%	47%	0.17%	88%	0.12%	0.12%	13%	20%	1.6%	13%	5.7%	8.6%	0.14%	1.4%	0.17%	11.2%	1.8%	1.8%	2.3%	2.3%	0.13%	24%	0.013%	76%	12.8%	168%	1.10%	294%
R306	590143.84	4808204.91	6.8%	47%	0.4%	52%	2.9%	48%	0.24%	88%	0.12%	0.12%	13%	20%	1.7%	14%	6.5%	9.4%	0.19%	1.5%	0.22%	11.2%	2.1%	2.1%	2.6%	2.6%	0.17%	24%	0.018%	76%	16.7%	172%	1.54%	294%
R307	590552.82	4808089.80	6.6%	47%	0.6%	52%	3.0%	48%	0.41%	88%	0.12%	0.12%	17%	24%	2.3%	14%	7.7%	10.5%	0.20%	1.5%	0.36%	11.4%	2.2%	2.2%	2.9%	2.9%	0.20%	24%	0.031%	76%	17.8%	173%	2.50%	295%
R308	590893.72	4808098.77	6.3%	46%	0.6%	52%	3.3%	48%	0.44%	88%	0.12%	0.12%	22%	29%	2.1%	14%	8.1%	11.0%	0.21%	1.5%	0.41%	11.4%	1.9%	1.9%	2.5%	2.5%	0.22%	24%	0.033%	76%	17.2%	172%	2.67%	295%
R309	591315.35	4808107.74	6.2%	46%	0.6%	52%	2.9%	47%	0.46%	88%	0.11%	0.11%	21%	28%	2.5%	14%	8.7%	11.6%	0.20%	1.5%	0.46%	11.5%	1.8%	1.8%	2.4%	2.4%	0.17%	24%	0.033%	76%	16.9%	172%	2.69%	295%
R310	588292.16	4808027.00	2.4%	43%	0.1%	52%	1.0%	46%	0.07%	88%	0.04%	0.04%	10%	17%	0.7%	12%	5.5%	8.4%	0.06%	1.3%	0.07%	11.1%	1.1%	1.1%	1.5%	1.5%	0.07%	24%	0.004%	76%	6.8%	162%	0.43%	293%
R311	587448.90	4807829.64	1.8%	42%	0.1%	52%	0.9%	46%	0.04%	88%	0.03%	0.03%	9%	16%	0.9%	13%	4.8%	7.6%	0.09%	1.4%	0.05%	11.1%	0.9%	0.9%	1.1%	1.1%	0.05%	24%	0.002%	76%	5.3%	160%	0.27%	293%
R312	587054.18	4807578.46	2.4%	43%	0.1%	52%	1.2%	46%	0.05%	88%	0.04%	0.04%	9%	16%	1.0%	13%	4.6%	7.5%	0.09%	1.4%	0.05%	11.1%	1.0%	1.0%	1.2%	1.2%	0.06%	24%	0.002%	76%	6.7%	162%	0.30%	293%
R313	586874.76	4807085.06	2.3%	42%	0.1%	52%	1.2%	46%	0.06%	88%	0.04%	0.04%	9%	16%	0.9%	13%	4.1%	7.0%	0.08%	1.4%	0.07%	11.1%	1.1%	1.1%	1.4%	1.4%	0.07%	24%	0.004%	76%	6.3%	161%	0.38%	293%
R314	588417.75	4803810.68	2.9%	43%	0.3%	52%	1.4%	46%	0.19%	88%	0.07%	0.07%	11%	18%	1.1%	13%	5.0%	7.9%	0.09%	1.4%	0.19%	11.2%	1.6%	1.6%	2.1%	2.1%	0.10%	24%	0.013%	76%	8.2%	163%	1.11%	294%
R315	589027.77	4803801.71	3.4%	43%	0.2%	52%	1.6%	46%	0.17%	88%	0.08%	0.08%	12%	19%	1.5%	13%	5.6%	8.4%	0.12%	1.4%	0.18%	11.2%	1.7%	1.7%	2.2%	2.2%	0.10%	24%	0.009%	76%	9.3%	164%	1.03%	294%
R316	589467.35	4803774.80	3.9%	44%	0.2%	52%	1.7%	46%	0.13%	88%	0.07%	0.07%	10%	17%	1.2%	13%	4.9%	7.8%	0.11%	1.4%	0.14%	11.2%	1.7%	1.7%	2.2%	2.2%	0.10%	24%	0.007%	76%	11.0%	166%	0.81%	293%
R317	587852.59	4804052.90	3.0%	43%	0.2%	52%	1.5%	46%	0.18%	88%	0.06%	0.06%	11%	18%	1.3%	13%	5.1%	7.9%	0.11%	1.4%	0.17%	11.2%	1.4%	1.4%	1.8%	1.8%	0.12%	24%	0.013%	76%	8.0%	163%	0.97%	293%
R318	591979.19	4808062.88	4.6%	45%	0.5%	52%	2.1%	47%	0.37%	88%	0.09%	0.09%	10%	17%	1.7%	14%	4.5%	7.4%	0.15%	1.4%	0.40%	11.4%	1.4%	1.4%	1.8%	1.8%	0.12%	24%	0.024%	76%	10.9%	166%	2.23%	295%
R319	592965.99	4804689.83	2.0%	42%	0.2%	52%	1.1%	46%	0.12%	88%	0.04%	0.04%	9%	16%	1.1%	13%	4.7%	7.5%	0.09%	1.4%	0.13%	11.1%	0.8%	0.8%	1.1%	1.1%	0.06%	24%	0.009%	76%	4.7%	160%	0.70%	293%
R320	592903.19	4804447.62	1.9%	42%	0.1%	52%	1.0%	46%	0.11%	88%	0.03%	0.03%	9%	16%	0.9%	13%	4.7%	7.5%	0.07%	1.4%	0.11%	11.1%	0.8%	0.8%	1.0%	1.0%	0.06%	24%	0.007%	76%	4.6%	160%	0.63%	293%
R321	589917.34	4807771.52	7.3%	47%	0.5%	52%	3.0%	48%	0.28%	88%	0.15%	0.15%	16%	23%	1.8%	14%	8.2%	11.1%	0.18%	1.5%	0.24%	11.2%	2.3%	2.3%	2.9%	2.9%	0.20%	24%	0.020%	76%	18.7%	174%	1.85%	294%
R322	589928.61	4808104.27	5.7%	46%	0.3%	52%	2.4%	47%	0.21%	88%	0.11%	0.11%	12%	19%	1.8%	14%	5.7%	8.6%	0.16%	1.4%	0.19%	11.2%	2.0%	2.0%	2.5%	2.5%	0.14%	24%	0.016%	76%	14.7%	170%	1.32%	294%
R323	590196.67	4807870.35	8.3%	48%	0.6%	52%	3.6%	48%	0.38%	88%	0.15%	0.15%	14%	21%	2.1%	14%	8.4%	11.2%	0.23%	1.5%	0.34%	11.4%	2.7%	2.7%	3.5%	3.5%	0.21%	24%	0.029%	76%	21.9%	177%	2.41%	295%

Percentages of Criteria at Sensitive Receptors (Scenario A)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			45.2%	85.3%	8.4%	60.0%	15.2%	59.8%	4.0%	92.0%	0.8%	0.8%	56.9%	64.1%	10.7%	22.5%	27.4%	30.3%	0.9%	2.2%	3.6%	14.6%	33.4%	33.4%	63.9%	63.9%	0.9%	24.7%	0.3%	76.3%	90.3%	245.3%	27.1%	319.6%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R1	590428.52	4805587.50	24.0%	64%	3.8%	55%	8.2%	53%	1.71%	90%	0.36%	0.36%	57%	64%	8.0%	20%	27.1%	29.9%	0.59%	1.9%	1.32%	12.3%	33.4%	33.4%	43.0%	43.0%	0.44%	24%	0.131%	76%	44.2%	199%	10.59%	303%
R2	590715.91	4805728.09	36.0%	76%	7.6%	59%	10.1%	55%	3.26%	91%	0.47%	0.47%	29%	37%	9.2%	21%	14.1%	17.0%	0.65%	1.9%	2.31%	13.3%	16.4%	16.4%	37.7%	37.7%	0.59%	24%	0.253%	76%	40.9%	196%	14.52%	307%
R3	590357.58	4805478.22	30.2%	70%	3.9%	56%	8.3%	53%	1.74%	90%	0.46%	0.46%	47%	54%	6.8%	19%	22.5%	25.3%	0.53%	1.8%	1.24%	12.2%	27.7%	27.7%	63.9%	63.9%	0.49%	24%	0.136%	76%	42.9%	198%	9.68%	302%
R4	590307.77	4805411.02	29.1%	69%	4.0%	56%	8.9%	53%	1.73%	90%	0.40%	0.40%	35%	43%	7.3%	19%	16.9%	19.7%	0.56%	1.8%	1.19%	12.2%	20.8%	20.8%	48.0%	48.0%	0.52%	24%	0.138%	76%	42.9%	198%	9.18%	302%
R5	590307.86	4805232.30	23.0%	63%	3.6%	55%	6.2%	51%	1.49%	89%	0.35%	0.35%	19%	26%	6.0%	18%	12.9%	15.7%	0.46%	1.7%	1.00%	12.0%	9.8%	9.8%	22.5%	22.5%	0.36%	24%	0.120%	76%	36.8%	192%	7.20%	300%
R6	590268.71	4805171.18	20.0%	60%	3.1%	55%	5.7%	50%	1.31%	89%	0.31%	0.31%	18%	26%	6.0%	18%	12.9%	15.7%	0.46%	1.7%	0.89%	11.9%	8.1%	8.1%	18.8%	18.8%	0.32%	24%	0.104%	76%	34.6%	190%	6.47%	299%
R7	590101.81	4805169.13	18.3%	58%	2.6%	54%	6.1%	51%	1.15%	89%	0.38%	0.38%	18%	25%	4.8%	17%	14.9%	17.7%	0.41%	1.7%	0.84%	11.8%	7.0%	7.0%	16.2%	16.2%	0.34%	24%	0.091%	76%	37.7%	193%	6.50%	299%
R8	590039.80	4805108.86	17.3%	57%	2.4%	54%	5.6%	50%	1.04%	89%	0.39%	0.39%	18%	25%	4.4%	16%	15.3%	18.2%	0.39%	1.7%	0.78%	11.8%	6.2%	6.2%	14.3%	14.3%	0.32%	24%	0.082%	76%	31.8%	187%	5.99%	298%
R9	590051.99	4805042.66	17.0%	57%	2.2%	54%	5.4%	50%	0.96%	89%	0.36%	0.36%	17%	24%	4.2%	16%	14.4%	17.2%	0.36%	1.6%	0.71%	11.7%	5.7%	5.7%	13.1%	13.1%	0.31%	24%	0.076%	76%	30.2%	185%	5.32%	298%
R10	589949.68	4804950.27	14.4%	55%	1.8%	53%	4.6%	49%	0.80%	89%	0.33%	0.33%	18%	25%	3.7%	15%	13.9%	16.8%	0.34%	1.6%	0.63%	11.6%	4.9%	4.9%	11.3%	11.3%	0.27%	24%	0.062%	76%	25.4%	180%	4.45%	297%
R12	589649.06	4804788.02	9.9%	50%	1.3%	53%	3.6%	48%	0.63%	89%	0.21%	0.21%	18%	26%	3.7%	16%	10.6%	13.4%	0.31%	1.6%	0.57%	11.6%	4.0%	4.0%	9.1%	9.1%	0.21%	24%	0.044%	76%	18.7%	174%	3.57%	296%
R13	589565.47	4804836.84	10.3%	50%	1.3%	53%	3.6%	48%	0.66%	89%	0.22%	0.22%	18%	25%	3.5%	15%	11.0%	13.8%	0.30%	1.6%	0.63%	11.6%	3.8%	3.8%	8.8%	8.8%	0.20%	24%	0.044%	76%	19.6%	175%	3.85%	296%
R14	589552.40	4804850.98	10.3%	50%	1.3%	53%	3.7%	48%	0.67%	89%	0.22%	0.22%	18%	25%	3.4%	15%	11.0%	13.8%	0.29%	1.6%	0.64%	11.6%	3.8%	3.8%	8.9%	8.9%	0.20%	24%	0.047%	76%	19.8%	175%	3.92%	296%
R15	589487.71	4804854.82	10.1%	50%	1.3%	53%	3.6%	48%	0.67%	89%	0.22%	0.22%	18%	25%	3.0%	15%	11.2%	14.0%	0.27%	1.6%	0.65%	11.7%	3.8%	3.8%	8.7%	8.7%	0.19%	24%	0.044%	76%	19.5%	174%	3.94%	296%
R16	589391.42	4804818.71	9.6%	50%	1.2%	53%	3.4%	48%	0.64%	89%	0.21%	0.21%	18%	25%	2.6%	14%	10.7%	13.6%	0.24%	1.5%	0.62%	11.6%	3.6%	3.6%	8.3%	8.3%	0.19%	24%	0.042%	76%	18.4%	173%	3.74%	296%
R17	589341.30	4804854.89	9.6%	50%	1.2%	53%	3.4%	48%	0.65%	89%	0.21%	0.21%	18%	25%	2.6%	14%	10.2%	13.1%	0.24%	1.5%	0.63%	11.6%	3.6%	3.6%	8.4%	8.4%	0.19%	24%	0.044%	76%	18.4%	173%	3.85%	296%
R18	589237.00	4804804.05	9.1%	49%	1.1%	53%	3.2%	48%	0.60%	89%	0.20%	0.20%	18%	26%	2.5%	14%	9.6%	12.4%	0.23%	1.5%	0.59%	11.6%	3.4%	3.4%	7.9%	7.9%	0.19%	24%	0.042%	76%	17.3%	172%	3.57%	296%
R19	589214.42	4804827.86	9.1%	49%	1.2%	53%	3.2%	48%	0.61%	89%	0.19%	0.19%	18%	26%	2.6%	14%	9.4%	12.2%	0.24%	1.5%	0.60%	11.6%	3.5%	3.5%	8.0%	8.0%	0.19%	24%	0.042%	76%	17.3%	172%	3.62%	296%
R20	589161.88	4804859.47	9.0%	49%	1.2%	53%	3.2%	48%	0.62%	89%	0.19%	0.19%	18%	25%	2.7%	14%	9.5%	12.3%	0.25%	1.5%	0.60%	11.6%	3.5%	3.5%	8.0%	8.0%	0.19%	24%	0.042%	76%	17.1%	172%	3.65%	296%
R21	589148.36	4804897.75	9.0%	49%	1.2%	53%	3.2%	48%	0.63%	89%	0.19%	0.19%	18%	25%	2.9%	15%	9.6%	12.5%	0.27%	1.6%	0.62%	11.6%	3.5%	3.5%	8.2%	8.2%	0.19%	24%	0.044%	76%	17.1%	172%	3.75%	296%
R22	589087.10	4804971.33	8.8%	49%	1.2%	53%	3.4%	48%	0.65%	89%	0.19%	0.19%	18%	25%	3.3%	15%	10.0%	12.8%	0.29%	1.6%	0.63%	11.6%	3.6%	3.6%	8.4%	8.4%	0.20%	24%	0.047%	76%	17.0%	172%	3.88%	296%
R23	589148.96	4805035.30	9.3%	49%	1.3%	53%	3.6%	48%	0.70%	89%	0.21%	0.21%	18%	25%	3.5%	15%	10.3%	13.1%	0.31%	1.6%	0.68%	11.7%	3.9%	3.9%	9.0%	9.0%	0.21%	24%	0.049%	76%	18.1%	173%	4.21%	297%
R24	589128.67	4805086.01	9.7%	50%	1.4%	53%	3.8%	48%	0.72%	89%	0.21%	0.21%	18%	25%	3.8%	16%	10.7%	13.6%	0.32%	1.6%	0.69%	11.7%	3.9%	3.9%	8.9%	8.9%	0.22%	24%	0.051%	76%	19.4%	174%	4.35%	297%
R25	589105.01	4805060.41	9.5%	50%	1.3%	53%	3.7%	48%	0.70%	89%	0.20%	0.20%	18%	25%	3.7%	15%	10.5%	13.4%	0.31%	1.6%	0.68%	11.7%	3.8%	3.8%	8.8%	8.8%	0.22%	24%	0.051%	76%	18.7%	174%	4.20%	297%
R26	589133.34	4805172.65	10.4%	51%	1.5%	53%	4.0%	49%	0.77%	89%	0.22%	0.22%	18%	25%	4.1%	16%	11.3%	14.2%	0.35%	1.6%	0.73%	11.7%	4.2%	4.2%	9.7%	9.7%	0.24%	24%	0.056%	76%	22.5%	178%	4.68%	297%
R27	588993.00	4805046.07	9.2%	49%	1.2%	53%	3.6%	48%	0.66%	89%	0.17%	0.17%	18%	25%	3.7%	15%	10.0%	12.9%	0.31%	1.6%	0.63%	11.6%	3.6%	3.6%	8.4%	8.4%	0.22%	24%	0.049%	76%	19.0%	174%	3.90%	296%
R28	588933.88	4805108.89	9.8%	50%	1.2%	53%	3.7%	48%	0.66%	89%	0.18%	0.18%	18%	26%	3.8%	16%	9.7%	12.6%	0.33%	1.6%	0.63%	11.6%	3.5%	3.5%	8.1%	8.1%	0.22%	24%	0.049%	76%	20.9%	176%	3.89%	296%
R29	589053.75	4804987.00	8.9%	49%	1.2%	53%	3.5%	48%	0.65%	89%	0.18%	0.18%	18%	25%	3.5%	15%	10.0%	12.9%	0.29%	1.6%	0.63%	11.6%	3.7%	3.7%	8.4%	8.4%	0.21%	24%	0.047%	76%	17.3%	172%	3.86%	296%
R30	589022.84	4805021.77	9.1%	49%	1.2%	53%	3.6%	48%	0.66%	89%	0.18%	0.18%	18%	25%	3.6%	15%	10.1%	13.0%	0.30%	1.6%	0.63%	11.6%	3.7%	3.7%	8.5%	8.5%	0.21%	24%	0.049%	76%	18.1%	173%	3.90%	296%
R31	588909.44	4805151.99	10.4%	51%	1.2%	53%	3.9%	49%	0.66%	89%	0.20%	0.20%	18%	25%	3.8%	16%	9.7%	12.5%	0.34%	1.6%	0.62%	11.6%	3.8%	3.8%	8.7%	8.7%	0.21%	24%	0.051%	76%	22.2%	177%	3.91%	296%
R32	588882.16	4805178.52	10.8%	51%	1.2%	53%	4.0%	49%	0.66%	89%	0.20%	0.20%	18%	25%	3.7%	15%	9.6%	12.5%	0.34%	1.6%	0.61%	11.6%	3.8%	3.8%	8.7%	8.7%	0.23%	24%	0.051%	76%	22.8%	178%	3.87%	296%
R33	588837.60	4805190.59	10.9%	51%	1.2%	53%	4.0%	49%	0.64%	89%	0.21%	0.21%	18%	25%	3.6%	15%	9.5%	12.4%	0.34%	1.6%	0.60%	11.6%	3.7%	3.7%	8.6%	8.6%	0.24%	24%	0.051%	76%	23.1%	178%	3.73%	296%
R34	588906.04	4805227.93	11.4%	52%	1.3%	53%	4.2%	49%	0.68%	89%	0.22%	0.22%	18%	25%	3.8%	16%	9.6%	12.5%	0.36%	1.6%	0.63%	11.6%	3.9%	3.9%	8.9%	8.9%	0.24%	24%	0.053%	76%	24.2%	179%	4.05%	297%
R35	588863.99	4805271.68	11.8%	52%	1.3%	53%	4.3%	49%	0.67%	89%	0.22%	0.22%	18%	25%	3.6%	15%	9.4%	12.3%	0.36%	1.6%	0.62%	11.6%	4.0%	4.0%	9.2%	9.2%	0.26%	24%	0.053%	76%	25.2%	180%	3.96%	296%
R36	588774.77	4805264.86	11.5%	52%	1.2%	53%	4.2%	49%	0.62%	89%	0.22%	0.22%	17%	25%	3.4%	15%	9.2%	12.1%	0.34%	1.6%	0.57%	11.6%	3.8%	3.8%	8.7%	8.7%	0.26%	24%	0.051%	76%	24.3%	179%	3.60%	296%
R37	588767.37	4805274.62	11.5%	52%	1.1%	53%	4.2%	49%	0.62%	89%	0.22%	0.22%	17%	25%	3.4%	15%	9.1%	12.0%	0.34%	1.6%	0.57%	11.6%	3.8%	3.8%	8.7%	8.7%	0.26%	24%	0.051%	76%	24.4%	179%	3.58%	296%
R38	588739.80	4805301.49	11.5%	52%	1.1%	53%	4.3%	49%	0.60%	89%	0.22%	0.22%	17%	24%	3.2%	15%	9.0%	11.8%	0.34%	1.6%	0.55%	11.6%	3.7%	3.7%	8.5%	8.5%	0.27%	24%	0.049%	76%	24.5%	179%	3.50%	296%
R39	588701.19	4805324.41	11.3%	51%	1.1%	53%	4.3%	49%	0.58%	89%	0.21%	0.21%	17%	25%	3.0%	15%	8.8%	11.7%	0.33%	1.6%	0.53%	11.5%	3.5%	3.5%	8.1%	8.1%	0.27%	24%	0.049%	76%	24.2%	179%	3.37%	296%
R40	588676.08	4805360.64	11.3%	51%	1.1%	53%	4.3%	49%	0.58%	89%	0.21%	0.21%	18%	25%	2.9%	15%	8.8%	11.6%	0.32%	1.6%	0.52%	11.5%	3.5%	3.5%	8.1%	8.1%	0.28%	24%	0.049%	76%	24.5%	180%	3.30%	296%
R41	588628.93	4805409.57	11.1%	51%	1.0%	53%	4.2%	49%	0.55%	88%	0.20%	0.20%	17%	24%	2.7%	15%	8.7%	11.6%	0.33%	1.6%	0.50%	11.5%	3.7%	3.7%	8.4%	8.4%	0.28%	24%	0.047%	76%	24.6%	180%	3.14%	296%
R42	588586.22	4805444.06	11.0%	51%	1.0%	53%	4.2%	49%	0.53%	88%	0.20%	0.20%	17%	24%	2.8%	15%	8.5%	11.4%	0.33%	1.6%	0.47%	11.5%	3.6%	3.6%	8.2%	8.2%	0.27%	24%	0.047%	76%	24.5%	179%	3.00%	295%
R43	588557.06	4805464.32	10.9%	51%	0.9%	53%	4.2%	49%	0.51%	88%	0.20%	0.20%	17%	24%	2.8%	15%	8.4%	11.2%	0.32%	1.6%	0.46%	11.5%	3.4%	3.4%	7.9%	7.9%	0.27%	24%	0.044%	76%	24.2%	179%	2.91%	295%
R44	588670.10	4805576.40	12.7%	53%	1.1%	53%	4.8%	49%	0.58%	89%	0.23%	0.23%	18%	25%	3.1%	15%	9.7%	12.6%	0.35%	1.6%	0.51%	11.5%	4.0%	4.0%	9.2%	9.2%	0.30%	24%	0.051%	76%	27.4%	182%	3.38%	296%
R45	588670.28	4805615.19	12.7%	53%	1.1%	53%	4.8%	49%	0.58%	89%	0.23%	0.23%	18%	25%	3.1%	15%	9.9%	12.8%	0.35%	1.6%	0.50%	11.5%	4.0%	4.0%	9.3%	9.3%	0.30%	24%	0.051%	76%	27.4%	182%	3.39%	296%
R46	589003.59	4805937.72	24.6%	65%	1.9%	53%	8.7%	53%	0.94%	89%	0.41%	0.41%	25%	32%	4.0%	16%	15.7%	18.6%	0.55%	1.8%	0.75%	11.8%	7.4%	7.4%	17.0%	17.0%	0.49%	24%	0.084%	76%	52.1%	207%	5.97%	298%
R47	589041.99	4805974.72	25.9%	66%	2.0%	54%	9.1%	54%	0.99%	89%	0.43%	0.43%	25%	32%	4.1%	16%	16.4%	19.3%	0.58%	1.9%	0.78%	11.8%	6.8%	6.8%	15.6%	15.6%	0.51%	24%	0.091%	76%	55.2%	210%	6.37%	299%
R48	589293.19	4806505.50	18.2%	58%	1.4%	53%	6.3%	51%	0.68%	89%	0.31%	0.31%	24%	31%	3.9%	16%	13.7%	16.6%	0.48%	1.8%	0.59%	11.6%	8.6%	8.6%	19.9%	19.9%	0.36%	24%	0.058%	76%	38.4%	193%	4.65%	297%
R49	589219.60	4806515.59	17.9%	58%	1.2%	53%	6.2%	51%	0.58%	89%	0.29%	0.29%	23%	30%	3.8%	16%	13.3%	16.2%	0.46%	1.7%	0.50%	11.5%	8.4%	8.4%	19.4%	19.4%	0.36%	24%	0.049%	76%	36.6%	192%	3.92%	296%
R50	589338.17	4806485.88	19.2%	59%	1.7%	53%	7.0%	52%	0.79%	89%	0.34%	0.34%	25%	32%	4.0%	16%	14.2%	17.1%	0.54%	1.8%	0.68%	11.7%	8.9%	8.9%	20.5%	20.5%	0.41%	24%	0.069%	76%	41.4%	196%	5.41%	298%
R51	589518.84	4806584.75	21.6%	62%	2.4%	54%	7.8%	52%	1.11%	89%	0.42%	0.42%	29%	36%	3.8%	16%	16.0%	18.8%	0.54%	1.8%	0.90%	11.9%	9.5%	9.5%	22.0%	22.0%	0.45%	24%	0.093%	76%	48.3%	203%	7.83%	300%
R52	589557.86	4806649.65	21.3%	61%	2.3%	54%	7.7%	52%	1.06%	89%	0.42%	0.42%	29%	36%	3.3%	15%	16.4%	19.2%	0.53%	1.8%	0.85%	11.9%	7.2%	7.2%	16.6%	16.6%	0.46%	24%	0.091%	76%	47.6%	203%	7.55%	300%
R53	589474.48	4806602.41	19.3%	59%	2.0%	54%	7.0%	52%	0.90%	89%	0.38%	0.38%	27%	35%	3.6%	15%	15.2%	18.0%	0.50%	1.8%	0.74%	11.7%	9.2%	9.2%	21.1%	21.1%	0.39%	24%	0.078%	76%	43.4%	198%	6.34%	299%
R54	589897.77	4807374.19	16.6%	57%	1.3%	53%	5.6%	50%	0.64%	89%	0.33%	0.33%	23%	30%	3.7%	15%	14.4%	17.2%	0.39%	1.7%	0.56%	11.6%	4.5%	4.5%	10.3%	10.3%	0.34%	24%	0.056%	76%	30.2%	185%	4.22%	297%
R55	590214.06	4807506.19	15.8%	56%	1.7%	53%	6.0%	51%	0.87%	89%	0.27%	0.27%	20%	27%	3.5%	15%	15.1%	17.9%	0.45%	1.7%	0.81%	11.8%	4.0%	4.0%	9.3%	9.3%	0.34%	24%	0.076%	76%	33.1%	188%	5.44%	298%
R56	590337.28	4807588.62	14.1%	54%	1.6%	53%	5.3%	50%	0.84%	89%	0.24%	0.24%	19%	26%	3.6%	15%	13.7%	16.6%	0.39%	1.7%	0.79%	11.8%	3.2%	3.2%	7.3%	7.3%	0.34%	24%	0.073%	76%	29.2%	184%	5.23%	298%
R57	590735.46	4807580.37	12.9%	53%	1.9%	53%	4.9%	49%	0.99%	89%	0.21%	0.21%	18%	25%	3.1%	15%	10.9%	13.8%	0.37%	1.7%	0.97%	12.0%	3.6%	3.6%	8.3%	8.3%	0.35%	24%	0.080%	76%	27.1%	182%	6.12%	299%
R58	590836.21	4807430.87	13.3%	53%	2.2%	54%	4.9%	49%	1.19%	89%	0.25%	0.25%	19%	26%	3.1%	15%	12.4%	15.2%	0.35%	1.6%	1.16%	12.2%	3.7%	3.7%	8.5%	8.5%	0.30%	24%	0.098%	76%	27.3%	182%	7.31%	300%
R59	590841.35	4807247.63	15.4%	56%	2.9%	54%	5.4%	50%	1.49%	89%	0.30%	0.30%	19%	26%	3.6%	15%	11.5%	14.3%	0.37%	1.7%	1.43%	12.4%	4.0%	4.0%	9.2%	9.2%	0.36%	24%	0.122%	76%	29.8%	185%	9.26%	302%
R60	590953.11	4807285.94	14.5%	55%	2.6%	54%	5.0%	50%	1.38%	89%	0.28%	0.28%	20%	27%	3.6%	15%	10.9%	13.8%	0.36%	1.6%	1.32%	12.3%	3.7%	3.7%	8.6%	8.6%	0.34%	24%	0.113%	76%	27.6%	183%	8.48%	301%
R61	590858.15	4807196.55	16.0%	56%	3.1%	55%	5.5%	50%	1.59%	90%	0.31%	0.31%	19%	26%	3.8%	16%	11.1%	13.9%	0.38%	1.7%	1.50%	12.5%	4.0%	4.0%	9.2%	9.2%	0.40%	24%	0.131%	76%	31.0%	186%	9.86%	302%
R62	590899.99	4807147.81	16.3%	56%	3.2%	55%	5.6%	50%	1.65%	90%	0.32%	0.32%	21%	28%	4.1%	16%	11.2%	14.1%	0.40%	1.7%	1.54%	12.6%	4.0%	4.0%	9.3%	9.3%	0.40%	24%	0.136%	76%	32.1%	187%	10.23%	303%
R63	590908.06	4807085.06	16.7%	57%	3.4%	55%	5.8%	50%	1.75%	90%	0.33%	0.33%	23%	30%	4.3%	16%	12.3%	15.2%	0.42%	1.7%	1.61%	12.6%	4.1%	4.1%	9.5%	9.5%	0.43%	24%	0.144%	76%	33.0%	188%	10.86%	303%
R64	590967.33	4807021.48	16.8%	57%	3.5%	55%	5.9%	51%	1.80%	90%	0.34%	0.34%	26%	34%	4.9%	17%	13.9%	16.8%	0.43%	1.7%	1.61%	12.6%	4.2%	4.2%	9.7%	9.7%	0.40%	24%	0.147%	76%	32.9%	188%	11.20%	304%
R65	590865.33	4806894.56	19.5%	60%	4.4%	56%	6.6%	51%	2.18%	90%	0.40%	0.40%	26%	33%	5.6%	17%	14.3%	17.2%	0.47%	1.8%	1.90%	12.9%	4.6%	4.6%	10.6%	10.6%	0.52%	24%	0.176%	76%	38.1%	193%	14.06%	307%
R66	590875.79	4806848.38	20.0%	60%	4.6%	56%	7.1%	52%	2.28%	90%	0.41%	0.41%	27%	34%	5.9%	18%	14.9%	17.7%	0.52%	1.8%	1.98%	13.0%	4.7%	4.7%	10.7%	10.7%	0.49%	24%	0.180%	76%	42.1%	197%	14.77%	307%
R67	590920.31	4806789.89	22.1%	62%	4.8%	56%	7.8%	52%	2.35%	90%	0.43%	0.43%	28%	35%	6.0%	18%	15.2%	18.0%	0.59%	1.9%	2.06%	13.1%	4.8%	4.8%	11.0%	11.0%	0.45%	24%	0.182%	76%	46.0%	201%	15.21%	308%
R68	590961.66	4806888.64	18.1%	58%	4.1%	56%	6.4%	51%	2.05%	90%	0.39%	0.39%	27%	34%	5.4%	17%	14.4%	17.2%	0.50%	1.8%	1.80%	12.8%	4.7%	4.7%	10.9%	10.9%	0.45%	24%	0.162%	76%	37.0%	192%	13.07%	306%
R69	590903.03	4806672.93	28.3%	68%	5.7%	57%	10.1%	55%	2.75%	91%	0.53%	0.53%	31%	38%	6.7%	18%	16.9%	19.8%	0.74%	2.0%	2.41%	13.4%	5.2%	5.2%	12.0%	12.0%	0.60%	24%	0.209%	76%	58.4%	213%	18.02%	311%
R70	590963.12	4806680.26	26.8%	67%	5.3%	57%	9.7%	54%	2.58%	91%	0.51%	0.51%	31%	38%	6.5%	18%	16.7%	19.5%	0.68%	2.0%	2.29%	13.3%	5.5%	5.5%	12.7%	12.7%	0.57%	24%	0.193%	76%	54.7%	210%	16.74%	309%
R71	591025.30	4806745.59	23.3%	63%	4.7%	56%	8.3%	53%	2.30%	90%	0.45%	0.45%	30%	37%	6.0%	18%	15.9%	18.8%	0.59%	1.9%	2.05%	13.1%	5.3%	5.3%	12.2%	12.2%	0.48%	24%	0.173%	76%	47.6%	203%	14.69%	307%
R72	591093.90	4806613.91	25.1%	65%	4.7%	56%	9.5%	54%	2.37%	90%	0.44%	0.44%	37%	44%	6.5%	18%	17.6%	20.5%	0.64%	1.9%	2.16%	13.2%	5.2%	5.2%	12.1%	12.1%	0.57%	24%	0.173%	76%	51.3%	206%	14.76%	307%
R73	591080.34	4806562.13	28.6%	69%	5.1%	57%	10.2%	55%	2.53%	90%	0.47%	0.47%	34%	41%	6.7%	19%	17.4%	20.3%	0.67%	2.0%	2.29%	13.3%	5.5%	5.5%	12.7%	12.7%	0.59%	24%	0.182%	76%	58.7%	214%	15.94%	308%
R74	590955.72	4806489.27	36.0%	76%	6.6%	58%	12.3%	57%	3.17%	91%	0.61%	0.61%	32%	39%	8.3%	20%	17.8%	20.6%	0.76%	2.0%	2.78%	13.8%	6.1%	6.1%	14.1%	14.1%	0.69%	25%	0.231%	76%	73.9%	229%	20.75%	313%
R75	591005.07	4806448.29	34.7%	75%	6.1%	58%	11.8%	56%	2.97%	91%	0.61%	0.61%	29%	37%	7.6%	19%	17.0%	19.9%	0.74%	2.0%	2.63%	13.6%	6.1%	6.1%	14.0%	14.0%	0.66%	25%	0.213%	76%	71.2%	226%	19.13%	312%
R76	590884.05	4806449.67	41.4%	81%	7.7%	59%	14.0%	59%	3.67%	92%	0.71%	0.71%	31%	39%	9.3%	21%	18.4%	21.3%	0.84%	2.1%	3.16%	14.2%	6.3%	6.3%	14.5%	14.5%	0.79%	25%	0.267%	76%	84.3%	239%	24.53%	317%
R77	590883.54	4806430.39	42.2%	82%	7.8%	59%	14.2%	59%	3.69%	92%	0.72%	0.72%	30%	38%	9.5%	21%	18.2%	21.1%	0.86%	2.1%	3.18%	14.2%	6.4%	6.4%	14.7%	14.7%	0.80%	25%	0.267%	76%	85.9%	241%	24.65%	317%
R78	590891.65	4806348.55	39.0%	79%	7.0%	59%	13.2%	58%	3.40%	91%	0.69%	0.69%	27%	34%	8.8%	21%	16.9%	19.8%	0.82%	2.1%	3.03%	14.0%	6.8%	6.8%	15.6%	15.6%	0.73%	25%	0.240%	76%	78.4%	233%	22.21%	315%
R79	590869.78	4806365.29	41.6%	82%	7.5%	59%	14.0%	59%	3.62%	92%	0.73%	0.73%	28%	35%	9.6%	21%	17.9%	20.7%	0.85%	2.1%	3.19%	14.2%	6.7%	6.7%	15.4%	15.4%	0.78%	25%	0.258%	76%	83.8%	239%	23.97%	316%
R80	590867.26	4806331.34	40.0%	80%	7.2%	59%	13.5%	58%	3.50%	91%	0.70%	0.70%	27%	34%	9.1%	21%	17.1%	19.9%	0.83%	2.1%	3.13%	14.1%	6.9%	6.9%	15.8%	15.8%	0.75%	25%	0.247%	76%	79.8%	235%	22.89%	315%
R81	590803.61	4806333.49	45.2%	85%	8.4%	60%	15.2%	60%	4.04%	92%	0.77%	0.77%	30%	37%	10.7%	23%	18.7%	21.6%	0.92%	2.2%	3.57%	14.6%	6.6%	6.6%	15.3%	15.3%	0.85%	25%	0.287%	76%	90.3%	245%	27.08%	320%
R82	590868.28	4806278.10	37.2%	77%	6.6%	58%	12.5%	57%	3.28%	91%	0.65%	0.65%	27%	34%	7.8%	20%	16.2%	19.1%	0.82%	2.1%	3.01%	14.0%	7.2%	7.2%	16.5%	16.5%	0.69%	25%	0.229%	76%	73.3%	228%	21.07%	314%
R83	590864.42	4806258.79	36.6%	77%	6.5%	58%	12.3%	57%	3.23%	91%	0.64%	0.64%	26%	33%	8.1%	20%	16.2%	19.0%	0.82%	2.1%	2.98%	14.0%	7.3%	7.3%	16.7%	16.7%	0.68%	25%	0.224%	76%	71.6%	227%	20.65%	313%
R84	590831.33	4806209.69	36.8%	77%	6.4%	58%	12.4%	57%	3.24%	91%	0.62%	0.62%	27%	34%	8.7%	20%	16.2%	19.1%	0.82%	2.1%	3.03%	14.0%	7.6%	7.6%	17.5%	17.5%	0.68%	25%	0.222%	76%	70.6%	226%	20.57%	313%

Percentages of Criteria at Sensitive Receptors (Scenario A)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			45.2%	85.3%	8.4%	60.0%	15.2%	59.8%	4.0%	92.0%	0.8%	0.8%	56.9%	64.1%	10.7%	22.5%	27.4%	30.3%	0.9%	2.2%	3.6%	14.6%	33.4%	33.4%	63.9%	63.9%	0.9%	24.7%	0.3%	76.3%	90.3%	245.3%	27.1%	319.6%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R85	590817.26	4806242.44	39.2%	79%	6.9%	58%	13.2%	58%	3.47%	91%	0.67%	0.67%	28%	35%	8.8%	21%	16.7%	19.6%	0.84%	2.1%	3.23%	14.2%	7.3%	7.3%	16.7%	16.7%	0.73%	25%	0.238%	76%	76.0%	231%	22.37%	315%
R86	590874.92	4806136.21	31.3%	71%	5.6%	57%	10.5%	55%	2.79%	91%	0.52%	0.52%	25%	32%	7.2%	19%	14.6%	17.4%	0.72%	2.0%	2.55%	13.6%	7.9%	7.9%	18.1%	18.1%	0.57%	24%	0.193%	76%	59.3%	214%	16.91%	309%
R87	591051.40	4806231.39	26.5%	67%	4.8%	56%	9.5%	54%	2.37%	90%	0.47%	0.47%	26%	33%	6.5%	18%	14.3%	17.1%	0.70%	2.0%	2.11%	13.1%	6.6%	6.6%	15.1%	15.1%	0.51%	24%	0.169%	76%	54.3%	209%	14.10%	307%
R88	590857.90	4806098.80	31.2%	71%	5.6%	57%	10.4%	55%	2.76%	91%	0.50%	0.50%	25%	33%	7.9%	20%	14.9%	17.7%	0.70%	2.0%	2.52%	13.5%	8.2%	8.2%	18.8%	18.8%	0.57%	24%	0.193%	76%	57.1%	212%	16.56%	309%
R89	590831.13	4806085.17	32.5%	73%	5.7%	57%	10.7%	55%	2.83%	91%	0.51%	0.51%	26%	33%	8.3%	20%	15.1%	18.0%	0.71%	2.0%	2.60%	13.6%	8.4%	8.4%	19.4%	19.4%	0.59%	24%	0.196%	76%	58.2%	213%	17.02%	310%
R90	590794.58	4805959.59	31.6%	72%	5.5%	57%	9.9%	54%	2.69%	91%	0.46%	0.46%	26%	34%	9.0%	21%	14.6%	17.5%	0.70%	2.0%	2.38%	13.4%	9.7%	9.7%	22.3%	22.3%	0.55%	24%	0.189%	76%	50.1%	205%	15.22%	308%
R91	590797.37	4805895.64	30.2%	70%	5.6%	57%	9.0%	54%	2.65%	91%	0.43%	0.43%	24%	31%	8.3%	20%	12.4%	15.2%	0.64%	1.9%	2.21%	13.2%	10.3%	10.3%	23.7%	23.7%	0.52%	24%	0.191%	76%	44.1%	199%	14.12%	307%
R92	591122.86	4805917.21	20.4%	61%	4.6%	56%	6.7%	51%	2.10%	90%	0.32%	0.32%	23%	30%	5.5%	17%	12.3%	15.1%	0.52%	1.8%	1.65%	12.7%	7.0%	7.0%	16.2%	16.2%	0.36%	24%	0.158%	76%	34.3%	189%	10.16%	303%
R93	591390.75	4805924.41	17.8%	58%	3.6%	55%	5.9%	50%	1.64%	90%	0.27%	0.27%	25%	32%	4.4%	16%	12.4%	15.3%	0.45%	1.7%	1.28%	12.3%	6.0%	6.0%	13.8%	13.8%	0.31%	24%	0.124%	76%	29.2%	184%	7.76%	300%
R94	591469.94	4806107.41	18.2%	58%	3.1%	55%	6.3%	51%	1.49%	89%	0.28%	0.28%	26%	33%	4.5%	16%	13.1%	16.0%	0.45%	1.7%	1.25%	12.3%	5.2%	5.2%	12.0%	12.0%	0.33%	24%	0.111%	76%	32.7%	188%	7.73%	300%
R95	591624.05	4806094.57	16.5%	57%	2.7%	54%	5.8%	50%	1.30%	89%	0.25%	0.25%	29%	37%	4.6%	16%	13.7%	16.6%	0.44%	1.7%	1.08%	12.1%	4.8%	4.8%	11.1%	11.1%	0.31%	24%	0.098%	76%	29.3%	184%	6.57%	299%
R96	591554.49	4806013.23	16.5%	57%	3.0%	55%	5.7%	50%	1.39%	89%	0.26%	0.26%	28%	36%	4.6%	16%	13.4%	16.3%	0.44%	1.7%	1.13%	12.1%	5.2%	5.2%	11.9%	11.9%	0.30%	24%	0.104%	76%	28.6%	184%	6.84%	299%
R97	591668.99	4806053.90	15.4%	56%	2.7%	54%	5.5%	50%	1.26%	89%	0.24%	0.24%	30%	37%	4.5%	16%	13.6%	16.5%	0.42%	1.7%	1.03%	12.0%	4.8%	4.8%	11.0%	11.0%	0.28%	24%	0.096%	76%	27.2%	182%	6.22%	299%
R98	591610.13	4805965.08	15.2%	55%	2.9%	54%	5.2%	50%	1.33%	89%	0.24%	0.24%	27%	34%	4.2%	16%	12.5%	15.4%	0.41%	1.7%	1.06%	12.1%	5.4%	5.4%	12.4%	12.4%	0.28%	24%	0.102%	76%	26.0%	181%	6.40%	299%
R99	591719.29	4806025.01	14.3%	54%	2.6%	54%	5.1%	50%	1.21%	89%	0.23%	0.23%	29%	36%	4.3%	16%	13.3%	16.1%	0.40%	1.7%	0.99%	12.0%	4.9%	4.9%	11.4%	11.4%	0.27%	24%	0.091%	76%	25.5%	180%	5.92%	298%
R100	591749.26	4805984.34	13.9%	54%	2.6%	54%	4.9%	49%	1.19%	89%	0.23%	0.23%	24%	31%	3.8%	16%	11.6%	14.4%	0.39%	1.7%	0.96%	12.0%	5.2%	5.2%	11.9%	11.9%	0.26%	24%	0.091%	76%	24.6%	180%	5.77%	298%
R101	591698.96	4805855.92	13.5%	54%	2.7%	54%	4.8%	49%	1.23%	89%	0.23%	0.23%	22%	29%	4.1%	16%	10.7%	13.6%	0.37%	1.7%	0.95%	12.0%	5.9%	5.9%	13.7%	13.7%	0.27%	24%	0.096%	76%	23.9%	179%	5.71%	298%
R102	591824.17	4805930.83	12.8%	53%	2.4%	54%	4.6%	49%	1.11%	89%	0.22%	0.22%	22%	29%	3.6%	15%	10.7%	13.6%	0.36%	1.6%	0.88%	11.9%	5.4%	5.4%	12.4%	12.4%	0.25%	24%	0.084%	76%	23.5%	178%	5.30%	298%
R103	591805.98	4805838.80	13.2%	53%	2.4%	54%	4.6%	49%	1.10%	89%	0.22%	0.22%	20%	27%	3.9%	16%	10.0%	12.9%	0.35%	1.6%	0.86%	11.9%	5.8%	5.8%	13.3%	13.3%	0.26%	24%	0.084%	76%	22.8%	178%	5.14%	298%
R104	591746.05	4805766.02	14.5%	55%	2.5%	54%	4.6%	49%	1.14%	89%	0.22%	0.22%	19%	26%	3.8%	16%	8.7%	11.5%	0.35%	1.6%	0.87%	11.9%	6.1%	6.1%	14.1%	14.1%	0.26%	24%	0.089%	76%	22.2%	177%	5.21%	298%
R105	592064.72	4805863.19	12.1%	52%	1.8%	53%	4.1%	49%	0.86%	89%	0.20%	0.20%	20%	27%	3.2%	15%	10.0%	12.9%	0.31%	1.6%	0.70%	11.7%	5.2%	5.2%	11.9%	11.9%	0.23%	24%	0.067%	76%	20.3%	175%	4.16%	297%
R106	591457.80	4806263.06	19.2%	59%	3.1%	55%	6.8%	51%	1.52%	89%	0.32%	0.32%	27%	34%	5.3%	17%	13.7%	16.6%	0.52%	1.8%	1.31%	12.3%	4.7%	4.7%	10.8%	10.8%	0.37%	24%	0.113%	76%	37.9%	193%	8.39%	301%
R107	591300.05	4806336.50	22.4%	62%	3.8%	55%	8.1%	53%	1.85%	90%	0.40%	0.40%	28%	35%	6.0%	18%	14.0%	16.8%	0.61%	1.9%	1.62%	12.6%	5.0%	5.0%	11.6%	11.6%	0.42%	24%	0.136%	76%	46.2%	201%	10.74%	303%
R108	591252.74	4806220.96	21.0%	61%	3.9%	55%	7.7%	52%	1.87%	90%	0.37%	0.37%	26%	33%	5.8%	18%	13.8%	16.6%	0.58%	1.9%	1.62%	12.6%	5.5%	5.5%	12.6%	12.6%	0.41%	24%	0.138%	76%	43.3%	198%	10.57%	303%
R109	591205.44	4806270.09	23.2%	63%	4.1%	56%	8.4%	53%	2.01%	90%	0.41%	0.41%	26%	33%	6.2%	18%	14.0%	16.8%	0.63%	1.9%	1.76%	12.8%	5.5%	5.5%	12.7%	12.7%	0.45%	24%	0.147%	76%	47.8%	203%	11.70%	304%
R110	591252.74	4806340.13	23.7%	64%	4.0%	56%	8.5%	53%	1.97%	90%	0.42%	0.42%	27%	34%	6.0%	18%	14.0%	16.9%	0.64%	1.9%	1.73%	12.7%	5.2%	5.2%	11.9%	11.9%	0.45%	24%	0.142%	76%	48.8%	204%	11.56%	304%
R111	591139.92	4806297.13	25.5%	66%	4.5%	56%	9.2%	54%	2.21%	90%	0.46%	0.46%	27%	34%	6.2%	18%	14.2%	17.0%	0.69%	2.0%	1.96%	13.0%	5.8%	5.8%	13.3%	13.3%	0.49%	24%	0.160%	76%	52.4%	207%	13.20%	306%
R112	591122.35	4806325.63	26.8%	67%	4.7%	56%	9.6%	54%	2.31%	90%	0.48%	0.48%	29%	36%	6.2%	18%	15.2%	18.1%	0.71%	2.0%	2.06%	13.1%	5.9%	5.9%	13.6%	13.6%	0.51%	24%	0.167%	76%	54.8%	210%	13.95%	306%
R113	591089.88	4806341.73	28.5%	69%	5.0%	57%	10.0%	55%	2.45%	90%	0.51%	0.51%	27%	35%	6.1%	18%	15.3%	18.2%	0.72%	2.0%	2.19%	13.2%	6.0%	6.0%	13.9%	13.9%	0.53%	24%	0.176%	76%	57.9%	213%	15.01%	307%
R114	591068.77	4806395.97	30.3%	70%	5.3%	57%	10.4%	55%	2.62%	91%	0.54%	0.54%	30%	38%	6.1%	18%	16.0%	18.8%	0.71%	2.0%	2.35%	13.4%	6.0%	6.0%	13.8%	13.8%	0.56%	24%	0.187%	76%	61.0%	216%	16.33%	309%
R115	591097.40	4806450.01	30.1%	70%	5.2%	57%	10.4%	55%	2.56%	90%	0.53%	0.53%	31%	38%	6.1%	18%	16.6%	19.4%	0.67%	2.0%	2.30%	13.3%	5.7%	5.7%	13.2%	13.2%	0.57%	24%	0.184%	76%	61.7%	217%	16.01%	309%
R116	591085.71	4806416.77	29.8%	70%	5.2%	57%	10.2%	55%	2.58%	91%	0.54%	0.54%	31%	39%	6.0%	18%	16.3%	19.2%	0.69%	2.0%	2.31%	13.3%	5.8%	5.8%	13.5%	13.5%	0.56%	24%	0.184%	76%	60.6%	216%	16.06%	309%
R117	591079.53	4806430.99	30.3%	70%	5.3%	57%	10.4%	55%	2.61%	91%	0.54%	0.54%	31%	39%	6.1%	18%	16.6%	19.5%	0.68%	2.0%	2.35%	13.4%	5.8%	5.8%	13.4%	13.4%	0.57%	24%	0.187%	76%	62.1%	217%	16.38%	309%
R118	591150.65	4806443.64	28.0%	68%	4.8%	56%	9.7%	54%	2.36%	90%	0.50%	0.50%	30%	38%	5.7%	17%	15.7%	18.6%	0.65%	1.9%	2.13%	13.1%	5.5%	5.5%	12.6%	12.6%	0.53%	24%	0.169%	76%	57.3%	212%	14.58%	307%
R119	591471.93	4806336.37	19.0%	59%	3.1%	55%	7.0%	52%	1.52%	89%	0.33%	0.33%	28%	35%	5.6%	17%	14.0%	16.8%	0.53%	1.8%	1.32%	12.3%	4.5%	4.5%	10.3%	10.3%	0.38%	24%	0.113%	76%	39.2%	194%	8.54%	301%
R120	591492.86	4806392.79	19.0%	59%	3.1%	55%	7.0%	52%	1.51%	89%	0.34%	0.34%	28%	35%	5.5%	17%	13.6%	16.4%	0.53%	1.8%	1.32%	12.3%	4.3%	4.3%	10.0%	10.0%	0.38%	24%	0.111%	76%	39.5%	194%	8.57%	301%
R121	591535.63	4806441.92	18.5%	59%	2.9%	55%	6.8%	51%	1.46%	89%	0.33%	0.33%	28%	35%	5.2%	17%	13.7%	16.5%	0.52%	1.8%	1.29%	12.3%	4.2%	4.2%	9.7%	9.7%	0.38%	24%	0.109%	76%	38.6%	194%	8.33%	301%
R122	591579.31	4806526.55	18.2%	58%	2.8%	54%	6.7%	51%	1.42%	89%	0.32%	0.32%	28%	35%	4.6%	16%	13.9%	16.8%	0.50%	1.8%	1.29%	12.3%	4.0%	4.0%	9.3%	9.3%	0.37%	24%	0.104%	76%	37.6%	193%	8.22%	301%
R123	591646.64	4806484.69	17.4%	58%	2.6%	54%	6.4%	51%	1.32%	89%	0.31%	0.31%	26%	33%	4.9%	17%	12.9%	15.8%	0.49%	1.8%	1.17%	12.2%	4.1%	4.1%	9.3%	9.3%	0.36%	24%	0.098%	76%	36.1%	191%	7.48%	300%
R124	591773.92	4806328.52	16.1%	56%	2.3%	54%	5.8%	50%	1.14%	89%	0.25%	0.25%	28%	35%	4.5%	16%	13.4%	16.2%	0.43%	1.7%	0.98%	12.0%	4.1%	4.1%	9.6%	9.6%	0.33%	24%	0.087%	76%	30.2%	185%	6.13%	299%
R125	591926.32	4806358.75	15.1%	55%	2.1%	54%	5.5%	50%	1.02%	89%	0.24%	0.24%	26%	33%	4.2%	16%	12.6%	15.4%	0.39%	1.7%	0.88%	11.9%	4.0%	4.0%	9.3%	9.3%	0.32%	24%	0.078%	76%	28.4%	183%	5.45%	298%
R126	592036.41	4805335.50	13.8%	54%	1.3%	53%	4.3%	49%	0.63%	89%	0.21%	0.21%	16%	23%	3.7%	15%	7.8%	10.6%	0.32%	1.6%	0.51%	11.5%	7.3%	7.3%	16.9%	16.9%	0.23%	24%	0.049%	76%	17.9%	173%	2.90%	295%
R127	592165.42	4805344.21	12.0%	52%	1.2%	53%	4.1%	49%	0.57%	89%	0.18%	0.18%	16%	24%	3.5%	15%	8.0%	10.8%	0.31%	1.6%	0.48%	11.5%	6.6%	6.6%	15.2%	15.2%	0.22%	24%	0.044%	76%	16.8%	172%	2.68%	295%
R128	592088.71	4805265.77	13.0%	53%	1.2%	53%	4.1%	49%	0.57%	88%	0.19%	0.19%	16%	23%	3.5%	15%	7.3%	10.2%	0.31%	1.6%	0.46%	11.5%	7.5%	7.5%	17.3%	17.3%	0.22%	24%	0.044%	76%	16.9%	172%	2.64%	295%
R129	592104.40	4805032.16	11.8%	52%	0.9%	52%	3.5%	48%	0.44%	88%	0.17%	0.17%	17%	24%	2.7%	15%	9.3%	12.1%	0.24%	1.5%	0.38%	11.4%	8.2%	8.2%	18.9%	18.9%	0.21%	24%	0.033%	76%	13.3%	168%	2.12%	295%
R130	592121.65	4804904.95	9.0%	49%	0.8%	52%	2.7%	47%	0.39%	88%	0.13%	0.13%	19%	26%	2.2%	14%	10.4%	13.3%	0.19%	1.5%	0.34%	11.3%	8.7%	8.7%	20.0%	20.0%	0.14%	24%	0.029%	76%	11.5%	166%	1.91%	294%
R131	592733.56	4805621.46	6.7%	47%	0.8%	52%	2.3%	47%	0.39%	88%	0.11%	0.11%	13%	20%	2.2%	14%	5.9%	8.8%	0.20%	1.5%	0.35%	11.4%	3.4%	3.4%	7.9%	7.9%	0.13%	24%	0.029%	76%	11.2%	166%	1.99%	294%
R132	591880.73	4804726.91	12.1%	52%	0.8%	52%	3.7%	48%	0.38%	88%	0.17%	0.17%	24%	31%	2.4%	14%	13.0%	15.9%	0.24%	1.5%	0.32%	11.3%	10.7%	10.7%	24.6%	24.6%	0.21%	24%	0.029%	76%	15.2%	170%	1.87%	294%
R133	592084.55	4804243.52	8.6%	49%	0.5%	52%	3.0%	48%	0.24%	88%	0.13%	0.13%	24%	31%	2.3%	14%	12.0%	14.9%	0.23%	1.5%	0.23%	11.2%	7.9%	7.9%	18.2%	18.2%	0.16%	24%	0.018%	76%	13.9%	169%	1.25%	294%
R134	592142.24	4804838.49	8.4%	48%	0.7%	52%	2.5%	47%	0.37%	88%	0.12%	0.12%	20%	27%	2.1%	14%	10.8%	13.7%	0.18%	1.5%	0.32%	11.3%	8.8%	8.8%	20.2%	20.2%	0.13%	24%	0.029%	76%	10.5%	166%	1.80%	294%
R135	592152.71	4804725.17	8.1%	48%	0.7%	52%	2.5%	47%	0.33%	88%	0.12%	0.12%	18%	26%	2.1%	14%	10.2%	13.0%	0.19%	1.5%	0.29%	11.3%	7.7%	7.7%	17.7%	17.7%	0.14%	24%	0.027%	76%	10.6%	166%	1.66%	294%
R136	592229.41	4804808.85	7.7%	48%	0.7%	52%	2.3%	47%	0.35%	88%	0.11%	0.11%	19%	26%	2.1%	14%	10.2%	13.1%	0.18%	1.5%	0.31%	11.3%	8.1%	8.1%	18.8%	18.8%	0.12%	24%	0.027%	76%	10.0%	165%	1.71%	294%
R137	589317.83	4804722.44	9.0%	49%	1.1%	53%	3.2%	48%	0.58%	89%	0.20%	0.20%	18%	25%	2.4%	14%	10.4%	13.2%	0.23%	1.5%	0.56%	11.6%	3.3%	3.3%	7.7%	7.7%	0.18%	24%	0.040%	76%	17.2%	172%	3.36%	296%
R138	589495.01	4804396.18	7.5%	48%	0.9%	52%	2.6%	47%	0.43%	88%	0.15%	0.15%	18%	25%	3.1%	15%	9.4%	12.3%	0.25%	1.5%	0.40%	11.4%	3.2%	3.2%	7.3%	7.3%	0.16%	24%	0.031%	76%	14.8%	170%	2.34%	295%
R139	589125.91	4804733.79	8.4%	49%	1.0%	53%	3.0%	48%	0.56%	88%	0.18%	0.18%	19%	26%	2.3%	14%	9.2%	12.1%	0.22%	1.5%	0.55%	11.6%	3.2%	3.2%	7.3%	7.3%	0.17%	24%	0.038%	76%	16.1%	171%	3.26%	296%
R140	588444.94	4804827.67	8.2%	48%	0.8%	52%	3.3%	48%	0.43%	88%	0.15%	0.15%	17%	24%	2.7%	15%	8.6%	11.5%	0.26%	1.5%	0.42%	11.4%	2.8%	2.8%	6.4%	6.4%	0.19%	24%	0.036%	76%	16.1%	171%	2.40%	295%
R141	588542.38	4804754.86	7.5%	48%	0.8%	52%	2.9%	48%	0.45%	88%	0.13%	0.13%	17%	24%	2.7%	15%	8.3%	11.2%	0.25%	1.5%	0.43%	11.4%	2.8%	2.8%	6.4%	6.4%	0.18%	24%	0.036%	76%	15.2%	170%	2.50%	295%
R142	588090.16	4805534.02	8.4%	49%	0.6%	52%	3.3%	48%	0.32%	88%	0.14%	0.14%	17%	24%	2.4%	14%	8.6%	11.4%	0.25%	1.5%	0.30%	11.3%	2.9%	2.9%	6.6%	6.6%	0.18%	24%	0.027%	76%	17.0%	172%	1.80%	294%
R143	588850.56	4806928.34	8.8%	49%	0.5%	52%	3.3%	48%	0.24%	88%	0.17%	0.17%	19%	26%	2.3%	14%	11.6%	14.5%	0.27%	1.6%	0.23%	11.2%	5.9%	5.9%	13.5%	13.5%	0.18%	24%	0.020%	76%	19.7%	175%	1.59%	294%
R144	588954.41	4807073.96	7.9%	48%	0.4%	52%	2.9%	48%	0.23%	88%	0.15%	0.15%	22%	29%	1.8%	14%	11.1%	13.9%	0.24%	1.5%	0.21%	11.2%	6.2%	6.2%	14.4%	14.4%	0.16%	24%	0.018%	76%	18.0%	173%	1.51%	294%
R145	589453.28	4806793.60	15.2%	55%	1.2%	53%	5.5%	50%	0.58%	89%	0.31%	0.31%	28%	35%	3.1%	15%	27.4%	30.3%	0.51%	1.8%	0.54%	11.6%	6.4%	6.4%	14.8%	14.8%	0.31%	24%	0.049%	76%	33.9%	189%	4.04%	297%
R146	589336.96	4806802.19	13.4%	53%	0.9%	53%	4.9%	50%	0.46%	88%	0.25%	0.25%	26%	34%	2.7%	14%	19.8%	22.7%	0.39%	1.7%	0.43%	11.4%	7.8%	7.8%	18.0%	18.0%	0.27%	24%	0.038%	76%	30.0%	185%	3.18%	296%
R147	589112.04	4806966.65	9.5%	50%	0.6%	52%	3.5%	48%	0.29%	88%	0.18%	0.18%	24%	31%	2.0%	14%	12.3%	15.1%	0.28%	1.6%	0.27%	11.3%	6.9%	6.9%	15.9%	15.9%	0.19%	24%	0.024%	76%	21.5%	177%	1.95%	294%
R148	589817.35	4807475.92	14.6%	55%	0.9%	53%	4.3%	49%	0.47%	88%	0.29%	0.29%	23%	31%	3.2%	15%	12.5%	15.4%	0.33%	1.6%	0.43%	11.4%	4.2%	4.2%	9.7%	9.7%	0.29%	24%	0.040%	76%	23.3%	178%	3.10%	296%
R149	589212.29	4807135.17	9.7%	50%	0.5%	52%	3.5%	48%	0.27%	88%	0.18%	0.18%	26%	33%	2.5%	14%	13.3%	16.1%	0.25%	1.5%	0.25%	11.3%	6.0%	6.0%	13.9%	13.9%	0.20%	24%	0.022%	76%	17.6%	173%	1.80%	294%
R150	589187.15	4807059.80	9.5%	50%	0.6%	52%	3.2%	48%	0.28%	88%	0.17%	0.17%	25%	32%	2.1%	14%	12.9%	15.7%	0.25%	1.5%	0.25%	11.3%	5.2%	5.2%	12.0%	12.0%	0.18%	24%	0.022%	76%	19.5%	175%	1.91%	294%
R151	589216.89	4807005.39	9.9%	50%	0.6%	52%	3.5%	48%	0.31%	88%	0.18%	0.18%	25%	32%	2.1%	14%	12.9%	15.8%	0.28%	1.6%	0.27%	11.3%	5.4%	5.4%	12.5%	12.5%	0.20%	24%	0.024%	76%	21.2%	176%	2.09%	295%
R152	590965.47	4807254.22	14.8%	55%	2.7%	54%	5.1%	50%	1.43%	89%	0.29%	0.29%	18%	25%	3.8%	16%	10.6%	13.4%	0.36%	1.7%	1.36%	12.4%	3.7%	3.7%	8.6%	8.6%	0.35%	24%	0.118%	76%	28.5%	184%	8.80%	301%
R153	590992.57	4807219.38	15.0%	55%	2.8%	54%	5.2%	50%	1.47%	89%	0.29%	0.29%	18%	25%	3.9%	16%	10.6%	13.4%	0.38%	1.7%	1.39%	12.4%	3.7%	3.7%	8.5%	8.5%	0.35%	24%	0.120%	76%	29.1%	184%	9.08%	302%
R154	591025.08	4807154.35	15.4%	56%	3.0%	55%	5.4%	50%	1.55%	89%	0.30%	0.30%	19%	26%	4.2%	16%	11.4%	14.2%	0.40%	1.7%	1.44%	12.4%	4.2%	4.2%	9.7%	9.7%	0.38%	24%	0.127%	76%	29.9%	185%	9.62%	302%
R155	591085.58	4807264.22	13.9%	54%	2.6%	54%	4.9%	50%	1.36%	89%	0.27%	0.27%	20%	27%	3.8%	16%	11.5%	14.4%	0.36%	1.6%	1.28%	12.3%	4.2%	4.2%	9.7%	9.7%	0.33%	24%	0.111%	76%	26.7%	182%	8.28%	301%
R156	591178.47	4807320.73	13.0%	53%	2.4%	54%	4.7%	49%	1.26%	89%	0.26%	0.26%	20%	27%	3.7%	15%	11.2%	14.1%	0.35%	1.6%	1.19%	12.2%	4.1%	4.1%	9.5%	9.5%	0.30%	24%	0.102%	76%	25.3%	180%	7.59%	300%
R157	591128.15	4807474.79	12.1%	52%	2.0%	54%	4.4%	49%	1.09%	89%	0.24%	0.24%	19%	26%	3.4%	15%	10.4%	13.3%	0.33%	1.6%	1.05%	12.1%	3.9%	3.9%	8.9%	8.9%	0.26%	24%	0.089%	76%	23.6%	179%	6.53%	299%
R158	591137.75	4807525.40	11.8%	52%	1.9%	54%	4.3%	49%	1.03%	89%	0.23%	0.23%	18%	26%	3.3%	15%	10.3%	13.1%	0.33%	1.6%	1.00%	12.0%	3.8%	3.8%	8.8%	8.8%	0.26%	24%	0.084%	76%	23.4%	178%	6.19%	299%
R159	591389.55	4807160.03	13.1%	53%	2.7%	54%	4.6%	49%	1.36%	89%	0.30%	0.30%	20%	27%	4.5%	16%	11.5%	14.4%	0.40%	1.7%	1.23%	12.2%	3.8%	3.8%	8.8%	8.8%	0.28%	24%	0.107%	76%	24.7%	180%	8.22%	301%
R160	591232.04	4806971.44	15.3%	55%	3.3%	55%	5.3%	50%	1.67%	90%	0.35%	0.35%	23%	30%	5.0%	17%	13.0%	15.9%	0.45%	1.7%	1.49%	12.5%	4.4%	4.4%	10.2%	10.2%	0.35%	24%	0.129%	76%	29.6%	185%	10.35%	303%
R161	591435.62	4807128.95	13.1%	53%	2.7%	54%	4.5%	49%	1.35%	89%	0.30%	0.30%	21%	28%	4.3%	16%	12.0%	14.9%	0.38%	1.7%	1.22%	12.2%	3.8%	3.8%	8.7%	8.7%	0.29%	24%	0.104%	76%	24.1%	179%	8.19%	301%
R162	591162.85	4806690.32	22.5%	63%	4.2%	56%	8.6%	53%	2.11%	90%	0.40%	0.40%	36%	43%	6.0%	18%	17.2%	20.0%	0.61%	1.9%	1.93%	12.9%	4.9%	4.9%	11.3%	11.3%	0.52%	24%	0.156%	76%	45.8%	201%	13.01%	306%
R163	591210.95	4806729.12	21.4%	62%	3.9%	56%	8.1%	53%	1.99%	90%	0.39%	0.39%	34%	41%	5.7%	17%	16.6%	19.5%	0.58%	1.9%	1.82%	12.8%	4.7%	4.7%	10.9%	10.9%	0.48%	24%	0.147%	76%	43.9%	199%	12.21%	305%
R164	591105.87	4806818.03	19.4%	60%	4.0%	56%	6.9%	52%	2.02%	90%	0.39%	0.39%	30%	38%	5.6%	17%	15.7%	18.6%	0.50%	1.8%	1.81%	12.8%	5.0%	5.0%	11.4%	11.4%	0.40%	24%	0.153%	76%	39.5%	195%	12.67%	305%
R165	591265.91	4806593.73	23.3%	63%	4.0%	56%	8.6%	53%	2.02%	90%	0.38%	0.38%	33%	40%	5.2%	17%	16.4%	19.2%	0.59%	1.9%	1.85%	12.9%	4.7%	4.7%	10.8%	10.8%	0.51%	24%	0.147%	76%	48.3%	203%	12.25%	305%
R166	591287.73	4806665.26	22.3%	62%	3.8%	55%	8.3%	53%	1.93%	90%	0.36%	0.36%	30%	37%	5.2%	17%	15.6%	18.5%	0.58%	1.9%	1.78%	12.8%	4.5%	4.5%	10.5%	10.5%	0.49%	24%	0.142%	76%	46.2%	201%	11.79%	304%
R167	591333.40	4806722.65	20.7%	61%	3.6%	55%	7.6%	52%	1.82%	90%	0.34%	0.34%	28%	35%	4.9%	17%	14.8%	17.6%	0.55%	1.8%	1.67%	12.7%	4.4%	4.4%	10.1%	10.1%	0.44%	24%	0.133%	76%	43.4%	198%	11.07%	304%

Percentages of Criteria at Sensitive Receptors (Scenario A)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			45.2%	85.3%	8.4%	60.0%	15.2%	59.8%	4.0%	92.0%	0.8%	0.8%	56.9%	64.1%	10.7%	22.5%	27.4%	30.3%	0.9%	2.2%	3.6%	14.6%	33.4%	33.4%	63.9%	63.9%	0.9%	24.7%	0.3%	76.3%	90.3%	245.3%	27.1%	319.6%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R168	591234.22	4806518.76	25.0%	65%	4.2%	56%	8.9%	54%	2.12%	90%	0.43%	0.43%	32%	39%	5.2%	17%	16.3%	19.1%	0.60%	1.9%	1.93%	12.9%	4.9%	4.9%	11.4%	11.4%	0.50%	24%	0.153%	76%	51.6%	207%	12.90%	305%
R169	591154.03	4806495.46	28.2%	68%	4.8%	56%	9.8%	54%	2.37%	90%	0.48%	0.48%	31%	38%	5.8%	18%	16.5%	19.3%	0.64%	1.9%	2.14%	13.1%	5.4%	5.4%	12.4%	12.4%	0.55%	24%	0.171%	76%	57.9%	213%	14.66%	307%
R170	592963.29	4806056.44	6.4%	47%	0.8%	52%	2.2%	47%	0.41%	88%	0.10%	0.10%	13%	20%	1.8%	14%	6.2%	9.1%	0.18%	1.5%	0.38%	11.4%	2.6%	2.6%	6.1%	6.1%	0.12%	24%	0.031%	76%	11.5%	167%	2.13%	295%
R171	592548.41	4807420.43	6.3%	46%	1.1%	53%	2.3%	47%	0.59%	89%	0.12%	0.12%	14%	21%	2.2%	14%	7.3%	10.2%	0.20%	1.5%	0.58%	11.6%	2.0%	2.0%	4.6%	4.6%	0.12%	24%	0.044%	76%	12.8%	168%	3.39%	296%
R172	592951.92	4807025.44	6.2%	46%	0.9%	52%	2.2%	47%	0.46%	88%	0.11%	0.11%	13%	20%	1.9%	14%	6.7%	9.6%	0.20%	1.5%	0.44%	11.5%	2.1%	2.1%	4.9%	4.9%	0.12%	24%	0.033%	76%	12.1%	167%	2.44%	295%
R173	592512.22	4807840.43	5.3%	45%	0.9%	53%	2.0%	47%	0.51%	88%	0.11%	0.11%	13%	20%	1.8%	14%	6.8%	9.6%	0.16%	1.4%	0.52%	11.5%	1.8%	1.8%	4.1%	4.1%	0.13%	24%	0.040%	76%	10.4%	165%	2.93%	295%
R174	592241.77	4807860.57	5.5%	46%	1.0%	53%	2.1%	47%	0.57%	88%	0.12%	0.12%	13%	20%	2.2%	14%	6.8%	9.7%	0.19%	1.5%	0.57%	11.6%	2.0%	2.0%	4.5%	4.5%	0.15%	24%	0.044%	76%	11.9%	167%	3.23%	296%
R175	592089.28	4807558.47	7.1%	47%	1.3%	53%	2.6%	47%	0.71%	89%	0.15%	0.15%	14%	21%	2.2%	14%	7.3%	10.2%	0.21%	1.5%	0.69%	11.7%	2.2%	2.2%	5.1%	5.1%	0.16%	24%	0.053%	76%	13.7%	169%	4.12%	297%
R176	593448.24	4806616.60	5.9%	46%	0.7%	52%	2.2%	47%	0.36%	88%	0.09%	0.09%	12%	19%	1.8%	14%	6.1%	9.0%	0.18%	1.5%	0.33%	11.3%	2.1%	2.1%	4.9%	4.9%	0.12%	24%	0.027%	76%	11.5%	166%	1.85%	294%
R177	593312.53	4806745.71	5.7%	46%	0.7%	52%	2.2%	47%	0.38%	88%	0.09%	0.09%	12%	20%	2.0%	14%	6.3%	9.1%	0.19%	1.5%	0.36%	11.4%	2.2%	2.2%	5.1%	5.1%	0.11%	24%	0.029%	76%	11.6%	167%	1.98%	294%
R178	589896.14	4804503.60	9.7%	50%	1.1%	53%	3.2%	48%	0.49%	88%	0.23%	0.23%	17%	24%	2.7%	15%	10.1%	13.0%	0.26%	1.5%	0.39%	11.4%	3.6%	3.6%	8.4%	8.4%	0.16%	24%	0.038%	76%	16.4%	171%	2.50%	295%
R179	589806.86	4804615.64	9.9%	50%	1.1%	53%	3.5%	48%	0.53%	88%	0.22%	0.22%	18%	25%	2.8%	15%	10.3%	13.2%	0.25%	1.5%	0.44%	11.5%	3.8%	3.8%	8.8%	8.8%	0.19%	24%	0.040%	76%	18.0%	173%	2.80%	295%
R180	589696.72	4804647.38	9.4%	50%	1.1%	53%	3.3%	48%	0.54%	88%	0.18%	0.18%	18%	26%	3.2%	15%	10.2%	13.1%	0.27%	1.6%	0.47%	11.5%	3.8%	3.8%	8.8%	8.8%	0.20%	24%	0.040%	76%	18.2%	173%	2.94%	295%
R181	589584.24	4804517.22	8.2%	48%	1.0%	53%	3.0%	48%	0.47%	88%	0.16%	0.16%	18%	26%	3.2%	15%	9.7%	12.5%	0.26%	1.5%	0.43%	11.4%	3.4%	3.4%	7.9%	7.9%	0.18%	24%	0.033%	76%	16.3%	171%	2.60%	295%
R182	589636.85	4804582.64	8.8%	49%	1.0%	53%	3.1%	48%	0.50%	88%	0.17%	0.17%	19%	26%	3.3%	15%	9.9%	12.7%	0.26%	1.5%	0.45%	11.5%	3.6%	3.6%	8.3%	8.3%	0.19%	24%	0.036%	76%	17.2%	172%	2.77%	295%
R183	589520.07	4804445.87	7.7%	48%	0.9%	52%	2.7%	47%	0.45%	88%	0.16%	0.16%	18%	25%	3.2%	15%	9.5%	12.4%	0.25%	1.5%	0.42%	11.4%	3.3%	3.3%	7.5%	7.5%	0.17%	24%	0.031%	76%	15.3%	170%	2.45%	295%
R184	589424.10	4804324.30	7.3%	47%	0.8%	52%	2.5%	47%	0.40%	88%	0.15%	0.15%	18%	25%	3.0%	15%	9.1%	12.0%	0.24%	1.5%	0.38%	11.4%	3.0%	3.0%	7.0%	7.0%	0.15%	24%	0.029%	76%	13.7%	169%	2.21%	295%
R185	589626.45	4804718.61	9.3%	49%	1.2%	53%	3.4%	48%	0.58%	89%	0.19%	0.19%	18%	26%	3.6%	15%	10.1%	13.0%	0.29%	1.6%	0.53%	11.5%	3.8%	3.8%	8.8%	8.8%	0.20%	24%	0.040%	76%	18.0%	173%	3.27%	296%
R186	589475.29	4804698.61	9.4%	50%	1.1%	53%	3.2%	48%	0.57%	89%	0.20%	0.20%	18%	25%	3.2%	15%	10.4%	13.2%	0.27%	1.6%	0.55%	11.6%	3.6%	3.6%	8.3%	8.3%	0.18%	24%	0.040%	76%	17.5%	172%	3.28%	296%
R187	589396.66	4804788.79	9.5%	50%	1.2%	53%	3.4%	48%	0.62%	89%	0.21%	0.21%	18%	25%	2.6%	14%	10.7%	13.6%	0.24%	1.5%	0.60%	11.6%	3.5%	3.5%	8.1%	8.1%	0.18%	24%	0.042%	76%	18.2%	173%	3.63%	296%
R188	589559.04	4804789.94	10.0%	50%	1.3%	53%	3.5%	48%	0.63%	89%	0.21%	0.21%	18%	26%	3.5%	15%	10.8%	13.6%	0.29%	1.6%	0.59%	11.6%	3.8%	3.8%	8.8%	8.8%	0.20%	24%	0.042%	76%	18.7%	174%	3.63%	296%
R189	589464.66	4804561.55	8.7%	49%	1.0%	53%	3.0%	48%	0.50%	88%	0.18%	0.18%	18%	25%	3.2%	15%	9.6%	12.5%	0.26%	1.6%	0.48%	11.5%	3.4%	3.4%	7.9%	7.9%	0.17%	24%	0.036%	76%	15.1%	170%	2.81%	295%
R190	589381.48	4804662.33	9.1%	49%	1.1%	53%	3.1%	48%	0.55%	88%	0.20%	0.20%	17%	25%	2.7%	15%	10.5%	13.3%	0.24%	1.5%	0.53%	11.5%	3.4%	3.4%	7.9%	7.9%	0.17%	24%	0.038%	76%	16.9%	172%	3.17%	296%
R191	589419.87	4804486.37	8.3%	48%	0.9%	53%	2.8%	47%	0.47%	88%	0.17%	0.17%	18%	25%	3.1%	15%	9.4%	12.3%	0.25%	1.5%	0.45%	11.5%	3.3%	3.3%	7.6%	7.6%	0.16%	24%	0.031%	76%	14.3%	169%	2.62%	295%
R192	588195.90	4804357.37	5.6%	46%	0.6%	52%	2.2%	47%	0.33%	88%	0.10%	0.10%	16%	23%	2.1%	14%	7.7%	10.6%	0.19%	1.5%	0.32%	11.3%	2.2%	2.2%	5.1%	5.1%	0.14%	24%	0.027%	76%	10.6%	166%	1.76%	294%
R193	587601.39	4804639.77	5.6%	46%	0.4%	52%	2.4%	47%	0.25%	88%	0.10%	0.10%	15%	22%	2.0%	14%	7.3%	10.1%	0.19%	1.5%	0.24%	11.3%	2.1%	2.1%	4.9%	4.9%	0.16%	24%	0.022%	76%	12.4%	167%	1.32%	294%
R194	587160.07	4805072.46	4.3%	44%	0.3%	52%	1.8%	46%	0.17%	88%	0.08%	0.08%	15%	22%	1.6%	13%	7.4%	10.3%	0.15%	1.4%	0.17%	11.2%	2.1%	2.1%	4.7%	4.7%	0.13%	24%	0.016%	76%	9.1%	164%	0.96%	293%
R195	587350.72	4804886.57	5.4%	46%	0.3%	52%	2.2%	47%	0.21%	88%	0.08%	0.08%	15%	22%	1.6%	13%	7.2%	10.0%	0.18%	1.5%	0.20%	11.2%	1.8%	1.8%	4.0%	4.0%	0.14%	24%	0.018%	76%	10.8%	166%	1.12%	294%
R196	586906.61	4804895.76	4.0%	44%	0.3%	52%	1.7%	46%	0.16%	88%	0.07%	0.07%	15%	22%	1.4%	13%	7.1%	10.0%	0.13%	1.4%	0.15%	11.2%	1.5%	1.5%	3.5%	3.5%	0.11%	24%	0.013%	76%	7.6%	163%	0.84%	293%
R197	587481.04	4806511.43	5.1%	45%	0.2%	52%	2.0%	47%	0.13%	88%	0.08%	0.08%	13%	21%	1.6%	13%	6.7%	9.6%	0.17%	1.5%	0.14%	11.1%	3.0%	3.0%	6.9%	6.9%	0.11%	24%	0.011%	76%	10.9%	166%	0.81%	293%
R198	587364.33	4806419.19	4.9%	45%	0.2%	52%	1.9%	47%	0.14%	88%	0.08%	0.08%	15%	22%	1.7%	13%	7.3%	10.2%	0.17%	1.5%	0.14%	11.2%	3.7%	3.7%	8.5%	8.5%	0.11%	24%	0.011%	76%	10.4%	165%	0.82%	293%
R199	587233.51	4806472.84	4.6%	45%	0.2%	52%	1.8%	46%	0.13%	88%	0.07%	0.07%	15%	22%	1.6%	13%	7.1%	9.9%	0.16%	1.4%	0.13%	11.1%	3.5%	3.5%	8.0%	8.0%	0.10%	24%	0.009%	76%	9.8%	165%	0.75%	293%
R200	587145.04	4806367.42	4.0%	44%	0.2%	52%	1.7%	46%	0.12%	88%	0.06%	0.06%	15%	22%	1.6%	13%	6.9%	9.8%	0.15%	1.4%	0.13%	11.1%	3.4%	3.4%	7.8%	7.8%	0.09%	24%	0.009%	76%	8.9%	164%	0.73%	293%
R201	587045.27	4806250.72	3.5%	44%	0.2%	52%	1.5%	46%	0.12%	88%	0.06%	0.06%	15%	22%	1.5%	13%	6.5%	9.3%	0.14%	1.4%	0.12%	11.1%	2.7%	2.7%	6.1%	6.1%	0.08%	24%	0.009%	76%	8.1%	163%	0.68%	293%
R202	586965.27	4806150.95	3.3%	43%	0.2%	52%	1.4%	46%	0.11%	88%	0.05%	0.05%	14%	21%	1.3%	13%	6.8%	9.6%	0.13%	1.4%	0.11%	11.1%	1.4%	1.4%	3.2%	3.2%	0.08%	24%	0.009%	76%	7.6%	163%	0.64%	293%
R203	587953.83	4806878.51	7.0%	47%	0.3%	52%	2.8%	47%	0.14%	88%	0.11%	0.11%	15%	22%	2.2%	14%	7.4%	10.3%	0.22%	1.5%	0.16%	11.2%	3.4%	3.4%	7.9%	7.9%	0.16%	24%	0.011%	76%	13.9%	169%	0.91%	293%
R204	588739.26	4807221.01	6.3%	46%	0.3%	52%	2.4%	47%	0.18%	88%	0.12%	0.12%	20%	27%	1.5%	13%	10.2%	13.1%	0.20%	1.5%	0.17%	11.2%	5.2%	5.2%	12.0%	12.0%	0.13%	24%	0.013%	76%	14.2%	169%	1.15%	294%
R205	588362.75	4807367.85	5.8%	46%	0.2%	52%	2.1%	47%	0.13%	88%	0.10%	0.10%	17%	24%	1.4%	13%	8.8%	11.6%	0.17%	1.5%	0.13%	11.1%	4.0%	4.0%	9.2%	9.2%	0.12%	24%	0.011%	76%	11.9%	167%	0.83%	293%
R206	588356.16	4807310.43	6.2%	46%	0.3%	52%	2.3%	47%	0.14%	88%	0.10%	0.10%	17%	24%	1.6%	13%	8.8%	11.7%	0.19%	1.5%	0.13%	11.1%	4.7%	4.7%	10.8%	10.8%	0.13%	24%	0.011%	76%	12.5%	168%	0.86%	293%
R207	588840.92	4807474.22	6.8%	47%	0.3%	52%	2.3%	47%	0.16%	88%	0.11%	0.11%	21%	28%	1.8%	14%	10.9%	13.7%	0.17%	1.5%	0.16%	11.2%	4.1%	4.1%	9.4%	9.4%	0.13%	24%	0.013%	76%	11.8%	167%	1.04%	294%
R208	588523.06	4807632.25	4.9%	45%	0.2%	52%	1.6%	46%	0.12%	88%	0.08%	0.08%	17%	25%	1.2%	13%	9.1%	11.9%	0.12%	1.4%	0.13%	11.1%	4.1%	4.1%	9.4%	9.4%	0.09%	24%	0.009%	76%	9.0%	164%	0.76%	293%
R209	588101.83	4807356.50	5.8%	46%	0.2%	52%	2.1%	47%	0.12%	88%	0.10%	0.10%	17%	24%	1.8%	14%	8.1%	11.0%	0.19%	1.5%	0.12%	11.1%	4.2%	4.2%	9.7%	9.7%	0.12%	24%	0.009%	76%	11.6%	167%	0.76%	293%
R210	587963.42	4807222.88	7.6%	48%	0.2%	52%	2.6%	47%	0.12%	88%	0.12%	0.12%	16%	23%	2.1%	14%	8.7%	11.6%	0.21%	1.5%	0.13%	11.1%	4.2%	4.2%	9.6%	9.6%	0.15%	24%	0.009%	76%	13.8%	169%	0.77%	293%
R211	588020.22	4807483.72	5.4%	46%	0.2%	52%	1.9%	47%	0.11%	88%	0.09%	0.09%	16%	24%	1.6%	13%	8.0%	10.8%	0.17%	1.5%	0.11%	11.1%	4.1%	4.1%	9.4%	9.4%	0.11%	24%	0.009%	76%	10.8%	166%	0.67%	293%
R212	587973.02	4807409.31	5.4%	46%	0.2%	52%	1.9%	47%	0.11%	88%	0.09%	0.09%	16%	23%	1.8%	14%	8.2%	11.0%	0.19%	1.5%	0.11%	11.1%	3.8%	3.8%	8.9%	8.9%	0.11%	24%	0.009%	76%	10.9%	166%	0.69%	293%
R213	587929.81	4807367.70	6.2%	46%	0.2%	52%	2.2%	47%	0.11%	88%	0.10%	0.10%	16%	23%	1.9%	14%	8.5%	11.3%	0.19%	1.5%	0.11%	11.1%	3.4%	3.4%	8.0%	8.0%	0.12%	24%	0.009%	76%	11.6%	167%	0.70%	293%
R214	587881.00	4807330.90	6.9%	47%	0.2%	52%	2.4%	47%	0.11%	88%	0.11%	0.11%	16%	23%	2.0%	14%	8.6%	11.4%	0.20%	1.5%	0.12%	11.1%	3.7%	3.7%	8.6%	8.6%	0.13%	24%	0.009%	76%	12.5%	168%	0.70%	293%
R215	587840.20	4807286.09	7.2%	47%	0.2%	52%	2.5%	47%	0.11%	88%	0.11%	0.11%	16%	23%	2.0%	14%	8.4%	11.2%	0.20%	1.5%	0.12%	11.1%	4.0%	4.0%	9.2%	9.2%	0.14%	24%	0.009%	76%	13.0%	168%	0.71%	293%
R216	587785.68	4807211.86	6.8%	47%	0.2%	52%	2.4%	47%	0.12%	88%	0.11%	0.11%	16%	23%	2.0%	14%	7.5%	10.4%	0.20%	1.5%	0.12%	11.1%	3.9%	3.9%	9.0%	9.0%	0.13%	24%	0.009%	76%	12.8%	168%	0.72%	293%
R217	587928.62	4807557.92	5.1%	45%	0.2%	52%	1.8%	46%	0.10%	88%	0.08%	0.08%	16%	23%	1.5%	13%	7.7%	10.6%	0.16%	1.4%	0.11%	11.1%	3.8%	3.8%	8.9%	8.9%	0.10%	24%	0.007%	76%	10.1%	165%	0.61%	293%
R218	587806.32	4807435.62	5.9%	46%	0.2%	52%	2.1%	47%	0.10%	88%	0.09%	0.09%	16%	23%	1.8%	14%	8.3%	11.1%	0.19%	1.5%	0.11%	11.1%	3.1%	3.1%	7.0%	7.0%	0.11%	24%	0.009%	76%	10.9%	166%	0.64%	293%
R219	587738.93	4807320.81	6.8%	47%	0.2%	52%	2.4%	47%	0.11%	88%	0.11%	0.11%	16%	23%	2.0%	14%	8.0%	10.8%	0.20%	1.5%	0.11%	11.1%	3.8%	3.8%	8.7%	8.7%	0.13%	24%	0.009%	76%	12.4%	167%	0.67%	293%
R220	587669.05	4807210.99	6.0%	46%	0.2%	52%	2.3%	47%	0.11%	88%	0.10%	0.10%	15%	22%	2.0%	14%	7.4%	10.2%	0.20%	1.5%	0.12%	11.1%	3.2%	3.2%	7.4%	7.4%	0.13%	24%	0.009%	76%	11.8%	167%	0.68%	293%
R221	587883.70	4807505.51	5.1%	45%	0.2%	52%	1.8%	46%	0.10%	88%	0.08%	0.08%	16%	23%	1.6%	13%	7.8%	10.7%	0.17%	1.5%	0.11%	11.1%	3.6%	3.6%	8.4%	8.4%	0.10%	24%	0.009%	76%	10.3%	165%	0.63%	293%
R222	591562.72	4806745.44	16.2%	56%	2.9%	54%	6.1%	51%	1.46%	89%	0.27%	0.27%	26%	33%	4.0%	16%	14.0%	16.9%	0.46%	1.7%	1.36%	12.4%	3.8%	3.8%	8.8%	8.8%	0.36%	24%	0.107%	76%	35.1%	190%	8.70%	301%
R223	591488.72	4806824.64	15.9%	56%	3.0%	55%	5.9%	51%	1.52%	89%	0.28%	0.28%	26%	33%	4.3%	16%	13.7%	16.6%	0.43%	1.7%	1.41%	12.4%	3.9%	3.9%	9.1%	9.1%	0.34%	24%	0.113%	76%	34.4%	189%	9.16%	302%
R224	591458.08	4806872.05	15.4%	56%	3.0%	55%	5.7%	50%	1.53%	89%	0.29%	0.29%	26%	33%	4.5%	16%	14.0%	16.8%	0.40%	1.7%	1.40%	12.4%	4.0%	4.0%	9.2%	9.2%	0.32%	24%	0.113%	76%	33.2%	188%	9.22%	302%
R225	591234.74	4806903.98	16.8%	57%	3.5%	55%	5.9%	51%	1.75%	90%	0.36%	0.36%	25%	32%	4.9%	17%	14.0%	16.9%	0.45%	1.7%	1.57%	12.6%	4.4%	4.4%	10.3%	10.3%	0.34%	24%	0.133%	76%	34.1%	189%	10.87%	303%
R226	591148.34	4807068.03	15.2%	55%	3.2%	55%	5.5%	50%	1.60%	90%	0.33%	0.33%	20%	27%	4.6%	16%	11.8%	14.7%	0.44%	1.7%	1.44%	12.4%	4.5%	4.5%	10.4%	10.4%	0.36%	24%	0.127%	76%	31.1%	186%	9.95%	302%
R227	591097.65	4807084.65	15.5%	56%	3.2%	55%	5.6%	50%	1.61%	90%	0.33%	0.33%	20%	27%	4.5%	16%	11.5%	14.3%	0.42%	1.7%	1.45%	12.5%	4.6%	4.6%	10.5%	10.5%	0.34%	24%	0.129%	76%	31.5%	187%	10.01%	303%
R228	591077.93	4807117.98	15.4%	55%	3.1%	55%	5.4%	50%	1.58%	90%	0.32%	0.32%	19%	26%	4.5%	16%	11.4%	14.3%	0.40%	1.7%	1.44%	12.4%	4.5%	4.5%	10.4%	10.4%	0.35%	24%	0.127%	76%	30.8%	186%	9.77%	302%
R229	590831.76	4807776.37	11.0%	51%	1.5%	53%	4.3%	49%	0.81%	89%	0.18%	0.18%	19%	27%	2.7%	14%	10.7%	13.6%	0.33%	1.6%	0.80%	11.8%	3.2%	3.2%	7.5%	7.5%	0.29%	24%	0.067%	76%	23.5%	179%	4.95%	297%
R230	590778.59	4807689.25	11.8%	52%	1.6%	53%	4.5%	49%	0.88%	89%	0.19%	0.19%	19%	26%	2.9%	15%	10.8%	13.7%	0.35%	1.6%	0.86%	11.9%	3.4%	3.4%	7.7%	7.7%	0.31%	24%	0.071%	76%	25.1%	180%	5.41%	298%
R231	591027.31	4806131.86	24.1%	64%	4.7%	56%	8.6%	53%	2.30%	90%	0.43%	0.43%	25%	32%	6.3%	18%	14.2%	17.0%	0.63%	1.9%	2.03%	13.0%	7.1%	7.1%	16.4%	16.4%	0.45%	24%	0.164%	76%	49.4%	204%	13.19%	306%
R232	591030.81	4806097.45	22.8%	63%	4.7%	56%	8.1%	53%	2.27%	90%	0.41%	0.41%	24%	31%	6.4%	18%	13.7%	16.5%	0.59%	1.9%	1.98%	13.0%	7.2%	7.2%	16.6%	16.6%	0.43%	24%	0.162%	76%	46.7%	202%	12.74%	305%
R233	591067.56	4806148.19	23.7%	64%	4.6%	56%	8.5%	53%	2.22%	90%	0.42%	0.42%	24%	31%	5.9%	18%	13.7%	16.6%	0.62%	1.9%	1.94%	13.0%	6.8%	6.8%	15.6%	15.6%	0.45%	24%	0.160%	76%	48.5%	204%	12.69%	305%
R234	591086.80	4806172.68	23.9%	64%	4.5%	56%	8.6%	53%	2.20%	90%	0.43%	0.43%	25%	32%	6.1%	18%	13.9%	16.8%	0.63%	1.9%	1.92%	12.9%	6.6%	6.6%	15.1%	15.1%	0.46%	24%	0.158%	76%	49.0%	204%	12.63%	305%
R235	591114.01	4806201.78	23.8%	64%	4.5%	56%	8.6%	53%	2.16%	90%	0.42%	0.42%	26%	33%	6.3%	18%	14.1%	16.9%	0.64%	1.9%	1.89%	12.9%	6.2%	6.2%	14.4%	14.4%	0.46%	24%	0.156%	76%	48.8%	204%	12.49%	305%
R236	591141.40	4806172.91	22.4%	63%	4.3%	56%	8.1%	53%	2.08%	90%	0.40%	0.40%	25%	32%	5.8%	18%	13.7%	16.5%	0.60%	1.9%	1.80%	12.8%	6.1%	6.1%	14.1%	14.1%	0.43%	24%	0.151%	76%	46.0%	201%	11.76%	304%
R237	591157.63	4806158.16	21.6%	62%	4.2%	56%	7.8%	52%	2.03%	90%	0.39%	0.39%	24%	31%	5.5%	17%	13.5%	16.3%	0.57%	1.9%	1.75%	12.8%	6.0%	6.0%	13.9%	13.9%	0.42%	24%	0.149%	76%	44.4%	199%	11.38%	304%
R238	591128.13	4806114.76	21.3%	61%	4.3%	56%	7.6%	52%	2.07%	90%	0.38%	0.38%	23%	30%	5.7%	18%	13.1%	16.0%	0.55%	1.8%	1.78%	12.8%	6.4%	6.4%	14.7%	14.7%	0.40%	24%	0.151%	76%	43.3%	198%	11.41%	304%
R239	591082.85	4806229.12	25.4%	66%	4.7%	56%	9.2%	54%	2.28%	90%	0.45%	0.45%	26%	33%	6.5%	18%	14.3%	17.1%	0.68%	2.0%	2.01%	13.0%	6.4%	6.4%	14.8%	14.8%	0.49%	24%	0.164%	76%	52.1%	207%	13.41%	306%
R240	591226.62	4806240.49	22.0%	62%	4.0%	56%	8.0%	53%	1.94%	90%	0.39%	0.39%	26%	34%	6.1%	18%	14.0%	16.8%	0.61%	1.9%	1.68%	12.7%	5.5%	5.5%	12.7%	12.7%	0.43%	24%	0.142%	76%	45.3%	200%	11.09%	304%
R241	591288.65	4806809.41	19.6%	60%	3.6%	55%	7.0%	52%	1.80%	90%	0.37%	0.37%	27%	34%	5.2%	17%	14.6%	17.5%	0.50%	1.8%	1.63%	12.6%	4.4%	4.4%	10.1%	10.1%	0.40%	24%	0.136%	76%	40.5%	196%	11.09%	304%
R242	591139.67	4806634.66	24.2%	64%	4.4%	56%	9.2%	54%	2.24%	90%	0.42%	0.42%	36%	43%	6.2%	18%	17.4%	20.3%	0.63%	1.9%	2.05%	13.1%	5.1%	5.1%	11.6%	11.6%	0.56%	24%	0.162%	76%	49.3%	204%	13.82%	306%
R243	591293.92	4806466.25	23.5%	64%	3.9%	56%	8.3%	53%	1.95%	90%	0.42%	0.42%	29%	36%	5.1%	17%	15.4%	18.3%	0.60%	1.9%	1.76%	12.8%	4.8%	4.8%	11.1%	11.1%	0.45%	24%	0.142%	76%	48.0%	203%	11.71%	304%
R244	589444.27	4806626.99	18.0%	58%	1.7%	53%	6.6%	51%	0.78%	89%	0.35%	0.35%	27%	34%	3.4%	15%	14.8%	17.7%	0.47%	1.8%	0.64%	11.7%	8.9%	8.9%	20.5%	20.5%	0.36%	24%	0.067%	76%	40.5%	196%	5.44%	298%
R245	589367.00	4806705.19	15.2%	55%	1.2%	53%	5.6%	50%	0.56%	88%	0.29%	0.29%	26%	33%	2.9%	15%	14.0%	16.9%	0.41%	1.7%	0.50%	11.5%	8.3%	8.3%	19.2%	19.2%	0.31%	24%	0.047%	76%	34.2%	189%	3.87%	296%
R246	588976.44	4806919.73	9.4%	49%	0.5%	52%	3.6%	48%	0.27%	88%	0.18%	0.18%	21%	28%	2.3%	14%	12.8%	15.6%	0.29%	1.6%	0.26%	11.3%	6.7%	6.7%	15.4%	15.4%	0.19%	24%	0.022%	76%	21.4%	176%	1.79%	294%
R247	588915.70	4806868.25	9.7%	50%	0.5%	52%	3.6%	48%	0.27%	88%	0.18%	0.18%	20%	27%	2.5%	14%	11.2%	14.1%	0.29%	1.6%	0.25%	11.3%	6.2%	6.2%	14.3%	14.3%	0.20%	24%	0.022%	76%	21.5%	176%	1.77%	294%
R248	588997.02	4807016.50	8.6%	49%	0.5%	52%	3.2%	48%	0.25%	88%	0.16%	0.16%	22%	29%	1.9%	14%	11.3%	14.1%	0.26%	1.5%	0.23%	11.2%	6.4%	6.4%	14.7%	14.7%	0.17%	24%	0.020%	76%	19.6%	175%	1.66%	294%
R249	591337.39	4806901.37	16.4%	56%	3.3%	55%	5.8%	50%	1.64%	90%	0.34%	0.34%	25%	32%	4.8%	17%	13.8%	16.6%	0.43%	1.7%	1.48%	12.5%	4.2%	4.2%	9.6%	9.6%	0.33%	24%	0.124%	76%	33.8%	189%	10.07%	303%
R250	591086.06	4807216.91	14.3%	54%	2.8%	54%	5.1%	50%	1.43%	89%	0.28%	0.28%	21%	28%	4.0%	16%	11.7%	14.6%	0.38%	1.7%	1.33%	12.3%	4.3%	4.3%	9.9%	9.9%	0.34%	24%	0.118%	76%	28.0%	183%	8.72%	301%

Percentages of Criteria at Sensitive Receptors (Scenario A)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			45.2%	85.3%	8.4%	60.0%	15.2%	59.8%	4.0%	92.0%	0.8%	0.8%	56.9%	64.1%	10.7%	22.5%	27.4%	30.3%	0.9%	2.2%	3.6%	14.6%	33.4%	33.4%	63.9%	63.9%	0.9%	24.7%	0.3%	76.3%	90.3%	245.3%	27.1%	319.6%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R251	590926.50	4807386.35	13.6%	54%	2.3%	54%	4.9%	49%	1.24%	89%	0.26%	0.26%	20%	28%	3.3%	15%	11.5%	14.4%	0.35%	1.6%	1.20%	12.2%	3.6%	3.6%	8.4%	8.4%	0.30%	24%	0.102%	76%	25.7%	181%	7.56%	300%
R252	590969.19	4806836.93	19.7%	60%	4.4%	56%	7.0%	52%	2.15%	90%	0.40%	0.40%	27%	34%	5.8%	18%	14.9%	17.8%	0.54%	1.8%	1.90%	12.9%	5.0%	5.0%	11.5%	11.5%	0.41%	24%	0.167%	76%	41.0%	196%	13.82%	306%
R253	590905.98	4807178.59	15.9%	56%	3.1%	55%	5.5%	50%	1.59%	90%	0.31%	0.31%	20%	27%	4.0%	16%	10.8%	13.6%	0.39%	1.7%	1.50%	12.5%	4.0%	4.0%	9.2%	9.2%	0.39%	24%	0.131%	76%	31.2%	186%	9.86%	302%
R254	590899.10	4807138.17	16.4%	57%	3.2%	55%	5.7%	50%	1.67%	90%	0.32%	0.32%	21%	28%	4.1%	16%	11.4%	14.2%	0.40%	1.7%	1.56%	12.6%	4.0%	4.0%	9.3%	9.3%	0.41%	24%	0.138%	76%	32.3%	187%	10.35%	303%
R255	590956.66	4807071.56	16.5%	57%	3.4%	55%	5.7%	50%	1.73%	90%	0.32%	0.32%	24%	31%	4.5%	16%	13.1%	15.9%	0.42%	1.7%	1.57%	12.6%	4.0%	4.0%	9.3%	9.3%	0.41%	24%	0.142%	76%	32.1%	187%	10.73%	303%
R256	590997.27	4807177.52	15.4%	55%	3.0%	55%	5.4%	50%	1.54%	89%	0.30%	0.30%	19%	26%	3.9%	16%	11.1%	13.9%	0.39%	1.7%	1.43%	12.4%	3.9%	3.9%	8.9%	8.9%	0.38%	24%	0.124%	76%	29.9%	185%	9.50%	302%
R257	590917.52	4807307.02	14.4%	55%	2.6%	54%	5.0%	50%	1.36%	89%	0.28%	0.28%	20%	27%	3.5%	15%	11.4%	14.3%	0.36%	1.6%	1.31%	12.3%	3.8%	3.8%	8.7%	8.7%	0.32%	24%	0.111%	76%	27.0%	182%	8.36%	301%
R258	590878.48	4807357.84	14.0%	54%	2.4%	54%	5.0%	50%	1.29%	89%	0.27%	0.27%	21%	28%	3.3%	15%	11.8%	14.6%	0.35%	1.6%	1.25%	12.3%	3.7%	3.7%	8.6%	8.6%	0.31%	24%	0.107%	76%	27.0%	182%	7.93%	300%
R259	590956.33	4807370.47	13.6%	54%	2.4%	54%	4.8%	49%	1.25%	89%	0.26%	0.26%	20%	27%	3.4%	15%	11.5%	14.4%	0.35%	1.6%	1.21%	12.2%	3.6%	3.6%	8.3%	8.3%	0.30%	24%	0.102%	76%	25.6%	181%	7.64%	300%
R260	591082.58	4807189.52	14.6%	55%	2.9%	54%	5.2%	50%	1.47%	89%	0.29%	0.29%	20%	27%	4.2%	16%	11.7%	14.5%	0.39%	1.7%	1.36%	12.4%	4.4%	4.4%	10.1%	10.1%	0.35%	24%	0.120%	76%	28.8%	184%	9.01%	302%
R261	591071.70	4806646.35	25.3%	65%	4.8%	56%	9.5%	54%	2.38%	90%	0.47%	0.47%	35%	43%	6.7%	18%	17.5%	20.4%	0.65%	1.9%	2.16%	13.2%	5.3%	5.3%	12.2%	12.2%	0.57%	24%	0.176%	76%	51.7%	207%	15.00%	307%
R262	591035.97	4806582.50	29.3%	69%	5.3%	57%	10.5%	55%	2.63%	91%	0.52%	0.52%	34%	41%	6.8%	19%	17.5%	20.4%	0.68%	2.0%	2.36%	13.4%	5.6%	5.6%	12.9%	12.9%	0.61%	24%	0.191%	76%	60.2%	215%	16.79%	309%
R263	591117.31	4806692.72	22.6%	63%	4.3%	56%	8.7%	53%	2.19%	90%	0.43%	0.43%	36%	43%	6.3%	18%	17.3%	20.2%	0.61%	1.9%	2.00%	13.0%	5.0%	5.0%	11.6%	11.6%	0.52%	24%	0.162%	76%	46.2%	201%	13.61%	306%
R264	591236.66	4806622.03	23.7%	64%	4.1%	56%	8.8%	53%	2.06%	90%	0.38%	0.38%	32%	39%	5.5%	17%	16.4%	19.2%	0.60%	1.9%	1.89%	12.9%	4.8%	4.8%	11.0%	11.0%	0.52%	24%	0.149%	76%	48.7%	204%	12.61%	305%
R265	591210.05	4806550.57	25.2%	65%	4.3%	56%	9.1%	54%	2.17%	90%	0.42%	0.42%	33%	40%	5.5%	17%	16.7%	19.6%	0.61%	1.9%	1.99%	13.0%	4.9%	4.9%	11.4%	11.4%	0.52%	24%	0.156%	76%	51.8%	207%	13.27%	306%
R266	591169.76	4806533.85	27.0%	67%	4.6%	56%	9.6%	54%	2.30%	90%	0.45%	0.45%	32%	39%	5.9%	18%	16.7%	19.5%	0.63%	1.9%	2.09%	13.1%	5.2%	5.2%	12.0%	12.0%	0.55%	24%	0.167%	76%	55.5%	210%	14.20%	307%
R267	591055.32	4806496.37	31.8%	72%	5.5%	57%	11.0%	56%	2.72%	91%	0.54%	0.54%	31%	38%	7.1%	19%	16.9%	19.8%	0.69%	2.0%	2.43%	13.4%	5.8%	5.8%	13.3%	13.3%	0.62%	24%	0.196%	76%	65.2%	220%	17.28%	310%
R268	590945.40	4806605.50	30.4%	71%	5.8%	57%	10.8%	55%	2.85%	91%	0.56%	0.56%	33%	40%	7.4%	19%	17.5%	20.4%	0.73%	2.0%	2.52%	13.5%	5.7%	5.7%	13.2%	13.2%	0.64%	25%	0.211%	76%	62.0%	217%	18.58%	311%
R269	591153.86	4805932.23	20.2%	60%	4.5%	56%	6.6%	51%	2.03%	90%	0.32%	0.32%	23%	31%	5.4%	17%	12.5%	15.3%	0.52%	1.8%	1.61%	12.6%	6.8%	6.8%	15.6%	15.6%	0.35%	24%	0.153%	76%	34.1%	189%	9.89%	302%
R270	591173.01	4806086.35	20.6%	61%	4.1%	56%	7.0%	52%	1.97%	90%	0.35%	0.35%	23%	30%	5.4%	17%	12.8%	15.7%	0.54%	1.8%	1.67%	12.7%	6.1%	6.1%	14.2%	14.2%	0.38%	24%	0.144%	76%	39.6%	195%	10.58%	303%
R271	590883.45	4806059.73	28.5%	69%	5.3%	57%	9.5%	54%	2.61%	91%	0.46%	0.46%	25%	33%	7.7%	19%	14.6%	17.5%	0.64%	1.9%	2.34%	13.4%	8.3%	8.3%	19.0%	19.0%	0.51%	24%	0.184%	76%	51.7%	207%	15.15%	308%
R272	591084.23	4806254.79	26.0%	66%	4.7%	56%	9.4%	54%	2.31%	90%	0.47%	0.47%	26%	33%	6.4%	18%	14.1%	17.0%	0.70%	2.0%	2.05%	13.1%	6.3%	6.3%	14.6%	14.6%	0.50%	24%	0.167%	76%	53.4%	208%	13.77%	306%
R273	591110.44	4806235.73	24.7%	65%	4.5%	56%	9.0%	54%	2.21%	90%	0.44%	0.44%	25%	32%	6.4%	18%	14.1%	17.0%	0.67%	2.0%	1.95%	13.0%	6.2%	6.2%	14.3%	14.3%	0.48%	24%	0.160%	76%	50.8%	206%	12.98%	305%
R274	591154.50	4806189.68	22.4%	63%	4.3%	56%	8.2%	53%	2.06%	90%	0.40%	0.40%	25%	32%	5.9%	18%	13.8%	16.6%	0.61%	1.9%	1.79%	12.8%	6.0%	6.0%	13.8%	13.8%	0.43%	24%	0.149%	76%	46.1%	201%	11.72%	304%
R275	591271.28	4806254.56	21.4%	62%	3.8%	55%	7.8%	52%	1.86%	90%	0.38%	0.38%	27%	34%	5.9%	18%	13.9%	16.8%	0.59%	1.9%	1.61%	12.6%	5.3%	5.3%	12.2%	12.2%	0.42%	24%	0.136%	76%	44.2%	199%	10.56%	303%
R276	591515.74	4806421.68	18.8%	59%	3.0%	55%	6.9%	52%	1.48%	89%	0.33%	0.33%	28%	35%	5.3%	17%	13.7%	16.6%	0.53%	1.8%	1.31%	12.3%	4.3%	4.3%	9.8%	9.8%	0.38%	24%	0.109%	76%	39.0%	194%	8.45%	301%
R277	591462.49	4806297.83	19.1%	59%	3.1%	55%	6.9%	52%	1.52%	89%	0.33%	0.33%	28%	35%	5.5%	17%	13.9%	16.7%	0.53%	1.8%	1.31%	12.3%	4.6%	4.6%	10.6%	10.6%	0.37%	24%	0.113%	76%	38.7%	194%	8.48%	301%
R278	591626.91	4806044.49	15.8%	56%	2.7%	54%	5.6%	50%	1.30%	89%	0.24%	0.24%	30%	38%	4.6%	16%	13.8%	16.7%	0.43%	1.7%	1.07%	12.1%	4.8%	4.8%	11.1%	11.1%	0.29%	24%	0.098%	76%	27.7%	183%	6.43%	299%
R279	591566.46	4805968.10	16.0%	56%	3.0%	55%	5.5%	50%	1.39%	89%	0.25%	0.25%	26%	33%	4.3%	16%	12.2%	15.1%	0.42%	1.7%	1.11%	12.1%	5.5%	5.5%	12.7%	12.7%	0.29%	24%	0.104%	76%	27.2%	182%	6.69%	299%
R280	591514.80	4806050.53	17.6%	58%	3.1%	55%	6.0%	51%	1.44%	89%	0.27%	0.27%	26%	33%	4.6%	16%	12.9%	15.7%	0.45%	1.7%	1.19%	12.2%	5.3%	5.3%	12.2%	12.2%	0.32%	24%	0.109%	76%	30.8%	186%	7.24%	300%
R281	591496.67	4806080.21	17.8%	58%	3.1%	55%	6.2%	51%	1.46%	89%	0.28%	0.28%	26%	34%	4.6%	16%	13.1%	16.0%	0.45%	1.7%	1.21%	12.2%	5.3%	5.3%	12.1%	12.1%	0.32%	24%	0.109%	76%	31.7%	187%	7.44%	300%
R282	591515.90	4805960.41	16.7%	57%	3.2%	55%	5.6%	50%	1.45%	89%	0.26%	0.26%	24%	32%	4.3%	16%	12.0%	14.9%	0.43%	1.7%	1.16%	12.2%	5.6%	5.6%	12.9%	12.9%	0.29%	24%	0.111%	76%	28.1%	183%	7.00%	299%
R283	591574.70	4805918.10	15.5%	56%	3.0%	55%	5.2%	50%	1.38%	89%	0.24%	0.24%	26%	33%	4.2%	16%	12.4%	15.2%	0.41%	1.7%	1.08%	12.1%	5.7%	5.7%	13.1%	13.1%	0.28%	24%	0.107%	76%	25.7%	181%	6.53%	299%
R284	591633.50	4805907.11	14.6%	55%	2.9%	54%	5.0%	50%	1.31%	89%	0.24%	0.24%	25%	32%	4.1%	16%	12.1%	14.9%	0.39%	1.7%	1.03%	12.0%	5.6%	5.6%	12.9%	12.9%	0.27%	24%	0.100%	76%	24.9%	180%	6.18%	299%
R285	591700.55	4805960.96	14.2%	54%	2.7%	54%	4.9%	50%	1.24%	89%	0.23%	0.23%	24%	31%	3.9%	16%	11.6%	14.4%	0.39%	1.7%	0.99%	12.0%	5.3%	5.3%	12.2%	12.2%	0.27%	24%	0.096%	76%	25.0%	180%	5.96%	298%
R286	591754.40	4805913.15	13.3%	53%	2.6%	54%	4.8%	49%	1.18%	89%	0.23%	0.23%	22%	29%	3.8%	16%	11.0%	13.9%	0.37%	1.7%	0.93%	11.9%	5.5%	5.5%	12.8%	12.8%	0.26%	24%	0.091%	76%	24.1%	179%	5.59%	298%
R287	591656.03	4806002.72	14.8%	55%	2.7%	54%	5.2%	50%	1.27%	89%	0.24%	0.24%	29%	37%	4.4%	16%	13.4%	16.3%	0.41%	1.7%	1.03%	12.0%	5.1%	5.1%	11.7%	11.7%	0.28%	24%	0.096%	76%	25.9%	181%	6.19%	299%
R288	591807.92	4805987.25	13.3%	53%	2.4%	54%	4.7%	49%	1.14%	89%	0.22%	0.22%	22%	29%	3.6%	15%	11.0%	13.9%	0.37%	1.7%	0.92%	11.9%	5.1%	5.1%	11.7%	11.7%	0.25%	24%	0.087%	76%	23.8%	179%	5.51%	298%
R289	592160.67	4804305.92	7.4%	48%	0.5%	52%	2.7%	47%	0.25%	88%	0.11%	0.11%	22%	29%	2.2%	14%	11.3%	14.1%	0.22%	1.5%	0.23%	11.2%	7.9%	7.9%	18.3%	18.3%	0.14%	24%	0.020%	76%	12.9%	168%	1.27%	294%
R290	591994.34	4804188.62	10.0%	50%	0.5%	52%	3.4%	48%	0.25%	88%	0.14%	0.14%	25%	32%	2.5%	14%	12.7%	15.5%	0.25%	1.5%	0.23%	11.2%	8.5%	8.5%	19.6%	19.6%	0.19%	24%	0.020%	76%	15.0%	170%	1.26%	294%
R291	591920.81	4804129.09	10.5%	51%	0.5%	52%	3.6%	48%	0.25%	88%	0.15%	0.15%	27%	34%	2.8%	15%	13.7%	16.5%	0.27%	1.6%	0.23%	11.2%	8.1%	8.1%	18.6%	18.6%	0.20%	24%	0.020%	76%	15.8%	171%	1.26%	294%
R292	591854.27	4804059.05	11.3%	51%	0.5%	52%	3.9%	49%	0.25%	88%	0.17%	0.17%	31%	38%	2.9%	15%	15.5%	18.4%	0.28%	1.6%	0.22%	11.2%	8.6%	8.6%	19.8%	19.8%	0.22%	24%	0.020%	76%	16.7%	172%	1.24%	294%
R293	591767.05	4803967.41	8.8%	49%	0.5%	52%	3.0%	48%	0.24%	88%	0.13%	0.13%	29%	36%	2.1%	14%	14.6%	17.4%	0.21%	1.5%	0.22%	11.2%	7.6%	7.6%	17.5%	17.5%	0.16%	24%	0.018%	76%	14.1%	169%	1.21%	294%
R294	591339.02	4803835.11	9.3%	49%	0.4%	52%	3.3%	48%	0.23%	88%	0.14%	0.14%	25%	33%	2.6%	14%	13.0%	15.9%	0.25%	1.5%	0.21%	11.2%	8.0%	8.0%	18.3%	18.3%	0.18%	24%	0.018%	76%	14.3%	169%	1.23%	294%
R295	590844.25	4803738.73	6.5%	47%	0.4%	52%	2.0%	47%	0.21%	88%	0.09%	0.09%	18%	25%	1.8%	14%	9.1%	11.9%	0.18%	1.5%	0.19%	11.2%	6.0%	6.0%	13.8%	13.8%	0.11%	24%	0.016%	76%	9.4%	164%	1.14%	294%
R296	590246.67	4803815.84	6.5%	47%	0.5%	52%	2.0%	47%	0.25%	88%	0.14%	0.14%	17%	24%	2.8%	15%	8.7%	11.6%	0.22%	1.5%	0.22%	11.2%	4.2%	4.2%	9.6%	9.6%	0.11%	24%	0.020%	76%	10.8%	166%	1.26%	294%
R297	589925.40	4804008.60	7.3%	47%	0.7%	52%	2.2%	47%	0.32%	88%	0.17%	0.17%	18%	25%	2.3%	14%	9.5%	12.3%	0.21%	1.5%	0.27%	11.3%	3.7%	3.7%	8.6%	8.6%	0.13%	24%	0.024%	76%	11.3%	166%	1.58%	294%
R298	590548.68	4803764.43	7.4%	48%	0.4%	52%	2.1%	47%	0.22%	88%	0.12%	0.12%	18%	25%	2.6%	14%	9.4%	12.2%	0.20%	1.5%	0.20%	11.2%	5.0%	5.0%	11.5%	11.5%	0.10%	24%	0.018%	76%	9.0%	164%	1.18%	294%
R299	591101.27	4803770.86	6.9%	47%	0.4%	52%	2.6%	47%	0.21%	88%	0.11%	0.11%	21%	28%	2.4%	14%	10.5%	13.3%	0.22%	1.5%	0.19%	11.2%	7.1%	7.1%	16.4%	16.4%	0.14%	24%	0.016%	76%	11.5%	167%	1.14%	294%
R300	591551.06	4803860.81	8.2%	48%	0.5%	52%	2.8%	47%	0.24%	88%	0.11%	0.11%	28%	35%	2.7%	14%	14.7%	17.6%	0.25%	1.5%	0.22%	11.2%	8.3%	8.3%	19.0%	19.0%	0.15%	24%	0.018%	76%	12.1%	167%	1.23%	294%
R301	586572.95	4805620.11	3.2%	43%	0.2%	52%	1.4%	46%	0.11%	88%	0.05%	0.05%	14%	21%	1.0%	13%	6.8%	9.6%	0.10%	1.4%	0.10%	11.1%	1.7%	1.7%	3.8%	3.8%	0.10%	24%	0.009%	76%	6.7%	162%	0.60%	293%
R302	588597.17	4808143.62	4.6%	45%	0.2%	52%	1.7%	46%	0.10%	88%	0.08%	0.08%	17%	24%	1.5%	13%	8.8%	11.7%	0.15%	1.4%	0.10%	11.1%	3.6%	3.6%	8.3%	8.3%	0.11%	24%	0.007%	76%	8.4%	163%	0.60%	293%
R303	588982.92	4808143.62	6.3%	46%	0.2%	52%	2.4%	47%	0.13%	88%	0.11%	0.11%	20%	27%	1.9%	14%	10.4%	13.3%	0.20%	1.5%	0.12%	11.1%	3.9%	3.9%	9.1%	9.1%	0.13%	24%	0.009%	76%	11.6%	167%	0.77%	293%
R304	589386.61	4808125.68	7.8%	48%	0.3%	52%	2.9%	48%	0.17%	88%	0.15%	0.15%	20%	27%	2.4%	14%	10.5%	13.4%	0.25%	1.5%	0.18%	11.2%	3.0%	3.0%	6.9%	6.9%	0.16%	24%	0.013%	76%	14.0%	169%	1.07%	294%
R305	589772.36	4808125.68	7.8%	48%	0.4%	52%	2.6%	47%	0.24%	88%	0.15%	0.15%	19%	27%	2.7%	14%	9.7%	12.5%	0.24%	1.5%	0.24%	11.3%	3.0%	3.0%	6.8%	6.8%	0.15%	24%	0.020%	76%	14.2%	169%	1.50%	294%
R306	590143.84	4808204.91	9.1%	49%	0.6%	52%	3.5%	48%	0.34%	88%	0.15%	0.15%	18%	25%	2.2%	14%	9.5%	12.4%	0.29%	1.6%	0.32%	11.3%	2.8%	2.8%	6.5%	6.5%	0.20%	24%	0.029%	76%	18.1%	173%	2.07%	295%
R307	590552.82	4808089.80	9.4%	50%	1.0%	53%	3.7%	48%	0.56%	88%	0.15%	0.15%	18%	25%	3.1%	15%	10.9%	13.8%	0.29%	1.6%	0.53%	11.5%	2.9%	2.9%	6.8%	6.8%	0.21%	24%	0.049%	76%	19.6%	175%	3.38%	296%
R308	590893.72	4808098.77	8.8%	49%	1.1%	53%	3.7%	48%	0.60%	89%	0.14%	0.14%	22%	29%	2.5%	14%	10.7%	13.5%	0.29%	1.6%	0.58%	11.6%	3.0%	3.0%	6.9%	6.9%	0.26%	24%	0.051%	76%	18.4%	173%	3.56%	296%
R309	591315.35	4808107.74	9.6%	50%	1.1%	53%	3.8%	48%	0.62%	89%	0.15%	0.15%	22%	29%	2.6%	14%	10.2%	13.1%	0.27%	1.6%	0.61%	11.6%	3.3%	3.3%	7.6%	7.6%	0.22%	24%	0.051%	76%	19.5%	175%	3.58%	296%
R310	588292.16	4808027.00	4.3%	44%	0.2%	52%	1.5%	46%	0.09%	88%	0.06%	0.06%	17%	24%	1.2%	13%	8.6%	11.5%	0.11%	1.4%	0.10%	11.1%	2.7%	2.7%	6.3%	6.3%	0.09%	24%	0.007%	76%	7.7%	163%	0.57%	293%
R311	587448.90	4807829.64	3.1%	43%	0.1%	52%	1.1%	46%	0.07%	88%	0.05%	0.05%	13%	20%	1.1%	13%	6.3%	9.2%	0.11%	1.4%	0.07%	11.1%	2.4%	2.4%	5.6%	5.6%	0.06%	24%	0.004%	76%	6.2%	161%	0.38%	293%
R312	587054.18	4807578.46	3.7%	44%	0.1%	52%	1.6%	46%	0.07%	88%	0.06%	0.06%	12%	19%	1.4%	13%	5.9%	8.8%	0.14%	1.4%	0.07%	11.1%	2.2%	2.2%	5.0%	5.0%	0.09%	24%	0.004%	76%	7.8%	163%	0.40%	293%
R313	586874.76	4807085.06	3.6%	44%	0.1%	52%	1.6%	46%	0.08%	88%	0.07%	0.07%	12%	19%	1.2%	13%	6.1%	9.0%	0.12%	1.4%	0.09%	11.1%	2.5%	2.5%	5.9%	5.9%	0.10%	24%	0.007%	76%	7.4%	162%	0.50%	293%
R314	588417.75	4803810.68	4.4%	45%	0.5%	52%	1.9%	46%	0.29%	88%	0.09%	0.09%	15%	22%	1.6%	13%	7.8%	10.6%	0.14%	1.4%	0.29%	11.3%	2.2%	2.2%	5.0%	5.0%	0.11%	24%	0.022%	76%	8.9%	164%	1.58%	294%
R315	589027.77	4803801.71	5.3%	45%	0.5%	52%	1.9%	47%	0.28%	88%	0.12%	0.12%	16%	23%	2.0%	14%	7.9%	10.8%	0.17%	1.5%	0.28%	11.3%	2.3%	2.3%	5.3%	5.3%	0.11%	24%	0.020%	76%	10.1%	165%	1.52%	294%
R316	589467.35	4803774.80	5.4%	46%	0.5%	52%	2.1%	47%	0.25%	88%	0.09%	0.09%	14%	22%	1.6%	13%	7.9%	10.8%	0.18%	1.5%	0.23%	11.2%	2.3%	2.3%	5.4%	5.4%	0.12%	24%	0.018%	76%	12.0%	167%	1.28%	294%
R317	587852.59	4804052.90	4.9%	45%	0.4%	52%	1.9%	46%	0.26%	88%	0.08%	0.08%	15%	22%	1.8%	14%	7.1%	10.0%	0.16%	1.4%	0.25%	11.3%	1.9%	1.9%	4.4%	4.4%	0.13%	24%	0.020%	76%	8.6%	164%	1.35%	294%
R318	591979.19	4808062.88	6.5%	47%	1.0%	53%	2.5%	47%	0.53%	88%	0.12%	0.12%	13%	20%	2.2%	14%	6.9%	9.8%	0.20%	1.5%	0.54%	11.5%	2.0%	2.0%	4.7%	4.7%	0.13%	24%	0.042%	76%	11.8%	167%	3.03%	296%
R319	592965.99	4804689.83	4.5%	45%	0.4%	52%	1.6%	46%	0.21%	88%	0.07%	0.07%	12%	20%	1.5%	13%	6.0%	8.9%	0.13%	1.4%	0.20%	11.2%	4.1%	4.1%	9.4%	9.4%	0.09%	24%	0.016%	76%	6.6%	162%	1.08%	294%
R320	592903.19	4804447.62	4.0%	44%	0.4%	52%	1.4%	46%	0.19%	88%	0.06%	0.06%	12%	20%	1.4%	13%	6.1%	8.9%	0.12%	1.4%	0.18%	11.2%	4.0%	4.0%	9.3%	9.3%	0.08%	24%	0.016%	76%	6.2%	161%	0.98%	293%
R321	589917.34	4807771.52	10.3%	50%	0.8%	52%	3.7%	48%	0.39%	88%	0.20%	0.20%	20%	27%	3.1%	15%	11.8%	14.6%	0.30%	1.6%	0.36%	11.4%	3.4%	3.4%	7.9%	7.9%	0.22%	24%	0.033%	76%	20.6%	176%	2.50%	295%
R322	589928.61	4808104.27	8.0%	48%	0.5%	52%	3.0%	48%	0.29%	88%	0.14%	0.14%	19%	26%	2.8%	15%	10.1%	13.0%	0.25%	1.5%	0.28%	11.3%	3.1%	3.1%	7.2%	7.2%	0.16%	24%	0.024%	76%	16.3%	171%	1.80%	294%
R323	590196.67	4807870.35	11.4%	52%	1.0%	53%	4.3%	49%	0.52%	88%	0.19%	0.19%	18%	25%	2.7%	14%	12.3%	15.1%	0.34%	1.6%	0.49%	11.5%	3.4%	3.4%	7.9%	7.9%	0.25%	24%	0.044%	76%	23.7%	179%	3.22%	296%

Percentages of Criteria at Sensitive Receptors (Scenario B)

			TSP				PM$_{2.5}$				RCS		NO$_2$				SO$_2$						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m^3)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			52.0%	92.1%	9.9%	61.5%	16.1%	60.7%	4.5%	92.4%	0.8%	0.8%	43.6%	50.8%	11.2%	23.0%	28.9%	31.8%	1.0%	2.3%	3.9%	14.9%	42.4%	42.4%	54.7%	54.7%	0.9%	24.8%	0.3%	76.3%	90.1%	245.1%	28.7%	321.2%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R1	590428.52	4805587.50	25.9%	66%	5.0%	57%	8.7%	53%	2.19%	90%	0.40%	0.40%	32%	39%	8.2%	20%	17.9%	20.8%	0.63%	1.9%	1.53%	12.5%	14.6%	14.6%	18.8%	18.8%	0.46%	24%	0.169%	76%	47.5%	202%	11.81%	304%
R2	590715.91	4805728.09	21.5%	62%	4.0%	56%	6.8%	51%	1.92%	90%	0.35%	0.35%	32%	39%	9.4%	21%	15.3%	18.2%	0.67%	2.0%	1.65%	12.7%	11.4%	11.4%	14.7%	14.7%	0.37%	24%	0.138%	76%	36.0%	191%	10.70%	303%
R3	590357.58	4805478.22	27.2%	67%	4.6%	56%	8.8%	53%	1.99%	90%	0.42%	0.42%	28%	36%	7.2%	19%	16.2%	19.1%	0.57%	1.9%	1.33%	12.3%	16.0%	16.0%	20.6%	20.6%	0.49%	24%	0.153%	76%	48.0%	203%	10.22%	303%
R4	590307.77	4805411.02	27.8%	68%	4.4%	56%	8.9%	53%	1.91%	90%	0.45%	0.45%	25%	32%	7.7%	20%	15.4%	18.3%	0.59%	1.9%	1.25%	12.3%	19.0%	19.0%	24.5%	24.5%	0.50%	24%	0.147%	76%	48.5%	204%	9.49%	302%
R5	590307.86	4805232.30	22.0%	62%	3.1%	55%	6.9%	51%	1.38%	89%	0.44%	0.44%	27%	34%	6.4%	18%	14.5%	17.3%	0.49%	1.8%	0.91%	11.9%	25.9%	25.9%	33.3%	33.3%	0.39%	24%	0.104%	76%	38.7%	194%	6.72%	299%
R6	590268.71	4805171.18	26.4%	67%	2.9%	54%	8.6%	53%	1.27%	89%	0.55%	0.55%	29%	36%	6.3%	18%	14.5%	17.3%	0.50%	1.8%	0.85%	11.9%	27.9%	27.9%	36.0%	36.0%	0.46%	24%	0.098%	76%	36.5%	191%	6.22%	299%
R7	590101.81	4805169.13	35.9%	76%	3.9%	55%	11.9%	56%	1.69%	90%	0.77%	0.77%	40%	47%	6.4%	18%	18.0%	20.8%	0.56%	1.8%	1.06%	12.1%	38.9%	38.9%	50.1%	50.1%	0.62%	24%	0.129%	76%	48.2%	203%	7.77%	300%
R8	590039.80	4805108.86	28.2%	68%	3.5%	55%	8.5%	53%	1.57%	89%	0.55%	0.55%	44%	51%	6.1%	18%	19.6%	22.5%	0.53%	1.8%	0.99%	12.0%	42.4%	42.4%	54.7%	54.7%	0.46%	24%	0.118%	76%	40.6%	196%	7.22%	300%
R9	590051.99	4805042.66	24.2%	64%	2.9%	54%	7.6%	52%	1.28%	89%	0.42%	0.42%	42%	49%	4.7%	16%	18.7%	21.6%	0.44%	1.7%	0.84%	11.8%	40.6%	40.6%	52.2%	52.2%	0.42%	24%	0.098%	76%	37.3%	192%	6.04%	299%
R10	589949.68	4804950.27	35.6%	76%	2.5%	54%	11.7%	56%	1.15%	89%	0.71%	0.71%	41%	48%	6.2%	18%	18.4%	21.3%	0.57%	1.9%	0.77%	11.8%	39.3%	39.3%	50.7%	50.7%	0.61%	24%	0.087%	76%	49.6%	205%	5.26%	298%
R12	589649.06	4804788.02	24.4%	65%	2.0%	54%	6.7%	51%	0.96%	89%	0.45%	0.45%	29%	37%	5.0%	17%	18.0%	20.9%	0.42%	1.7%	0.71%	11.7%	16.4%	16.4%	21.2%	21.2%	0.37%	24%	0.069%	76%	29.9%	185%	4.36%	297%
R13	589565.47	4804836.84	21.2%	61%	2.4%	54%	6.2%	51%	1.14%	89%	0.40%	0.40%	32%	40%	5.0%	17%	18.2%	21.0%	0.43%	1.7%	0.83%	11.8%	14.8%	14.8%	19.1%	19.1%	0.35%	24%	0.080%	76%	29.4%	184%	5.00%	297%
R14	589552.40	4804850.98	21.7%	62%	2.5%	54%	6.3%	51%	1.18%	89%	0.40%	0.40%	33%	40%	5.0%	17%	18.2%	21.1%	0.43%	1.7%	0.85%	11.9%	14.9%	14.9%	19.2%	19.2%	0.35%	24%	0.082%	76%	29.6%	185%	5.16%	298%
R15	589487.71	4804854.82	21.6%	62%	2.6%	54%	6.1%	51%	1.19%	89%	0.40%	0.40%	33%	40%	4.6%	16%	18.2%	21.0%	0.40%	1.7%	0.87%	11.9%	12.8%	12.8%	16.5%	16.5%	0.33%	24%	0.084%	76%	28.4%	183%	5.21%	298%
R16	589391.42	4804818.71	19.9%	60%	2.3%	54%	5.5%	50%	1.07%	89%	0.37%	0.37%	31%	38%	4.0%	16%	17.1%	20.0%	0.36%	1.6%	0.81%	11.8%	11.0%	11.0%	14.2%	14.2%	0.29%	24%	0.076%	76%	25.6%	181%	4.82%	297%
R17	589341.30	4804854.89	20.7%	61%	2.4%	54%	5.7%	50%	1.13%	89%	0.39%	0.39%	29%	37%	4.0%	16%	16.7%	19.6%	0.35%	1.6%	0.84%	11.9%	11.0%	11.0%	14.2%	14.2%	0.29%	24%	0.080%	76%	25.4%	180%	5.04%	298%
R18	589237.00	4804804.05	16.5%	57%	2.1%	54%	5.0%	50%	0.98%	89%	0.31%	0.31%	28%	35%	3.6%	15%	15.3%	18.1%	0.32%	1.6%	0.76%	11.8%	9.6%	9.6%	12.4%	12.4%	0.26%	24%	0.069%	76%	22.0%	177%	4.51%	297%
R19	589214.42	4804827.86	15.8%	56%	2.1%	54%	5.1%	50%	1.00%	89%	0.30%	0.30%	28%	35%	3.6%	15%	14.6%	17.5%	0.33%	1.6%	0.77%	11.8%	10.1%	10.1%	13.0%	13.0%	0.27%	24%	0.071%	76%	22.5%	177%	4.58%	297%
R20	589161.88	4804859.47	15.2%	55%	2.1%	54%	5.2%	50%	0.99%	89%	0.28%	0.28%	28%	35%	4.1%	16%	14.1%	16.9%	0.33%	1.6%	0.77%	11.8%	10.5%	10.5%	13.5%	13.5%	0.28%	24%	0.071%	76%	22.4%	177%	4.58%	297%
R21	589148.36	4804897.75	16.3%	56%	2.2%	54%	5.8%	50%	1.01%	89%	0.31%	0.31%	27%	34%	4.4%	16%	14.3%	17.2%	0.35%	1.6%	0.78%	11.8%	11.3%	11.3%	14.5%	14.5%	0.31%	24%	0.073%	76%	24.8%	180%	4.70%	297%
R22	589087.10	4804971.33	17.7%	58%	2.1%	54%	6.3%	51%	0.98%	89%	0.33%	0.33%	23%	31%	4.5%	16%	11.6%	14.5%	0.39%	1.7%	0.78%	11.8%	11.7%	11.7%	15.1%	15.1%	0.33%	24%	0.071%	76%	28.2%	183%	4.73%	297%
R23	589148.96	4805035.30	19.6%	60%	2.4%	54%	6.9%	52%	1.11%	89%	0.36%	0.36%	24%	31%	4.8%	17%	12.1%	14.9%	0.42%	1.7%	0.86%	11.9%	13.5%	13.5%	17.4%	17.4%	0.37%	24%	0.080%	76%	31.1%	186%	5.25%	298%
R24	589128.67	4805086.01	17.6%	58%	2.3%	54%	6.3%	51%	1.08%	89%	0.31%	0.31%	21%	28%	4.7%	17%	12.1%	15.0%	0.41%	1.7%	0.85%	11.9%	15.0%	15.0%	19.4%	19.4%	0.33%	24%	0.080%	76%	29.3%	184%	5.28%	298%
R25	589105.01	4805060.41	17.4%	58%	2.2%	54%	6.2%	51%	1.04%	89%	0.31%	0.31%	21%	28%	4.7%	16%	11.9%	14.8%	0.40%	1.7%	0.83%	11.8%	14.0%	14.0%	18.1%	18.1%	0.33%	24%	0.078%	76%	28.9%	184%	5.08%	298%
R26	589133.34	4805172.65	16.4%	57%	2.2%	54%	5.7%	50%	1.07%	89%	0.30%	0.30%	20%	27%	4.7%	16%	12.8%	15.6%	0.40%	1.7%	0.87%	11.9%	17.7%	17.7%	22.8%	22.8%	0.30%	24%	0.080%	76%	27.5%	183%	5.48%	298%
R27	588993.00	4805046.07	14.6%	55%	1.8%	53%	5.3%	50%	0.89%	89%	0.24%	0.24%	20%	27%	4.3%	16%	11.3%	14.2%	0.37%	1.7%	0.74%	11.8%	12.7%	12.7%	16.4%	16.4%	0.28%	24%	0.067%	76%	25.5%	180%	4.53%	297%
R28	588933.88	4805108.89	13.4%	54%	1.7%	53%	4.8%	49%	0.84%	89%	0.23%	0.23%	20%	27%	4.1%	16%	11.0%	13.9%	0.37%	1.7%	0.72%	11.7%	13.2%	13.2%	17.0%	17.0%	0.26%	24%	0.064%	76%	24.3%	179%	4.40%	297%
R29	589053.75	4804987.00	16.9%	57%	2.0%	54%	6.0%	51%	0.95%	89%	0.30%	0.30%	22%	29%	4.5%	16%	11.4%	14.2%	0.39%	1.7%	0.77%	11.8%	11.8%	11.8%	15.2%	15.2%	0.32%	24%	0.071%	76%	27.5%	182%	4.64%	297%
R30	589022.84	4805021.77	15.6%	56%	1.9%	53%	5.6%	50%	0.92%	89%	0.27%	0.27%	20%	28%	4.4%	16%	11.4%	14.3%	0.38%	1.7%	0.76%	11.8%	12.3%	12.3%	15.8%	15.8%	0.29%	24%	0.069%	76%	26.4%	181%	4.60%	297%
R31	588909.44	4805151.99	13.9%	54%	1.7%	53%	4.9%	50%	0.82%	89%	0.24%	0.24%	20%	27%	4.1%	16%	10.8%	13.6%	0.37%	1.7%	0.70%	11.7%	13.0%	13.0%	16.8%	16.8%	0.25%	24%	0.064%	76%	24.3%	179%	4.37%	297%
R32	588882.16	4805178.52	14.8%	55%	1.6%	53%	5.2%	50%	0.80%	89%	0.25%	0.25%	20%	27%	4.1%	16%	10.7%	13.6%	0.38%	1.7%	0.69%	11.7%	13.7%	13.7%	17.6%	17.6%	0.27%	24%	0.064%	76%	25.0%	180%	4.29%	297%
R33	588837.60	4805190.59	14.7%	55%	1.5%	53%	5.2%	50%	0.77%	89%	0.25%	0.25%	20%	27%	4.1%	16%	10.6%	13.4%	0.38%	1.7%	0.66%	11.7%	12.8%	12.8%	16.5%	16.5%	0.27%	24%	0.062%	76%	25.1%	180%	4.12%	297%
R34	588906.04	4805227.93	15.9%	56%	1.7%	53%	5.6%	50%	0.83%	89%	0.27%	0.27%	19%	27%	4.3%	16%	10.8%	13.7%	0.40%	1.7%	0.71%	11.7%	14.8%	14.8%	19.1%	19.1%	0.29%	24%	0.067%	76%	27.0%	182%	4.48%	297%
R35	588863.99	4805271.68	15.3%	55%	1.6%	53%	5.4%	50%	0.81%	89%	0.25%	0.25%	20%	27%	4.1%	16%	10.7%	13.5%	0.40%	1.7%	0.69%	11.7%	14.5%	14.5%	18.6%	18.6%	0.28%	24%	0.067%	76%	27.4%	182%	4.37%	297%
R36	588774.77	4805264.86	14.3%	54%	1.5%	53%	5.1%	50%	0.74%	89%	0.23%	0.23%	19%	26%	4.0%	16%	10.1%	13.0%	0.38%	1.7%	0.63%	11.6%	12.5%	12.5%	16.1%	16.1%	0.28%	24%	0.060%	76%	26.1%	181%	3.95%	296%
R37	588767.37	4805274.62	14.1%	54%	1.5%	53%	5.0%	50%	0.73%	89%	0.23%	0.23%	19%	26%	3.9%	16%	10.1%	12.9%	0.37%	1.7%	0.63%	11.6%	12.7%	12.7%	16.3%	16.3%	0.28%	24%	0.060%	76%	26.3%	181%	3.93%	296%
R38	588739.80	4805301.49	13.9%	54%	1.4%	53%	4.9%	50%	0.72%	89%	0.22%	0.22%	19%	26%	3.6%	15%	9.8%	12.7%	0.37%	1.7%	0.61%	11.6%	12.0%	12.0%	15.5%	15.5%	0.29%	24%	0.060%	76%	26.7%	182%	3.83%	296%
R39	588701.19	4805324.41	13.9%	54%	1.4%	53%	4.9%	50%	0.69%	89%	0.22%	0.22%	19%	26%	3.4%	15%	9.8%	12.6%	0.37%	1.7%	0.59%	11.6%	11.6%	11.6%	14.9%	14.9%	0.30%	24%	0.058%	76%	26.6%	182%	3.68%	296%
R40	588676.08	4805360.64	14.3%	54%	1.3%	53%	5.1%	50%	0.68%	89%	0.22%	0.22%	19%	26%	3.3%	15%	9.8%	12.6%	0.37%	1.7%	0.57%	11.6%	11.3%	11.3%	14.6%	14.6%	0.31%	24%	0.058%	76%	27.2%	182%	3.61%	296%
R41	588628.93	4805409.57	14.5%	55%	1.3%	53%	5.2%	50%	0.64%	89%	0.21%	0.21%	19%	26%	3.3%	15%	9.6%	12.5%	0.38%	1.7%	0.54%	11.6%	10.5%	10.5%	13.5%	13.5%	0.31%	24%	0.056%	76%	27.5%	183%	3.42%	296%
R42	588586.22	4805444.06	14.4%	54%	1.2%	53%	5.1%	50%	0.61%	89%	0.21%	0.21%	18%	25%	3.2%	15%	9.5%	12.3%	0.38%	1.7%	0.52%	11.5%	8.5%	8.5%	11.0%	11.0%	0.30%	24%	0.053%	76%	27.3%	182%	3.26%	296%
R43	588557.06	4805464.32	14.1%	54%	1.2%	53%	5.1%	50%	0.59%	89%	0.21%	0.21%	18%	25%	3.1%	15%	9.4%	12.3%	0.37%	1.7%	0.50%	11.5%	7.2%	7.2%	9.3%	9.3%	0.29%	24%	0.051%	76%	26.9%	182%	3.16%	296%
R44	588670.10	4805576.40	15.0%	55%	1.4%	53%	5.3%	50%	0.68%	89%	0.24%	0.24%	20%	27%	3.6%	15%	10.9%	13.7%	0.39%	1.7%	0.56%	11.6%	18.7%	18.7%	24.0%	24.0%	0.33%	24%	0.060%	76%	28.9%	184%	3.68%	296%
R45	588670.28	4805615.19	14.7%	55%	1.3%	53%	5.2%	50%	0.67%	89%	0.23%	0.23%	20%	27%	3.6%	15%	11.0%	13.9%	0.38%	1.7%	0.55%	11.6%	16.9%	16.9%	21.8%	21.8%	0.33%	24%	0.060%	76%	28.5%	183%	3.67%	296%
R46	589003.59	4805937.72	28.9%	69%	2.3%	54%	9.7%	54%	1.08%	89%	0.43%	0.43%	24%	31%	4.8%	17%	14.6%	17.4%	0.62%	1.9%	0.83%	11.8%	20.5%	20.5%	26.3%	26.3%	0.55%	24%	0.100%	76%	55.2%	210%	6.43%	299%
R47	589041.99	4805974.72	29.9%	70%	2.5%	54%	10.1%	55%	1.14%	89%	0.43%	0.43%	25%	32%	4.8%	17%	15.0%	17.8%	0.64%	1.9%	0.87%	11.9%	17.9%	17.9%	23.0%	23.0%	0.57%	24%	0.107%	76%	57.6%	213%	6.88%	299%
R48	589293.19	4806505.50	20.6%	61%	1.7%	53%	6.8%	51%	0.78%	89%	0.31%	0.31%	25%	32%	4.3%	16%	13.5%	16.4%	0.52%	1.8%	0.65%	11.7%	8.5%	8.5%	10.9%	10.9%	0.39%	24%	0.069%	76%	39.4%	194%	4.99%	297%
R49	589219.60	4806515.59	19.0%	59%	1.4%	53%	6.3%	51%	0.66%	89%	0.28%	0.28%	24%	31%	4.1%	16%	13.3%	16.2%	0.49%	1.8%	0.55%	11.6%	8.3%	8.3%	10.7%	10.7%	0.36%	24%	0.058%	76%	36.4%	191%	4.20%	297%
R50	589338.17	4806485.88	22.0%	62%	2.0%	54%	7.5%	52%	0.91%	89%	0.34%	0.34%	25%	33%	4.4%	16%	14.0%	16.8%	0.58%	1.9%	0.75%	11.8%	8.5%	8.5%	11.0%	11.0%	0.45%	24%	0.080%	76%	42.4%	197%	5.82%	298%
R51	589518.84	4806584.75	27.4%	68%	3.0%	55%	8.8%	53%	1.29%	89%	0.48%	0.48%	28%	35%	4.4%	16%	15.9%	18.8%	0.60%	1.9%	1.01%	12.0%	7.3%	7.3%	9.4%	9.4%	0.50%	24%	0.113%	76%	51.0%	206%	8.47%	301%
R52	589557.86	4806649.65	27.4%	68%	2.9%	54%	8.7%	53%	1.24%	89%	0.47%	0.47%	27%	34%	4.2%	16%	15.5%	18.4%	0.60%	1.9%	0.96%	12.0%	6.8%	6.8%	8.8%	8.8%	0.50%	24%	0.109%	76%	50.4%	205%	8.16%	301%
R53	589474.48	4806602.41	25.0%	65%	2.4%	54%	7.9%	53%	1.05%	89%	0.44%	0.44%	28%	35%	4.1%	16%	16.1%	18.9%	0.56%	1.9%	0.82%	11.8%	7.2%	7.2%	9.3%	9.3%	0.45%	24%	0.093%	76%	45.7%	201%	6.85%	299%
R54	589897.77	4807374.19	18.6%	59%	1.6%	53%	6.3%	51%	0.73%	89%	0.31%	0.31%	24%	31%	3.9%	16%	16.4%	19.2%	0.43%	1.7%	0.61%	11.6%	4.0%	4.0%	5.2%	5.2%	0.38%	24%	0.064%	76%	32.2%	187%	4.54%	297%
R55	590214.06	4807506.19	19.9%	60%	2.1%	54%	7.0%	52%	1.00%	89%	0.29%	0.29%	24%	31%	4.2%	16%	17.5%	20.4%	0.51%	1.8%	0.88%	11.9%	4.6%	4.6%	5.9%	5.9%	0.40%	24%	0.089%	76%	36.3%	191%	5.88%	298%
R56	590337.28	4807588.62	17.5%	58%	2.0%	54%	6.2%	51%	0.97%	89%	0.26%	0.26%	21%	28%	4.0%	16%	15.8%	18.6%	0.44%	1.7%	0.86%	11.9%	4.3%	4.3%	5.5%	5.5%	0.35%	24%	0.087%	76%	32.0%	187%	5.66%	298%
R57	590735.46	4807580.37	15.7%	56%	2.3%	54%	5.5%	50%	1.13%	89%	0.24%	0.24%	22%	29%	3.5%	15%	12.9%	15.7%	0.41%	1.7%	1.05%	12.1%	3.9%	3.9%	5.0%	5.0%	0.36%	24%	0.093%	76%	29.3%	184%	6.58%	299%
R58	590836.21	4807430.87	15.9%	56%	2.7%	54%	5.6%	50%	1.34%	89%	0.26%	0.26%	25%	32%	3.7%	15%	14.0%	16.8%	0.39%	1.7%	1.25%	12.3%	3.9%	3.9%	5.0%	5.0%	0.34%	24%	0.113%	76%	29.8%	185%	7.83%	300%
R59	590841.35	4807247.63	18.9%	59%	3.4%	55%	6.0%	51%	1.68%	90%	0.31%	0.31%	24%	31%	4.0%	16%	13.6%	16.5%	0.42%	1.7%	1.54%	12.6%	4.2%	4.2%	5.4%	5.4%	0.37%	24%	0.142%	76%	32.2%	187%	9.91%	302%
R60	590953.11	4807285.94	17.8%	58%	3.1%	55%	5.7%	50%	1.54%	89%	0.29%	0.29%	24%	32%	3.9%	16%	13.1%	16.0%	0.41%	1.7%	1.42%	12.4%	3.8%	3.8%	4.9%	4.9%	0.34%	24%	0.131%	76%	29.5%	185%	9.03%	302%
R61	590858.15	4807196.55	19.6%	60%	3.7%	55%	6.3%	51%	1.78%	90%	0.33%	0.33%	24%	31%	4.2%	16%	13.4%	16.3%	0.43%	1.7%	1.62%	12.6%	4.1%	4.1%	5.3%	5.3%	0.40%	24%	0.151%	76%	33.0%	188%	10.54%	303%
R62	590899.99	4807147.81	20.1%	60%	3.8%	55%	6.4%	51%	1.85%	90%	0.33%	0.33%	26%	33%	4.3%	16%	14.2%	17.1%	0.45%	1.7%	1.66%	12.7%	3.9%	3.9%	5.1%	5.1%	0.40%	24%	0.158%	76%	33.9%	189%	10.91%	303%
R63	590908.06	4807085.06	20.8%	61%	4.0%	56%	6.7%	51%	1.96%	90%	0.34%	0.34%	29%	36%	4.5%	16%	15.7%	18.6%	0.48%	1.8%	1.73%	12.7%	4.3%	4.3%	5.6%	5.6%	0.44%	24%	0.167%	76%	35.0%	190%	11.57%	304%
R64	590967.33	4807021.48	21.3%	61%	4.2%	56%	7.0%	52%	1.99%	90%	0.36%	0.36%	34%	41%	5.4%	17%	17.4%	20.2%	0.49%	1.8%	1.73%	12.7%	4.5%	4.5%	5.9%	5.9%	0.41%	24%	0.167%	76%	36.0%	191%	11.89%	304%
R65	590865.33	4806894.56	24.6%	65%	5.3%	57%	7.9%	53%	2.45%	90%	0.41%	0.41%	33%	41%	6.2%	18%	18.0%	20.8%	0.54%	1.8%	2.06%	13.1%	4.8%	4.8%	6.2%	6.2%	0.53%	24%	0.204%	76%	41.1%	196%	15.00%	307%
R66	590875.79	4806848.38	25.3%	65%	5.5%	57%	8.2%	53%	2.55%	90%	0.42%	0.42%	35%	42%	6.5%	18%	18.7%	21.5%	0.59%	1.9%	2.14%	13.2%	4.8%	4.8%	6.2%	6.2%	0.50%	24%	0.209%	76%	45.2%	200%	15.74%	308%
R67	590920.31	4806789.89	26.7%	67%	5.7%	57%	9.1%	54%	2.62%	91%	0.45%	0.45%	36%	43%	6.8%	19%	18.8%	21.7%	0.67%	2.0%	2.22%	13.2%	5.1%	5.1%	6.6%	6.6%	0.51%	24%	0.211%	76%	49.7%	205%	16.16%	309%
R68	590961.66	4806888.64	23.3%	63%	4.9%	56%	7.6%	52%	2.27%	90%	0.40%	0.40%	35%	42%	5.9%	18%	17.9%	20.8%	0.57%	1.9%	1.94%	12.9%	4.7%	4.7%	6.1%	6.1%	0.46%	24%	0.184%	76%	40.2%	195%	13.87%	306%
R69	590903.03	4806672.93	34.0%	74%	6.7%	58%	11.5%	56%	3.07%	91%	0.55%	0.55%	40%	47%	7.6%	19%	21.2%	24.0%	0.83%	2.1%	2.60%	13.6%	5.5%	5.5%	7.0%	7.0%	0.65%	25%	0.242%	76%	63.0%	218%	19.14%	312%
R70	590963.12	4806680.26	31.4%	72%	6.2%	58%	10.7%	55%	2.85%	91%	0.54%	0.54%	40%	47%	7.5%	19%	20.9%	23.8%	0.77%	2.1%	2.46%	13.5%	5.5%	5.5%	7.1%	7.1%	0.61%	24%	0.222%	76%	58.3%	213%	17.70%	310%
R71	591025.30	4806745.59	27.0%	67%	5.4%	57%	9.1%	54%	2.52%	90%	0.48%	0.48%	38%	46%	6.8%	19%	20.0%	22.9%	0.67%	2.0%	2.19%	13.2%	5.4%	5.4%	6.9%	6.9%	0.52%	24%	0.198%	76%	49.8%	205%	15.48%	308%
R72	591093.90	4806613.91	27.3%	67%	5.3%	57%	9.9%	55%	2.52%	90%	0.50%	0.50%	42%	49%	7.4%	19%	20.2%	23.0%	0.68%	2.0%	2.27%	13.3%	5.4%	5.4%	6.9%	6.9%	0.60%	24%	0.191%	76%	52.2%	207%	15.36%	308%
R73	591080.34	4806562.13	31.4%	71%	5.7%	57%	10.9%	55%	2.70%	91%	0.54%	0.54%	38%	45%	7.3%	19%	19.3%	22.2%	0.72%	2.0%	2.40%	13.4%	5.6%	5.6%	7.3%	7.3%	0.63%	25%	0.202%	76%	60.1%	215%	16.59%	309%
R74	590955.72	4806489.27	40.7%	81%	7.6%	59%	13.0%	58%	3.47%	91%	0.67%	0.67%	38%	45%	8.7%	20%	20.8%	23.6%	0.84%	2.1%	2.97%	14.0%	6.0%	6.0%	7.8%	7.8%	0.75%	25%	0.264%	76%	75.3%	230%	21.85%	314%
R75	591005.07	4806448.29	41.0%	81%	6.9%	58%	12.7%	57%	3.19%	91%	0.62%	0.62%	33%	41%	8.0%	20%	19.1%	21.9%	0.82%	2.1%	2.78%	13.8%	6.1%	6.1%	7.9%	7.9%	0.71%	25%	0.240%	76%	73.0%	228%	19.97%	312%
R76	590884.05	4806449.67	47.3%	87%	9.1%	61%	14.9%	60%	4.07%	92%	0.76%	0.76%	39%	46%	9.7%	22%	22.0%	24.8%	0.94%	2.2%	3.41%	14.4%	6.2%	6.2%	8.0%	8.0%	0.85%	25%	0.311%	76%	85.1%	240%	26.00%	318%
R77	590883.54	4806430.39	48.5%	89%	9.1%	61%	14.9%	60%	4.09%	92%	0.76%	0.76%	38%	45%	9.9%	22%	21.5%	24.3%	0.94%	2.2%	3.43%	14.4%	6.3%	6.3%	8.1%	8.1%	0.85%	25%	0.311%	76%	86.9%	242%	26.09%	319%
R78	590891.65	4806348.55	46.4%	87%	8.0%	60%	14.5%	59%	3.71%	92%	0.70%	0.70%	31%	38%	9.2%	21%	19.4%	22.2%	0.93%	2.2%	3.23%	14.2%	6.6%	6.6%	8.4%	8.4%	0.81%	25%	0.276%	76%	80.2%	235%	23.33%	316%
R79	590869.78	4806365.29	48.8%	89%	8.7%	60%	15.1%	60%	3.99%	92%	0.74%	0.74%	33%	40%	10.0%	22%	20.5%	23.3%	0.96%	2.3%	3.42%	14.4%	6.5%	6.5%	8.4%	8.4%	0.85%	25%	0.298%	76%	84.4%	239%	25.30%	318%
R80	590867.26	4806331.34	47.1%	87%	8.3%	60%	14.7%	59%	3.83%	92%	0.71%	0.71%	31%	39%	9.5%	21%	19.5%	22.3%	0.95%	2.2%	3.34%	14.4%	6.6%	6.6%	8.5%	8.5%	0.83%	25%	0.282%	76%	81.4%	236%	24.08%	317%
R81	590803.61	4806333.49	52.0%	92%	9.9%	61%	16.1%	61%	4.51%	92%	0.80%	0.80%	36%	43%	11.2%	23%	21.5%	24.3%	1.02%	2.3%	3.86%	14.9%	6.7%	6.7%	8.6%	8.6%	0.91%	25%	0.336%	76%	90.1%	245%	28.74%	321%
R82	590868.28	4806278.10	44.0%	84%	7.5%	59%	14.0%	59%	3.54%	91%	0.66%	0.66%	31%	38%	8.2%	20%	18.4%	21.2%	0.93%	2.2%	3.17%	14.2%	6.9%	6.9%	8.9%	8.9%	0.78%	25%	0.258%	76%	76.6%	232%	22.03%	315%
R83	590864.42	4806258.79	43.1%	83%	7.3%	59%	13.7%	58%	3.48%	91%	0.65%	0.65%	30%	37%	8.3%	20%	18.2%	21.1%	0.93%	2.2%	3.13%	14.1%	7.1%	7.1%	9.2%	9.2%	0.76%	25%	0.251%	76%	75.3%	230%	21.55%	314%
R84	590831.33	4806209.69	42.1%	82%	7.2%	59%	13.5%	58%	3.48%	91%	0.63%	0.63%	31%	38%	8.9%	21%	18.2%	21.0%	0.93%	2.2%	3.18%	14.2%	7.4%	7.4%	9.6%	9.6%	0.73%	25%	0.249%	76%	73.8%	229%	21.44%	314%

Percentages of Criteria at Sensitive Receptors (Scenario B)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			52.0%	92.1%	9.9%	61.5%	16.1%	60.7%	4.5%	92.4%	0.8%	0.8%	43.6%	50.8%	11.2%	23.0%	28.9%	31.8%	1.0%	2.3%	3.9%	14.9%	42.4%	42.4%	54.7%	54.7%	0.9%	24.8%	0.3%	76.3%	90.1%	245.1%	28.7%	321.2%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R85	590817.26	4806242.44	44.9%	85%	7.9%	60%	14.2%	59%	3.78%	92%	0.67%	0.67%	32%	39%	9.1%	21%	18.9%	21.7%	0.95%	2.2%	3.42%	14.4%	7.1%	7.1%	9.1%	9.1%	0.79%	25%	0.271%	76%	78.3%	233%	23.49%	316%
R86	590874.92	4806136.21	35.5%	76%	5.9%	57%	11.5%	56%	2.84%	91%	0.53%	0.53%	28%	35%	7.6%	19%	16.4%	19.2%	0.81%	2.1%	2.59%	13.6%	7.8%	7.8%	10.0%	10.0%	0.62%	24%	0.202%	76%	62.8%	218%	17.18%	310%
R87	591051.40	4806231.39	32.3%	72%	4.9%	56%	10.8%	55%	2.34%	90%	0.48%	0.48%	29%	36%	7.2%	19%	15.9%	18.8%	0.78%	2.1%	2.12%	13.1%	7.1%	7.1%	9.1%	9.1%	0.59%	24%	0.171%	76%	57.5%	212%	14.14%	307%
R88	590857.90	4806098.80	34.2%	74%	5.7%	57%	11.1%	56%	2.78%	91%	0.51%	0.51%	29%	36%	8.2%	20%	16.6%	19.5%	0.79%	2.1%	2.55%	13.6%	7.9%	7.9%	10.2%	10.2%	0.59%	24%	0.198%	76%	60.6%	216%	16.73%	309%
R89	590831.13	4806085.17	34.6%	75%	5.9%	57%	11.2%	56%	2.87%	91%	0.52%	0.52%	29%	37%	8.6%	20%	16.9%	19.8%	0.79%	2.1%	2.64%	13.7%	8.1%	8.1%	10.4%	10.4%	0.60%	24%	0.202%	76%	61.3%	216%	17.27%	310%
R90	590794.58	4805959.59	29.6%	70%	5.1%	57%	9.6%	54%	2.53%	90%	0.45%	0.45%	29%	37%	9.2%	21%	16.2%	19.0%	0.74%	2.0%	2.31%	13.3%	8.7%	8.7%	11.2%	11.2%	0.51%	24%	0.178%	76%	52.0%	207%	14.83%	307%
R91	590797.37	4805895.64	26.7%	67%	4.6%	56%	8.7%	53%	2.26%	90%	0.41%	0.41%	26%	33%	8.5%	20%	13.7%	16.6%	0.70%	2.0%	2.03%	13.0%	9.5%	9.5%	12.3%	12.3%	0.46%	24%	0.160%	76%	46.5%	201%	13.06%	306%
R92	591122.86	4805917.21	20.9%	61%	3.0%	55%	7.1%	52%	1.48%	89%	0.34%	0.34%	25%	32%	6.0%	18%	13.6%	16.4%	0.57%	1.9%	1.35%	12.4%	8.5%	8.5%	10.9%	10.9%	0.38%	24%	0.107%	76%	36.1%	191%	8.44%	301%
R93	591390.75	4805924.41	17.9%	58%	2.2%	54%	6.3%	51%	1.10%	89%	0.28%	0.28%	27%	34%	4.8%	17%	13.6%	16.4%	0.50%	1.8%	1.02%	12.0%	8.1%	8.1%	10.5%	10.5%	0.35%	24%	0.080%	76%	30.7%	186%	6.28%	299%
R94	591469.94	4806107.41	19.1%	59%	2.4%	54%	6.5%	51%	1.22%	89%	0.29%	0.29%	28%	36%	4.7%	16%	14.3%	17.2%	0.49%	1.8%	1.13%	12.1%	6.5%	6.5%	8.4%	8.4%	0.36%	24%	0.089%	76%	33.2%	188%	7.01%	299%
R95	591624.05	4806094.57	16.5%	57%	2.0%	54%	5.8%	50%	1.03%	89%	0.25%	0.25%	31%	39%	4.7%	16%	14.8%	17.7%	0.45%	1.7%	0.95%	12.0%	7.0%	7.0%	9.1%	9.1%	0.33%	24%	0.076%	76%	28.6%	184%	5.82%	298%
R96	591554.49	4806013.23	16.9%	57%	2.0%	54%	6.0%	51%	1.03%	89%	0.26%	0.26%	31%	38%	4.8%	17%	14.5%	17.4%	0.48%	1.8%	0.96%	12.0%	7.5%	7.5%	9.7%	9.7%	0.33%	24%	0.076%	76%	29.2%	184%	5.84%	298%
R97	591668.99	4806053.90	15.6%	56%	1.8%	53%	5.7%	50%	0.95%	89%	0.24%	0.24%	32%	39%	4.5%	16%	14.6%	17.5%	0.45%	1.7%	0.89%	11.9%	7.0%	7.0%	9.0%	9.0%	0.32%	24%	0.069%	76%	27.1%	182%	5.38%	298%
R98	591610.13	4805965.08	16.2%	56%	1.8%	53%	5.8%	50%	0.93%	89%	0.25%	0.25%	29%	36%	4.5%	16%	13.5%	16.4%	0.46%	1.7%	0.87%	11.9%	6.8%	6.8%	8.8%	8.8%	0.32%	24%	0.069%	76%	27.8%	183%	5.29%	298%
R99	591719.29	4806025.01	15.3%	55%	1.7%	53%	5.5%	50%	0.89%	89%	0.24%	0.24%	31%	38%	4.4%	16%	14.3%	17.2%	0.44%	1.7%	0.83%	11.8%	6.7%	6.7%	8.7%	8.7%	0.31%	24%	0.064%	76%	26.4%	181%	5.03%	298%
R100	591749.26	4805984.34	15.5%	56%	1.6%	53%	5.5%	50%	0.84%	89%	0.24%	0.24%	26%	33%	4.2%	16%	12.6%	15.4%	0.43%	1.7%	0.79%	11.8%	6.4%	6.4%	8.3%	8.3%	0.30%	24%	0.062%	76%	26.5%	181%	4.80%	297%
R101	591698.96	4805855.92	15.2%	55%	1.5%	53%	5.3%	50%	0.78%	89%	0.24%	0.24%	23%	31%	3.9%	16%	11.7%	14.6%	0.40%	1.7%	0.74%	11.7%	6.8%	6.8%	8.7%	8.7%	0.30%	24%	0.058%	76%	25.5%	180%	4.47%	297%
R102	591824.17	4805930.83	14.9%	55%	1.5%	53%	5.2%	50%	0.76%	89%	0.24%	0.24%	23%	31%	3.8%	16%	11.7%	14.5%	0.40%	1.7%	0.72%	11.7%	6.3%	6.3%	8.2%	8.2%	0.29%	24%	0.056%	76%	25.3%	180%	4.33%	297%
R103	591805.98	4805838.80	14.3%	54%	1.4%	53%	5.0%	50%	0.71%	89%	0.22%	0.22%	22%	29%	3.6%	15%	10.9%	13.8%	0.38%	1.7%	0.67%	11.7%	6.4%	6.4%	8.3%	8.3%	0.28%	24%	0.053%	76%	24.0%	179%	4.07%	297%
R104	591746.05	4805766.02	13.5%	54%	1.4%	53%	4.8%	49%	0.70%	89%	0.21%	0.21%	20%	27%	3.6%	15%	9.6%	12.5%	0.37%	1.7%	0.66%	11.7%	6.4%	6.4%	8.3%	8.3%	0.27%	24%	0.051%	76%	22.7%	178%	3.98%	296%
R105	592064.72	4805863.19	12.4%	53%	1.2%	53%	4.4%	49%	0.61%	89%	0.19%	0.19%	22%	29%	3.2%	15%	10.9%	13.8%	0.33%	1.6%	0.58%	11.6%	5.2%	5.2%	6.7%	6.7%	0.25%	24%	0.044%	76%	21.0%	176%	3.45%	296%
R106	591457.80	4806263.06	22.2%	62%	2.8%	54%	7.6%	52%	1.38%	89%	0.33%	0.33%	30%	37%	5.5%	17%	15.0%	17.8%	0.57%	1.9%	1.25%	12.3%	6.6%	6.6%	8.5%	8.5%	0.41%	24%	0.102%	76%	40.0%	195%	8.06%	301%
R107	591300.05	4806336.50	27.1%	67%	3.7%	55%	9.1%	54%	1.79%	90%	0.40%	0.40%	30%	38%	6.3%	18%	15.3%	18.1%	0.68%	2.0%	1.60%	12.6%	6.2%	6.2%	8.0%	8.0%	0.49%	24%	0.133%	76%	48.7%	204%	10.65%	303%
R108	591252.74	4806220.96	25.5%	66%	3.6%	55%	8.7%	53%	1.73%	90%	0.38%	0.38%	28%	36%	6.0%	18%	15.2%	18.0%	0.64%	1.9%	1.56%	12.6%	6.9%	6.9%	8.8%	8.8%	0.47%	24%	0.127%	76%	45.7%	201%	10.24%	303%
R109	591205.44	4806270.09	28.2%	68%	4.0%	56%	9.5%	54%	1.93%	90%	0.42%	0.42%	28%	35%	6.6%	18%	15.5%	18.4%	0.70%	2.0%	1.73%	12.7%	6.6%	6.6%	8.5%	8.5%	0.51%	24%	0.142%	76%	50.5%	205%	11.56%	304%
R110	591252.74	4806340.13	28.7%	69%	4.0%	56%	9.6%	54%	1.92%	90%	0.43%	0.43%	30%	37%	6.5%	18%	15.4%	18.3%	0.71%	2.0%	1.73%	12.7%	6.4%	6.4%	8.2%	8.2%	0.52%	24%	0.142%	76%	51.5%	207%	11.52%	304%
R111	591139.92	4806297.13	31.1%	71%	4.5%	56%	10.4%	55%	2.19%	90%	0.46%	0.46%	30%	37%	7.0%	19%	15.6%	18.5%	0.76%	2.1%	1.97%	13.0%	6.7%	6.7%	8.7%	8.7%	0.56%	24%	0.160%	76%	55.4%	210%	13.24%	306%
R112	591122.35	4806325.63	32.6%	73%	4.8%	56%	10.8%	55%	2.32%	90%	0.49%	0.49%	32%	39%	7.1%	19%	16.7%	19.6%	0.79%	2.1%	2.09%	13.1%	6.7%	6.7%	8.7%	8.7%	0.58%	24%	0.171%	76%	58.1%	213%	14.11%	307%
R113	591089.88	4806341.73	34.7%	75%	5.2%	57%	11.3%	56%	2.50%	90%	0.52%	0.52%	31%	38%	7.0%	19%	17.0%	19.8%	0.80%	2.1%	2.24%	13.2%	6.7%	6.7%	8.6%	8.6%	0.62%	24%	0.184%	76%	61.3%	216%	15.29%	308%
R114	591068.77	4806395.97	36.9%	77%	5.7%	57%	11.8%	56%	2.73%	91%	0.55%	0.55%	34%	41%	6.8%	19%	17.8%	20.7%	0.80%	2.1%	2.43%	13.4%	6.5%	6.5%	8.3%	8.3%	0.65%	25%	0.202%	76%	64.6%	220%	16.81%	309%
R115	591097.40	4806450.01	36.0%	76%	5.6%	57%	11.4%	56%	2.68%	91%	0.54%	0.54%	34%	41%	6.5%	18%	18.3%	21.1%	0.76%	2.0%	2.39%	13.4%	6.2%	6.2%	7.9%	7.9%	0.64%	25%	0.200%	76%	63.4%	218%	16.51%	309%
R116	591085.71	4806416.77	36.4%	77%	5.6%	57%	11.6%	56%	2.68%	91%	0.55%	0.55%	34%	42%	6.7%	18%	17.9%	20.8%	0.78%	2.1%	2.40%	13.4%	6.4%	6.4%	8.2%	8.2%	0.64%	25%	0.198%	76%	63.6%	219%	16.53%	309%
R117	591079.53	4806430.99	36.8%	77%	5.8%	57%	11.6%	56%	2.74%	91%	0.55%	0.55%	35%	42%	6.6%	18%	18.3%	21.2%	0.78%	2.1%	2.44%	13.4%	6.2%	6.2%	8.1%	8.1%	0.65%	25%	0.202%	76%	64.1%	219%	16.90%	309%
R118	591150.65	4806443.64	34.0%	74%	5.1%	57%	10.9%	55%	2.44%	90%	0.51%	0.51%	33%	41%	6.3%	18%	17.5%	20.4%	0.74%	2.0%	2.19%	13.2%	6.3%	6.3%	8.1%	8.1%	0.60%	24%	0.180%	76%	59.6%	215%	14.93%	307%
R119	591471.93	4806336.37	22.6%	63%	2.9%	54%	7.7%	52%	1.43%	89%	0.33%	0.33%	30%	37%	5.7%	17%	15.3%	18.1%	0.59%	1.9%	1.28%	12.3%	6.1%	6.1%	7.9%	7.9%	0.41%	24%	0.107%	76%	41.1%	196%	8.33%	301%
R120	591492.86	4806392.79	22.8%	63%	2.9%	55%	7.8%	52%	1.44%	89%	0.34%	0.34%	30%	38%	5.7%	17%	14.7%	17.6%	0.59%	1.9%	1.30%	12.3%	5.9%	5.9%	7.7%	7.7%	0.42%	24%	0.109%	76%	41.4%	196%	8.45%	301%
R121	591535.63	4806441.92	22.3%	62%	2.9%	54%	7.6%	52%	1.41%	89%	0.33%	0.33%	30%	37%	5.5%	17%	14.9%	17.7%	0.57%	1.9%	1.28%	12.3%	5.7%	5.7%	7.3%	7.3%	0.41%	24%	0.104%	76%	40.5%	195%	8.24%	301%
R122	591579.31	4806526.55	21.9%	62%	2.8%	54%	7.5%	52%	1.40%	89%	0.32%	0.32%	30%	38%	5.1%	17%	15.2%	18.0%	0.56%	1.8%	1.28%	12.3%	5.6%	5.6%	7.2%	7.2%	0.41%	24%	0.104%	76%	39.6%	195%	8.20%	301%
R123	591646.64	4806484.69	20.7%	61%	2.6%	54%	7.1%	52%	1.27%	89%	0.30%	0.30%	28%	35%	5.1%	17%	14.1%	17.0%	0.54%	1.8%	1.16%	12.2%	5.6%	5.6%	7.3%	7.3%	0.39%	24%	0.096%	76%	37.8%	193%	7.40%	300%
R124	591773.92	4806328.52	17.6%	58%	2.0%	54%	6.2%	51%	1.02%	89%	0.26%	0.26%	30%	37%	4.8%	17%	14.5%	17.3%	0.47%	1.8%	0.93%	11.9%	5.9%	5.9%	7.6%	7.6%	0.33%	24%	0.078%	76%	31.8%	187%	5.83%	298%
R125	591926.32	4806358.75	16.3%	56%	1.8%	53%	5.7%	50%	0.91%	89%	0.24%	0.24%	28%	35%	4.4%	16%	13.6%	16.5%	0.44%	1.7%	0.83%	11.8%	5.4%	5.4%	6.9%	6.9%	0.31%	24%	0.069%	76%	29.4%	184%	5.13%	298%
R126	592036.41	4805335.50	9.5%	50%	0.8%	52%	3.4%	48%	0.44%	88%	0.16%	0.16%	17%	24%	3.1%	15%	8.4%	11.3%	0.28%	1.6%	0.41%	11.4%	6.1%	6.1%	7.8%	7.8%	0.18%	24%	0.033%	76%	15.4%	170%	2.36%	295%
R127	592165.42	4805344.21	9.1%	49%	0.8%	52%	3.4%	48%	0.42%	88%	0.15%	0.15%	17%	24%	3.1%	15%	8.6%	11.5%	0.28%	1.6%	0.40%	11.4%	5.6%	5.6%	7.3%	7.3%	0.18%	24%	0.031%	76%	14.8%	170%	2.25%	295%
R128	592088.71	4805265.77	9.0%	49%	0.8%	52%	3.3%	48%	0.41%	88%	0.15%	0.15%	17%	24%	3.0%	15%	7.8%	10.7%	0.26%	1.6%	0.39%	11.4%	5.9%	5.9%	7.6%	7.6%	0.17%	24%	0.031%	76%	14.6%	170%	2.19%	295%
R129	592104.40	4805032.16	6.7%	47%	0.6%	52%	2.3%	47%	0.35%	88%	0.13%	0.13%	17%	24%	2.4%	14%	8.1%	11.0%	0.21%	1.5%	0.33%	11.3%	5.9%	5.9%	7.6%	7.6%	0.12%	24%	0.027%	76%	10.5%	166%	1.86%	294%
R130	592121.65	4804904.95	6.5%	47%	0.6%	52%	2.5%	47%	0.32%	88%	0.11%	0.11%	17%	24%	2.4%	14%	8.2%	11.1%	0.21%	1.5%	0.30%	11.3%	5.6%	5.6%	7.2%	7.2%	0.13%	24%	0.024%	76%	10.6%	166%	1.70%	294%
R131	592733.56	4805621.46	6.2%	46%	0.6%	52%	2.2%	47%	0.34%	88%	0.10%	0.10%	14%	21%	2.1%	14%	6.3%	9.2%	0.19%	1.5%	0.33%	11.3%	3.5%	3.5%	4.5%	4.5%	0.12%	24%	0.024%	76%	10.5%	166%	1.84%	294%
R132	591880.73	4804726.91	6.8%	47%	0.6%	52%	2.6%	47%	0.30%	88%	0.10%	0.10%	18%	25%	1.9%	14%	9.7%	12.5%	0.21%	1.5%	0.28%	11.3%	6.3%	6.3%	8.1%	8.1%	0.15%	24%	0.022%	76%	12.8%	168%	1.64%	294%
R133	592084.55	4804243.52	6.0%	46%	0.4%	52%	2.3%	47%	0.22%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.4%	11.2%	0.21%	1.5%	0.22%	11.2%	5.0%	5.0%	6.4%	6.4%	0.12%	24%	0.018%	76%	11.6%	167%	1.20%	294%
R134	592142.24	4804838.49	6.6%	47%	0.6%	52%	2.4%	47%	0.30%	88%	0.11%	0.11%	17%	24%	2.3%	14%	8.3%	11.2%	0.20%	1.5%	0.29%	11.3%	5.3%	5.3%	6.8%	6.8%	0.13%	24%	0.022%	76%	10.6%	166%	1.62%	294%
R135	592152.71	4804725.17	5.9%	46%	0.5%	52%	2.1%	47%	0.28%	88%	0.09%	0.09%	17%	24%	1.9%	14%	8.5%	11.4%	0.17%	1.5%	0.26%	11.3%	5.3%	5.3%	6.9%	6.9%	0.12%	24%	0.020%	76%	10.5%	165%	1.50%	294%
R136	592229.41	4804808.85	6.2%	46%	0.5%	52%	2.3%	47%	0.29%	88%	0.10%	0.10%	17%	24%	2.3%	14%	8.3%	11.1%	0.20%	1.5%	0.28%	11.3%	5.2%	5.2%	6.7%	6.7%	0.12%	24%	0.022%	76%	10.1%	165%	1.55%	294%
R137	589317.83	4804722.44	17.3%	57%	1.9%	53%	4.8%	49%	0.89%	89%	0.32%	0.32%	29%	36%	3.5%	15%	16.2%	19.0%	0.32%	1.6%	0.70%	11.7%	9.7%	9.7%	12.5%	12.5%	0.26%	24%	0.062%	76%	23.4%	178%	4.13%	297%
R138	589495.01	4804396.18	12.6%	53%	1.0%	53%	4.4%	49%	0.49%	88%	0.21%	0.21%	24%	32%	3.5%	15%	14.0%	16.8%	0.28%	1.6%	0.42%	11.4%	9.2%	9.2%	11.9%	11.9%	0.25%	24%	0.033%	76%	21.5%	177%	2.47%	295%
R139	589125.91	4804733.79	13.0%	53%	1.8%	53%	4.5%	49%	0.84%	89%	0.25%	0.25%	27%	34%	3.2%	15%	13.0%	15.9%	0.29%	1.6%	0.67%	11.7%	8.5%	8.5%	11.0%	11.0%	0.24%	24%	0.060%	76%	19.8%	175%	3.96%	296%
R140	588444.94	4804827.67	10.5%	51%	1.0%	53%	3.9%	49%	0.51%	88%	0.16%	0.16%	19%	26%	3.1%	15%	9.5%	12.3%	0.30%	1.6%	0.46%	11.5%	7.1%	7.1%	9.2%	9.2%	0.22%	24%	0.042%	76%	19.3%	174%	2.62%	295%
R141	588542.38	4804754.86	10.5%	51%	1.1%	53%	3.9%	49%	0.54%	88%	0.17%	0.17%	19%	26%	3.2%	15%	9.2%	12.1%	0.30%	1.6%	0.48%	11.5%	7.2%	7.2%	9.2%	9.2%	0.21%	24%	0.042%	76%	18.9%	174%	2.76%	295%
R142	588090.16	4805534.02	9.5%	50%	0.7%	52%	3.6%	48%	0.36%	88%	0.15%	0.15%	18%	25%	2.6%	14%	9.6%	12.4%	0.27%	1.6%	0.33%	11.3%	5.2%	5.2%	6.7%	6.7%	0.20%	24%	0.031%	76%	18.0%	173%	1.94%	294%
R143	588850.56	4806928.34	10.6%	51%	0.5%	52%	3.7%	48%	0.27%	88%	0.16%	0.16%	20%	28%	2.5%	14%	12.7%	15.5%	0.29%	1.6%	0.25%	11.3%	6.1%	6.1%	7.8%	7.8%	0.21%	24%	0.022%	76%	20.8%	176%	1.68%	294%
R144	588954.41	4807073.96	9.8%	50%	0.5%	52%	3.4%	48%	0.26%	88%	0.15%	0.15%	22%	29%	2.0%	14%	11.2%	14.1%	0.26%	1.5%	0.23%	11.2%	5.9%	5.9%	7.5%	7.5%	0.19%	24%	0.022%	76%	19.2%	174%	1.62%	294%
R145	589453.28	4806793.60	21.1%	61%	1.5%	53%	6.3%	51%	0.68%	89%	0.37%	0.37%	29%	36%	3.7%	16%	28.9%	31.8%	0.54%	1.8%	0.60%	11.6%	6.5%	6.5%	8.4%	8.4%	0.35%	24%	0.058%	76%	35.8%	191%	4.36%	297%
R146	589336.96	4806802.19	16.9%	57%	1.2%	53%	5.6%	50%	0.54%	88%	0.30%	0.30%	24%	31%	3.0%	15%	21.2%	24.1%	0.44%	1.7%	0.48%	11.5%	6.7%	6.7%	8.6%	8.6%	0.32%	24%	0.047%	76%	31.8%	187%	3.43%	296%
R147	589112.04	4806966.65	12.0%	52%	0.7%	52%	4.1%	49%	0.33%	88%	0.18%	0.18%	23%	30%	2.2%	14%	13.4%	16.3%	0.30%	1.6%	0.29%	11.3%	5.8%	5.8%	7.5%	7.5%	0.23%	24%	0.027%	76%	23.2%	178%	2.09%	295%
R148	589817.35	4807475.92	16.2%	56%	1.2%	53%	4.7%	49%	0.54%	88%	0.27%	0.27%	24%	31%	3.4%	15%	13.9%	16.8%	0.37%	1.7%	0.47%	11.5%	4.0%	4.0%	5.2%	5.2%	0.29%	24%	0.047%	76%	24.6%	180%	3.33%	296%
R149	589212.29	4807135.17	12.1%	52%	0.6%	52%	4.0%	49%	0.31%	88%	0.21%	0.21%	23%	30%	2.4%	14%	14.3%	17.1%	0.28%	1.6%	0.27%	11.3%	5.4%	5.4%	6.9%	6.9%	0.23%	24%	0.027%	76%	19.3%	174%	1.93%	294%
R150	589187.15	4807059.80	11.8%	52%	0.7%	52%	3.8%	48%	0.32%	88%	0.20%	0.20%	21%	28%	2.4%	14%	13.0%	15.8%	0.28%	1.6%	0.28%	11.3%	5.7%	5.7%	7.3%	7.3%	0.22%	24%	0.027%	76%	20.9%	176%	2.04%	295%
R151	589216.89	4807005.39	12.3%	52%	0.7%	52%	4.0%	49%	0.35%	88%	0.21%	0.21%	21%	28%	2.6%	14%	12.8%	15.7%	0.30%	1.6%	0.30%	11.3%	5.9%	5.9%	7.6%	7.6%	0.23%	24%	0.029%	76%	22.7%	178%	2.25%	295%
R152	590965.47	4807254.22	18.3%	58%	3.3%	55%	5.9%	50%	1.59%	90%	0.30%	0.30%	24%	31%	4.0%	16%	13.2%	16.1%	0.41%	1.7%	1.46%	12.5%	3.6%	3.6%	4.7%	4.7%	0.36%	24%	0.133%	76%	30.2%	185%	9.36%	302%
R153	590992.57	4807219.38	18.6%	59%	3.4%	55%	6.0%	51%	1.63%	90%	0.31%	0.31%	24%	31%	4.0%	16%	13.8%	16.6%	0.43%	1.7%	1.48%	12.5%	4.0%	4.0%	5.1%	5.1%	0.36%	24%	0.138%	76%	30.9%	186%	9.64%	302%
R154	591025.08	4807154.35	19.4%	60%	3.6%	55%	6.2%	51%	1.72%	90%	0.32%	0.32%	25%	33%	4.7%	16%	14.7%	17.5%	0.45%	1.7%	1.54%	12.5%	4.2%	4.2%	5.4%	5.4%	0.38%	24%	0.144%	76%	32.7%	188%	10.20%	303%
R155	591085.58	4807264.22	17.5%	58%	3.0%	55%	5.7%	50%	1.49%	89%	0.29%	0.29%	27%	34%	4.2%	16%	14.6%	17.5%	0.41%	1.7%	1.36%	12.4%	4.1%	4.1%	5.2%	5.2%	0.34%	24%	0.127%	76%	29.1%	184%	8.75%	301%
R156	591178.47	4807320.73	16.6%	57%	2.8%	54%	5.5%	50%	1.37%	89%	0.27%	0.27%	26%	33%	4.1%	16%	14.3%	17.1%	0.39%	1.7%	1.26%	12.3%	4.0%	4.0%	5.1%	5.1%	0.31%	24%	0.113%	76%	27.8%	183%	7.97%	300%
R157	591128.15	4807474.79	15.0%	55%	2.4%	54%	5.0%	50%	1.19%	89%	0.25%	0.25%	23%	31%	3.7%	15%	12.6%	15.5%	0.36%	1.6%	1.11%	12.1%	3.4%	3.4%	4.4%	4.4%	0.30%	24%	0.100%	76%	25.5%	181%	6.89%	299%
R158	591137.75	4807525.40	14.6%	55%	2.2%	54%	4.9%	50%	1.13%	89%	0.24%	0.24%	23%	30%	3.6%	15%	12.1%	15.0%	0.36%	1.6%	1.06%	12.1%	3.2%	3.2%	4.1%	4.1%	0.29%	24%	0.093%	76%	25.3%	180%	6.53%	299%
R159	591389.55	4807160.03	17.5%	58%	3.0%	55%	5.4%	50%	1.44%	89%	0.32%	0.32%	27%	34%	5.0%	17%	14.8%	17.7%	0.45%	1.7%	1.29%	12.3%	4.4%	4.4%	5.6%	5.6%	0.29%	24%	0.116%	76%	27.0%	182%	8.54%	301%
R160	591232.04	4806971.44	20.5%	61%	3.7%	55%	6.2%	51%	1.79%	90%	0.38%	0.38%	30%	37%	5.7%	17%	16.5%	19.4%	0.51%	1.8%	1.57%	12.6%	4.8%	4.8%	6.2%	6.2%	0.35%	24%	0.142%	76%	32.1%	187%	10.80%	303%
R161	591435.62	4807128.95	17.5%	58%	2.9%	55%	5.3%	50%	1.43%	89%	0.32%	0.32%	26%	34%	4.8%	17%	14.7%	17.5%	0.43%	1.7%	1.28%	12.3%	4.5%	4.5%	5.8%	5.8%	0.29%	24%	0.113%	76%	26.2%	181%	8.48%	301%
R162	591162.85	4806690.32	25.0%	65%	4.6%	56%	9.0%	54%	2.23%	90%	0.46%	0.46%	41%	48%	6.8%	19%	19.6%	22.4%	0.64%	1.9%	2.02%	13.0%	5.2%	5.2%	6.7%	6.7%	0.54%	24%	0.171%	76%	46.4%	201%	13.50%	306%
R163	591210.95	4806729.12	24.0%	64%	4.3%	56%	8.4%	53%	2.10%	90%	0.44%	0.44%	39%	46%	6.5%	18%	19.0%	21.8%	0.61%	1.9%	1.89%	12.9%	5.2%	5.2%	6.7%	6.7%	0.50%	24%	0.160%	76%	44.5%	200%	12.64%	305%
R164	591105.87	4806818.03	23.4%	64%	4.6%	56%	7.5%	52%	2.18%	90%	0.42%	0.42%	38%	45%	6.3%	18%	19.2%	22.0%	0.57%	1.9%	1.92%	12.9%	5.1%	5.1%	6.6%	6.6%	0.45%	24%	0.171%	76%	40.3%	195%	13.28%	306%
R165	591265.91	4806593.73	26.2%	66%	4.3%	56%	9.4%	54%	2.08%	90%	0.41%	0.41%	35%	43%	5.8%	18%	18.0%	20.8%	0.64%	1.9%	1.91%	12.9%	5.5%	5.5%	7.1%	7.1%	0.55%	24%	0.156%	76%	50.1%	205%	12.56%	305%
R166	591287.73	4806665.26	25.0%	65%	4.1%	56%	9.0%	54%	2.01%	90%	0.41%	0.41%	34%	41%	5.8%	18%	17.2%	20.1%	0.63%	1.9%	1.83%	12.8%	5.4%	5.4%	6.9%	6.9%	0.53%	24%	0.151%	76%	48.0%	203%	12.12%	305%
R167	591333.40	4806722.65	23.6%	64%	3.9%	55%	8.4%	53%	1.89%	90%	0.40%	0.40%	31%	38%	5.6%	17%	16.5%	19.3%	0.60%	1.9%	1.72%	12.7%	5.3%	5.3%	6.8%	6.8%	0.49%	24%	0.142%	76%	45.3%	200%	11.39%	304%

Percentages of Criteria at Sensitive Receptors (Scenario B)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			52.0%	92.1%	9.9%	61.5%	16.1%	60.7%	4.5%	92.4%	0.8%	0.8%	43.6%	50.8%	11.2%	23.0%	28.9%	31.8%	1.0%	2.3%	3.9%	14.9%	42.4%	42.4%	54.7%	54.7%	0.9%	24.8%	0.3%	76.3%	90.1%	245.1%	28.7%	321.2%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R168	591234.22	4806518.76	29.3%	69%	4.5%	56%	9.6%	54%	2.17%	90%	0.44%	0.44%	35%	42%	5.7%	17%	17.8%	20.6%	0.65%	1.9%	1.98%	13.0%	5.9%	5.9%	7.6%	7.6%	0.55%	24%	0.162%	76%	53.4%	208%	13.18%	306%
R169	591154.03	4806495.46	32.8%	73%	5.1%	57%	10.6%	55%	2.46%	90%	0.49%	0.49%	34%	41%	6.1%	18%	18.2%	21.0%	0.69%	2.0%	2.21%	13.2%	6.0%	6.0%	7.7%	7.7%	0.60%	24%	0.182%	76%	59.6%	215%	15.08%	308%
R170	592963.29	4806056.44	6.1%	46%	0.7%	52%	2.2%	47%	0.36%	88%	0.09%	0.09%	14%	21%	1.8%	14%	6.8%	9.7%	0.18%	1.5%	0.36%	11.4%	2.6%	2.6%	3.4%	3.4%	0.12%	24%	0.027%	76%	11.5%	167%	2.00%	294%
R171	592548.41	4807420.43	8.2%	48%	1.2%	53%	2.6%	47%	0.61%	89%	0.13%	0.13%	15%	23%	2.5%	14%	8.1%	11.0%	0.22%	1.5%	0.59%	11.6%	2.7%	2.7%	3.5%	3.5%	0.14%	24%	0.047%	76%	13.3%	168%	3.45%	296%
R172	592951.92	4807025.44	7.0%	47%	0.8%	52%	2.5%	47%	0.44%	88%	0.10%	0.10%	14%	21%	2.1%	14%	7.3%	10.2%	0.21%	1.5%	0.44%	11.4%	2.8%	2.8%	3.6%	3.6%	0.13%	24%	0.033%	76%	12.6%	168%	2.41%	295%
R173	592512.22	4807840.43	6.8%	47%	1.0%	53%	2.2%	47%	0.54%	88%	0.12%	0.12%	14%	22%	1.9%	14%	7.6%	10.4%	0.17%	1.5%	0.53%	11.5%	2.3%	2.3%	3.0%	3.0%	0.14%	24%	0.042%	76%	10.8%	166%	3.02%	296%
R174	592241.77	4807860.57	7.4%	48%	1.1%	53%	2.4%	47%	0.59%	89%	0.14%	0.14%	15%	22%	2.4%	14%	7.8%	10.7%	0.20%	1.5%	0.59%	11.6%	2.5%	2.5%	3.2%	3.2%	0.16%	24%	0.047%	76%	12.9%	168%	3.34%	296%
R175	592089.28	4807558.47	9.2%	49%	1.5%	53%	2.9%	47%	0.74%	89%	0.16%	0.16%	17%	24%	2.5%	14%	8.5%	11.3%	0.23%	1.5%	0.71%	11.7%	2.9%	2.9%	3.7%	3.7%	0.17%	24%	0.058%	76%	14.6%	170%	4.26%	297%
R176	593448.24	4806616.60	6.1%	46%	0.6%	52%	2.2%	47%	0.32%	88%	0.09%	0.09%	13%	20%	1.9%	14%	6.7%	9.6%	0.19%	1.5%	0.32%	11.3%	2.3%	2.3%	2.9%	2.9%	0.12%	24%	0.024%	76%	11.3%	166%	1.75%	294%
R177	593312.53	4806745.71	6.8%	47%	0.6%	52%	2.4%	47%	0.35%	88%	0.10%	0.10%	13%	21%	2.1%	14%	6.9%	9.8%	0.21%	1.5%	0.34%	11.4%	2.8%	2.8%	3.6%	3.6%	0.12%	24%	0.027%	76%	12.5%	167%	1.88%	294%
R178	589896.14	4804503.60	14.9%	55%	1.0%	53%	3.8%	48%	0.47%	88%	0.28%	0.28%	21%	28%	3.3%	15%	11.9%	14.8%	0.28%	1.6%	0.38%	11.4%	16.0%	16.0%	20.6%	20.6%	0.20%	24%	0.036%	76%	18.4%	173%	2.42%	295%
R179	589806.86	4804615.64	19.9%	60%	1.2%	53%	5.1%	50%	0.58%	89%	0.37%	0.37%	24%	31%	3.3%	15%	14.5%	17.3%	0.30%	1.6%	0.46%	11.5%	17.1%	17.1%	22.0%	22.0%	0.27%	24%	0.042%	76%	23.2%	178%	2.90%	295%
R180	589696.72	4804647.38	22.5%	63%	1.4%	53%	5.8%	50%	0.66%	89%	0.42%	0.42%	26%	33%	3.6%	15%	16.4%	19.2%	0.34%	1.6%	0.52%	11.5%	14.9%	14.9%	19.2%	19.2%	0.31%	24%	0.047%	76%	25.3%	180%	3.23%	296%
R181	589584.24	4804517.22	14.5%	55%	1.1%	53%	4.8%	49%	0.56%	88%	0.27%	0.27%	25%	32%	3.6%	15%	15.0%	17.8%	0.30%	1.6%	0.47%	11.5%	11.0%	11.0%	14.2%	14.2%	0.27%	24%	0.040%	76%	23.8%	179%	2.79%	295%
R182	589636.85	4804582.64	18.5%	59%	1.2%	53%	5.0%	50%	0.61%	89%	0.34%	0.34%	25%	32%	3.5%	15%	15.9%	18.8%	0.31%	1.6%	0.49%	11.5%	12.9%	12.9%	16.6%	16.6%	0.28%	24%	0.042%	76%	24.8%	180%	3.00%	295%
R183	589520.07	4804445.87	13.1%	53%	1.0%	53%	4.6%	49%	0.52%	88%	0.22%	0.22%	25%	32%	3.6%	15%	14.3%	17.1%	0.29%	1.6%	0.44%	11.5%	9.9%	9.9%	12.7%	12.7%	0.25%	24%	0.036%	76%	22.3%	177%	2.61%	295%
R184	589424.10	4804324.30	11.6%	52%	0.9%	52%	4.1%	49%	0.46%	88%	0.20%	0.20%	24%	31%	3.5%	15%	13.4%	16.3%	0.28%	1.6%	0.40%	11.4%	8.1%	8.1%	10.5%	10.5%	0.23%	24%	0.031%	76%	19.8%	175%	2.34%	295%
R185	589626.45	4804718.61	20.9%	61%	1.7%	53%	5.9%	51%	0.81%	89%	0.39%	0.39%	28%	35%	4.5%	16%	17.0%	19.8%	0.37%	1.7%	0.63%	11.6%	14.7%	14.7%	18.9%	18.9%	0.33%	24%	0.058%	76%	27.8%	183%	3.83%	296%
R186	589475.29	4804698.61	17.6%	58%	1.8%	53%	5.1%	50%	0.84%	89%	0.33%	0.33%	29%	36%	4.3%	16%	16.4%	19.3%	0.37%	1.7%	0.66%	11.7%	10.8%	10.8%	13.9%	13.9%	0.28%	24%	0.058%	76%	24.4%	179%	3.94%	296%
R187	589396.66	4804788.79	19.1%	59%	2.2%	54%	5.3%	50%	1.01%	89%	0.36%	0.36%	31%	38%	4.0%	16%	17.0%	19.9%	0.35%	1.6%	0.77%	11.8%	11.0%	11.0%	14.1%	14.1%	0.28%	24%	0.071%	76%	25.3%	180%	4.60%	297%
R188	589559.04	4804789.94	19.8%	60%	2.1%	54%	5.9%	50%	1.01%	89%	0.37%	0.37%	31%	39%	4.9%	17%	17.6%	20.5%	0.41%	1.7%	0.75%	11.8%	14.0%	14.0%	18.0%	18.0%	0.34%	24%	0.071%	76%	28.1%	183%	4.54%	297%
R189	589464.66	4804561.55	14.8%	55%	1.3%	53%	4.6%	49%	0.65%	89%	0.28%	0.28%	26%	33%	4.1%	16%	14.7%	17.5%	0.34%	1.6%	0.54%	11.6%	9.7%	9.7%	12.4%	12.4%	0.26%	24%	0.044%	76%	22.5%	177%	3.18%	296%
R190	589381.48	4804662.33	16.6%	57%	1.7%	53%	4.8%	49%	0.80%	89%	0.31%	0.31%	30%	37%	3.8%	16%	16.1%	19.0%	0.33%	1.6%	0.64%	11.7%	9.9%	9.9%	12.8%	12.8%	0.26%	24%	0.056%	76%	23.3%	178%	3.79%	296%
R191	589419.87	4804486.37	13.7%	54%	1.2%	53%	4.2%	49%	0.59%	89%	0.26%	0.26%	25%	33%	3.8%	16%	14.0%	16.8%	0.32%	1.6%	0.50%	11.5%	9.0%	9.0%	11.6%	11.6%	0.24%	24%	0.040%	76%	20.8%	176%	2.91%	295%
R192	588195.90	4804357.37	7.8%	48%	0.7%	52%	2.8%	47%	0.39%	88%	0.13%	0.13%	18%	25%	2.4%	14%	8.8%	11.6%	0.22%	1.5%	0.35%	11.4%	5.1%	5.1%	6.6%	6.6%	0.16%	24%	0.031%	76%	12.6%	168%	1.92%	294%
R193	587601.39	4804639.77	7.2%	47%	0.5%	52%	2.8%	47%	0.28%	88%	0.11%	0.11%	16%	24%	2.1%	14%	8.1%	10.9%	0.22%	1.5%	0.26%	11.3%	4.4%	4.4%	5.6%	5.6%	0.17%	24%	0.024%	76%	13.8%	169%	1.41%	294%
R194	587160.07	4805072.46	5.0%	45%	0.3%	52%	2.0%	47%	0.19%	88%	0.08%	0.08%	16%	23%	1.7%	14%	8.2%	11.0%	0.16%	1.5%	0.18%	11.2%	4.0%	4.0%	5.2%	5.2%	0.13%	24%	0.018%	76%	9.7%	165%	1.02%	294%
R195	587350.72	4804886.57	6.2%	46%	0.4%	52%	2.4%	47%	0.23%	88%	0.09%	0.09%	16%	23%	1.8%	14%	7.8%	10.6%	0.19%	1.5%	0.22%	11.2%	3.7%	3.7%	4.7%	4.7%	0.15%	24%	0.020%	76%	11.4%	166%	1.20%	294%
R196	586906.61	4804895.76	4.5%	45%	0.3%	52%	1.8%	46%	0.17%	88%	0.07%	0.07%	16%	23%	1.5%	13%	7.7%	10.6%	0.14%	1.4%	0.16%	11.2%	3.0%	3.0%	3.9%	3.9%	0.12%	24%	0.016%	76%	8.1%	163%	0.89%	293%
R197	587481.04	4806511.43	5.6%	46%	0.3%	52%	2.1%	47%	0.14%	88%	0.09%	0.09%	15%	22%	1.6%	13%	7.3%	10.2%	0.16%	1.5%	0.14%	11.2%	4.6%	4.6%	5.9%	5.9%	0.13%	24%	0.011%	76%	10.4%	165%	0.85%	293%
R198	587364.33	4806419.19	5.1%	45%	0.3%	52%	2.0%	47%	0.14%	88%	0.08%	0.08%	16%	23%	1.7%	13%	7.9%	10.8%	0.17%	1.5%	0.15%	11.2%	4.8%	4.8%	6.2%	6.2%	0.12%	24%	0.011%	76%	10.1%	165%	0.84%	293%
R199	587233.51	4806472.84	4.7%	45%	0.2%	52%	1.9%	46%	0.13%	88%	0.07%	0.07%	16%	23%	1.6%	13%	7.7%	10.5%	0.16%	1.4%	0.14%	11.1%	4.6%	4.6%	5.9%	5.9%	0.11%	24%	0.011%	76%	9.4%	164%	0.77%	293%
R200	587145.04	4806367.42	4.4%	45%	0.2%	52%	1.8%	46%	0.13%	88%	0.07%	0.07%	16%	23%	1.7%	13%	7.5%	10.4%	0.16%	1.4%	0.13%	11.1%	4.7%	4.7%	6.0%	6.0%	0.10%	24%	0.011%	76%	9.2%	164%	0.75%	293%
R201	587045.27	4806250.72	4.6%	45%	0.2%	52%	1.8%	46%	0.12%	88%	0.07%	0.07%	16%	23%	1.6%	13%	7.0%	9.9%	0.15%	1.4%	0.13%	11.1%	4.5%	4.5%	5.8%	5.8%	0.09%	24%	0.009%	76%	9.1%	164%	0.71%	293%
R202	586965.27	4806150.95	4.4%	45%	0.2%	52%	1.8%	46%	0.12%	88%	0.07%	0.07%	15%	22%	1.5%	13%	7.3%	10.2%	0.14%	1.4%	0.12%	11.1%	5.6%	5.6%	7.2%	7.2%	0.09%	24%	0.011%	76%	8.7%	164%	0.68%	293%
R203	587953.83	4806878.51	6.8%	47%	0.3%	52%	2.7%	47%	0.16%	88%	0.10%	0.10%	16%	23%	2.1%	14%	8.0%	10.8%	0.22%	1.5%	0.17%	11.2%	6.5%	6.5%	8.4%	8.4%	0.15%	24%	0.013%	76%	13.3%	168%	0.97%	293%
R204	588739.26	4807221.01	7.6%	48%	0.4%	52%	2.7%	47%	0.20%	88%	0.12%	0.12%	20%	27%	1.7%	13%	10.5%	13.3%	0.21%	1.5%	0.18%	11.2%	5.0%	5.0%	6.4%	6.4%	0.15%	24%	0.016%	76%	15.1%	170%	1.21%	294%
R205	588362.75	4807367.85	6.2%	46%	0.3%	52%	2.2%	47%	0.15%	88%	0.10%	0.10%	18%	25%	1.6%	13%	9.4%	12.3%	0.18%	1.5%	0.14%	11.1%	6.6%	6.6%	8.4%	8.4%	0.12%	24%	0.011%	76%	11.9%	167%	0.88%	293%
R206	588356.16	4807310.43	6.4%	47%	0.3%	52%	2.3%	47%	0.15%	88%	0.10%	0.10%	18%	25%	1.7%	13%	9.3%	12.2%	0.20%	1.5%	0.14%	11.2%	6.6%	6.6%	8.5%	8.5%	0.12%	24%	0.011%	76%	12.4%	167%	0.91%	293%
R207	588840.92	4807474.22	7.5%	48%	0.4%	52%	2.6%	47%	0.18%	88%	0.12%	0.12%	19%	26%	1.7%	13%	10.1%	13.0%	0.18%	1.5%	0.17%	11.2%	4.2%	4.2%	5.4%	5.4%	0.15%	24%	0.016%	76%	12.7%	168%	1.10%	294%
R208	588523.06	4807632.25	5.3%	45%	0.2%	52%	1.8%	46%	0.13%	88%	0.09%	0.09%	16%	23%	1.3%	13%	8.1%	11.0%	0.12%	1.4%	0.13%	11.1%	3.7%	3.7%	4.7%	4.7%	0.10%	24%	0.011%	76%	9.5%	165%	0.80%	293%
R209	588101.83	4807356.50	5.6%	46%	0.2%	52%	2.1%	47%	0.13%	88%	0.09%	0.09%	17%	24%	1.9%	14%	8.5%	11.4%	0.20%	1.5%	0.13%	11.1%	6.1%	6.1%	7.8%	7.8%	0.11%	24%	0.011%	76%	11.0%	166%	0.79%	293%
R210	587963.42	4807222.88	5.8%	46%	0.3%	52%	2.3%	47%	0.14%	88%	0.09%	0.09%	17%	24%	2.2%	14%	8.2%	11.1%	0.22%	1.5%	0.13%	11.1%	4.8%	4.8%	6.2%	6.2%	0.13%	24%	0.011%	76%	11.5%	167%	0.81%	293%
R211	588020.22	4807483.72	5.2%	45%	0.2%	52%	1.8%	46%	0.12%	88%	0.08%	0.08%	17%	24%	1.7%	13%	8.3%	11.1%	0.18%	1.5%	0.12%	11.1%	5.5%	5.5%	7.0%	7.0%	0.10%	24%	0.009%	76%	10.2%	165%	0.70%	293%
R212	587973.02	4807409.31	5.3%	45%	0.2%	52%	2.0%	47%	0.12%	88%	0.08%	0.08%	17%	24%	1.9%	14%	8.4%	11.3%	0.20%	1.5%	0.12%	11.1%	5.3%	5.3%	6.9%	6.9%	0.10%	24%	0.009%	76%	10.5%	165%	0.72%	293%
R213	587929.81	4807367.70	5.3%	45%	0.2%	52%	2.1%	47%	0.12%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.4%	11.3%	0.20%	1.5%	0.12%	11.1%	5.4%	5.4%	7.0%	7.0%	0.11%	24%	0.009%	76%	10.5%	165%	0.73%	293%
R214	587881.00	4807330.90	5.3%	45%	0.2%	52%	2.2%	47%	0.12%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.3%	11.2%	0.21%	1.5%	0.12%	11.1%	4.6%	4.6%	5.9%	5.9%	0.11%	24%	0.009%	76%	10.7%	166%	0.73%	293%
R215	587840.20	4807286.09	5.4%	46%	0.2%	52%	2.2%	47%	0.12%	88%	0.08%	0.08%	17%	24%	2.1%	14%	8.1%	10.9%	0.21%	1.5%	0.12%	11.1%	4.4%	4.4%	5.6%	5.6%	0.12%	24%	0.009%	76%	10.9%	166%	0.74%	293%
R216	587785.68	4807211.86	5.6%	46%	0.2%	52%	2.3%	47%	0.13%	88%	0.08%	0.08%	17%	24%	2.1%	14%	8.1%	10.9%	0.21%	1.5%	0.13%	11.1%	5.8%	5.8%	7.4%	7.4%	0.13%	24%	0.011%	76%	11.1%	166%	0.76%	293%
R217	587928.62	4807557.92	4.8%	45%	0.2%	52%	1.7%	46%	0.11%	88%	0.07%	0.07%	16%	23%	1.5%	13%	8.0%	10.9%	0.17%	1.5%	0.11%	11.1%	5.3%	5.3%	6.9%	6.9%	0.09%	24%	0.009%	76%	9.5%	165%	0.64%	293%
R218	587806.32	4807435.62	5.1%	45%	0.2%	52%	2.0%	47%	0.11%	88%	0.08%	0.08%	17%	24%	1.9%	14%	8.3%	11.2%	0.19%	1.5%	0.11%	11.1%	4.5%	4.5%	5.8%	5.8%	0.10%	24%	0.009%	76%	9.9%	165%	0.67%	293%
R219	587738.93	4807320.81	5.2%	45%	0.2%	52%	2.2%	47%	0.12%	88%	0.08%	0.08%	16%	24%	2.0%	14%	7.9%	10.7%	0.20%	1.5%	0.12%	11.1%	4.8%	4.8%	6.2%	6.2%	0.12%	24%	0.009%	76%	10.5%	166%	0.70%	293%
R220	587669.05	4807210.99	5.4%	46%	0.2%	52%	2.2%	47%	0.12%	88%	0.08%	0.08%	16%	23%	2.0%	14%	8.0%	10.8%	0.20%	1.5%	0.12%	11.1%	5.5%	5.5%	7.1%	7.1%	0.13%	24%	0.009%	76%	10.8%	166%	0.72%	293%
R221	587883.70	4807505.51	5.0%	45%	0.2%	52%	1.8%	46%	0.11%	88%	0.07%	0.07%	16%	23%	1.7%	13%	8.2%	11.1%	0.18%	1.5%	0.11%	11.1%	4.8%	4.8%	6.2%	6.2%	0.10%	24%	0.009%	76%	9.9%	165%	0.65%	293%
R222	591562.72	4806745.44	19.7%	60%	3.0%	55%	7.0%	52%	1.49%	89%	0.30%	0.30%	29%	36%	4.5%	16%	15.5%	18.4%	0.51%	1.8%	1.39%	12.4%	5.4%	5.4%	6.9%	6.9%	0.41%	24%	0.111%	76%	37.7%	193%	8.85%	301%
R223	591488.72	4806824.64	19.1%	59%	3.2%	55%	6.7%	51%	1.57%	90%	0.33%	0.33%	29%	36%	4.9%	17%	15.3%	18.2%	0.48%	1.8%	1.45%	12.5%	5.0%	5.0%	6.5%	6.5%	0.39%	24%	0.120%	76%	36.8%	192%	9.39%	302%
R224	591458.08	4806872.05	18.6%	59%	3.2%	55%	6.3%	51%	1.59%	90%	0.34%	0.34%	30%	37%	5.1%	17%	15.7%	18.6%	0.45%	1.7%	1.45%	12.5%	4.9%	4.9%	6.3%	6.3%	0.36%	24%	0.122%	76%	35.1%	190%	9.48%	302%
R225	591234.74	4806903.98	21.4%	62%	3.9%	56%	6.3%	51%	1.87%	90%	0.39%	0.39%	32%	39%	5.7%	18%	17.2%	20.1%	0.52%	1.8%	1.65%	12.7%	5.0%	5.0%	6.4%	6.4%	0.36%	24%	0.147%	76%	33.8%	189%	11.32%	304%
R226	591148.34	4807068.03	19.7%	60%	3.6%	55%	6.5%	51%	1.74%	90%	0.35%	0.35%	27%	34%	5.2%	17%	14.9%	17.8%	0.50%	1.8%	1.53%	12.5%	4.2%	4.2%	5.4%	5.4%	0.37%	24%	0.142%	76%	34.1%	189%	10.46%	303%
R227	591097.65	4807084.65	19.9%	60%	3.7%	55%	6.6%	51%	1.76%	90%	0.34%	0.34%	25%	33%	4.9%	17%	14.4%	17.2%	0.48%	1.8%	1.55%	12.6%	4.2%	4.2%	5.4%	5.4%	0.38%	24%	0.144%	76%	34.5%	190%	10.56%	303%
R228	591077.93	4807117.98	19.6%	60%	3.6%	55%	6.4%	51%	1.73%	90%	0.33%	0.33%	26%	33%	4.9%	17%	14.7%	17.6%	0.46%	1.7%	1.53%	12.5%	4.2%	4.2%	5.4%	5.4%	0.37%	24%	0.144%	76%	33.8%	189%	10.31%	303%
R229	590831.76	4807776.37	14.3%	54%	1.8%	53%	5.0%	50%	0.92%	89%	0.22%	0.22%	23%	30%	3.0%	15%	12.5%	15.4%	0.36%	1.6%	0.86%	11.9%	3.7%	3.7%	4.8%	4.8%	0.30%	24%	0.076%	76%	26.8%	182%	5.31%	298%
R230	590778.59	4807689.25	14.9%	55%	2.0%	54%	5.2%	50%	1.00%	89%	0.23%	0.23%	22%	30%	3.3%	15%	12.6%	15.5%	0.38%	1.7%	0.93%	11.9%	3.8%	3.8%	4.9%	4.9%	0.33%	24%	0.084%	76%	27.8%	183%	5.81%	298%
R231	591027.31	4806131.86	29.4%	70%	4.5%	56%	9.7%	54%	2.18%	90%	0.44%	0.44%	28%	35%	6.5%	18%	15.8%	18.6%	0.70%	2.0%	1.98%	13.0%	7.3%	7.3%	9.4%	9.4%	0.52%	24%	0.158%	76%	52.4%	207%	12.91%	305%
R232	591030.81	4806097.45	28.1%	68%	4.2%	56%	9.2%	54%	2.09%	90%	0.42%	0.42%	27%	34%	6.7%	18%	15.2%	18.1%	0.65%	1.9%	1.90%	12.9%	7.6%	7.6%	9.8%	9.8%	0.50%	24%	0.149%	76%	49.8%	205%	12.29%	305%
R233	591067.56	4806148.19	28.9%	69%	4.3%	56%	9.6%	54%	2.09%	90%	0.43%	0.43%	27%	34%	6.3%	18%	15.3%	18.2%	0.69%	2.0%	1.89%	12.9%	7.2%	7.2%	9.3%	9.3%	0.52%	24%	0.151%	76%	51.5%	206%	12.38%	305%
R234	591086.80	4806172.68	29.1%	69%	4.3%	56%	9.7%	54%	2.08%	90%	0.43%	0.43%	28%	35%	6.4%	18%	15.5%	18.4%	0.70%	2.0%	1.88%	12.9%	7.1%	7.1%	9.1%	9.1%	0.53%	24%	0.151%	76%	51.8%	207%	12.37%	305%
R235	591114.01	4806201.78	28.9%	69%	4.2%	56%	9.7%	54%	2.06%	90%	0.43%	0.43%	29%	36%	6.7%	18%	15.6%	18.5%	0.71%	2.0%	1.86%	12.9%	6.9%	6.9%	8.9%	8.9%	0.53%	24%	0.151%	76%	51.7%	207%	12.28%	305%
R236	591141.40	4806172.91	27.3%	67%	3.9%	56%	9.1%	54%	1.93%	90%	0.41%	0.41%	27%	35%	6.1%	18%	15.2%	18.0%	0.67%	2.0%	1.74%	12.7%	7.1%	7.1%	9.2%	9.2%	0.50%	24%	0.140%	76%	48.7%	204%	11.40%	304%
R237	591157.63	4806158.16	26.4%	67%	3.8%	55%	8.8%	53%	1.86%	90%	0.39%	0.39%	27%	34%	5.9%	18%	15.0%	17.8%	0.64%	1.9%	1.68%	12.7%	7.2%	7.2%	9.3%	9.3%	0.48%	24%	0.136%	76%	47.1%	202%	10.94%	303%
R238	591128.13	4806114.76	26.2%	66%	3.8%	55%	8.6%	53%	1.85%	90%	0.39%	0.39%	26%	33%	6.0%	18%	14.6%	17.4%	0.61%	1.9%	1.68%	12.7%	7.4%	7.4%	9.6%	9.6%	0.47%	24%	0.133%	76%	46.3%	201%	10.85%	303%
R239	591082.85	4806229.12	30.9%	71%	4.6%	56%	10.3%	55%	2.22%	90%	0.46%	0.46%	28%	36%	7.0%	19%	15.9%	18.7%	0.76%	2.0%	2.00%	13.0%	6.9%	6.9%	8.9%	8.9%	0.56%	24%	0.162%	76%	55.1%	210%	13.36%	306%
R240	591226.62	4806240.49	26.6%	67%	3.8%	55%	9.0%	54%	1.83%	90%	0.40%	0.40%	29%	36%	6.3%	18%	15.4%	18.2%	0.67%	2.0%	1.64%	12.6%	6.7%	6.7%	8.7%	8.7%	0.49%	24%	0.133%	76%	47.8%	203%	10.84%	303%
R241	591288.65	4806809.41	22.8%	63%	3.9%	56%	7.4%	52%	1.90%	90%	0.42%	0.42%	32%	39%	5.9%	18%	17.1%	19.9%	0.53%	1.8%	1.70%	12.7%	5.1%	5.1%	6.6%	6.6%	0.43%	24%	0.147%	76%	41.3%	196%	11.48%	304%
R242	591139.67	4806634.66	26.1%	66%	4.9%	56%	9.6%	54%	2.36%	90%	0.47%	0.47%	41%	48%	7.0%	19%	19.5%	22.4%	0.67%	2.0%	2.14%	13.1%	5.3%	5.3%	6.8%	6.8%	0.59%	24%	0.178%	76%	50.2%	205%	14.33%	307%
R243	591293.92	4806466.25	28.7%	69%	4.0%	56%	9.4%	54%	1.96%	90%	0.43%	0.43%	32%	39%	5.8%	18%	17.0%	19.8%	0.67%	2.0%	1.79%	12.8%	6.1%	6.1%	7.9%	7.9%	0.52%	24%	0.147%	76%	50.9%	206%	11.84%	304%
R244	589444.27	4806626.99	23.2%	63%	2.0%	54%	7.4%	52%	0.90%	89%	0.41%	0.41%	27%	35%	3.9%	16%	15.1%	18.0%	0.53%	1.8%	0.72%	11.7%	6.7%	6.7%	8.7%	8.7%	0.42%	24%	0.080%	76%	42.8%	198%	5.87%	298%
R245	589367.00	4806705.19	18.8%	59%	1.4%	53%	6.4%	51%	0.65%	89%	0.33%	0.33%	26%	33%	3.5%	15%	14.7%	17.6%	0.47%	1.8%	0.55%	11.6%	7.2%	7.2%	9.2%	9.2%	0.36%	24%	0.056%	76%	36.2%	191%	4.17%	297%
R246	588976.44	4806919.73	11.4%	52%	0.6%	52%	4.0%	49%	0.31%	88%	0.17%	0.17%	23%	30%	2.6%	14%	13.9%	16.7%	0.32%	1.6%	0.28%	11.3%	6.5%	6.5%	8.3%	8.3%	0.22%	24%	0.027%	76%	22.6%	178%	1.90%	294%
R247	588915.70	4806868.25	11.4%	52%	0.6%	52%	4.0%	49%	0.30%	88%	0.17%	0.17%	21%	28%	2.7%	14%	12.4%	15.2%	0.31%	1.6%	0.27%	11.3%	6.3%	6.3%	8.2%	8.2%	0.22%	24%	0.024%	76%	22.5%	177%	1.87%	294%
R248	588997.02	4807016.50	10.7%	51%	0.6%	52%	3.7%	48%	0.28%	88%	0.16%	0.16%	21%	29%	2.2%	14%	12.1%	15.0%	0.27%	1.6%	0.25%	11.3%	5.9%	5.9%	7.7%	7.7%	0.20%	24%	0.024%	76%	20.9%	176%	1.78%	294%
R249	591337.39	4806901.37	20.8%	61%	3.6%	55%	6.1%	51%	1.73%	90%	0.38%	0.38%	31%	38%	5.6%	17%	16.5%	19.4%	0.49%	1.8%	1.54%	12.6%	4.9%	4.9%	6.4%	6.4%	0.35%	24%	0.136%	76%	34.2%	189%	10.43%	303%
R250	591086.06	4807216.91	18.2%	58%	3.2%	55%	5.9%	51%	1.57%	89%	0.30%	0.30%	27%	34%	4.5%	16%	14.9%	17.8%	0.43%	1.7%	1.42%	12.4%	4.2%	4.2%	5.4%	5.4%	0.35%	24%	0.131%	76%	30.7%	186%	9.21%	302%

Percentages of Criteria at Sensitive Receptors (Scenario B)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			52.0%	92.1%	9.9%	61.5%	16.1%	60.7%	4.5%	92.4%	0.8%	0.8%	43.6%	50.8%	11.2%	23.0%	28.9%	31.8%	1.0%	2.3%	3.9%	14.9%	42.4%	42.4%	54.7%	54.7%	0.9%	24.8%	0.3%	76.3%	90.1%	245.1%	28.7%	321.2%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R251	590926.50	4807386.35	16.6%	57%	2.8%	54%	5.5%	50%	1.38%	89%	0.27%	0.27%	25%	32%	3.8%	16%	13.4%	16.3%	0.39%	1.7%	1.29%	12.3%	4.0%	4.0%	5.2%	5.2%	0.34%	24%	0.116%	76%	28.5%	184%	8.07%	301%
R252	590969.19	4806836.93	23.9%	64%	5.1%	57%	8.1%	53%	2.39%	90%	0.42%	0.42%	35%	42%	6.5%	18%	18.5%	21.4%	0.61%	1.9%	2.04%	13.1%	5.0%	5.0%	6.4%	6.4%	0.48%	24%	0.193%	76%	44.3%	199%	14.65%	307%
R253	590905.98	4807178.59	19.6%	60%	3.7%	55%	6.3%	51%	1.78%	90%	0.32%	0.32%	25%	32%	4.2%	16%	13.7%	16.5%	0.44%	1.7%	1.61%	12.6%	3.8%	3.8%	4.9%	4.9%	0.40%	24%	0.151%	76%	33.1%	188%	10.52%	303%
R254	590899.10	4807138.17	20.2%	60%	3.9%	55%	6.5%	51%	1.87%	90%	0.33%	0.33%	26%	34%	4.4%	16%	14.4%	17.2%	0.46%	1.7%	1.68%	12.7%	4.0%	4.0%	5.2%	5.2%	0.41%	24%	0.158%	76%	34.2%	189%	11.03%	304%
R255	590956.66	4807071.56	20.7%	61%	4.0%	56%	6.7%	51%	1.92%	90%	0.34%	0.34%	31%	38%	5.0%	17%	16.5%	19.3%	0.48%	1.8%	1.69%	12.7%	4.4%	4.4%	5.7%	5.7%	0.41%	24%	0.162%	76%	34.7%	190%	11.40%	304%
R256	590997.27	4807177.52	19.2%	59%	3.5%	55%	6.2%	51%	1.70%	90%	0.32%	0.32%	25%	32%	4.4%	16%	14.3%	17.2%	0.44%	1.7%	1.53%	12.5%	4.1%	4.1%	5.3%	5.3%	0.38%	24%	0.142%	76%	31.7%	187%	10.08%	303%
R257	590917.52	4807307.02	17.7%	58%	3.1%	55%	5.7%	50%	1.52%	89%	0.29%	0.29%	25%	32%	3.8%	16%	13.4%	16.2%	0.41%	1.7%	1.41%	12.4%	4.0%	4.0%	5.2%	5.2%	0.35%	24%	0.129%	76%	29.7%	185%	8.92%	301%
R258	590878.48	4807357.84	17.1%	57%	2.9%	55%	5.6%	50%	1.45%	89%	0.28%	0.28%	25%	33%	3.9%	16%	13.9%	16.8%	0.40%	1.7%	1.35%	12.4%	4.0%	4.0%	5.2%	5.2%	0.35%	24%	0.122%	76%	29.3%	184%	8.47%	301%
R259	590956.33	4807370.47	16.7%	57%	2.8%	54%	5.5%	50%	1.40%	89%	0.27%	0.27%	25%	32%	3.7%	15%	13.3%	16.1%	0.39%	1.7%	1.30%	12.3%	4.0%	4.0%	5.1%	5.1%	0.34%	24%	0.118%	76%	28.6%	184%	8.14%	301%
R260	591082.58	4807189.52	18.6%	59%	3.3%	55%	6.0%	51%	1.61%	90%	0.31%	0.31%	27%	34%	4.6%	16%	14.9%	17.8%	0.44%	1.7%	1.45%	12.5%	4.2%	4.2%	5.4%	5.4%	0.36%	24%	0.136%	76%	31.6%	187%	9.52%	302%
R261	591071.70	4806646.35	28.5%	69%	5.4%	57%	9.9%	54%	2.56%	90%	0.52%	0.52%	42%	49%	7.5%	19%	20.6%	23.5%	0.69%	2.0%	2.28%	13.3%	5.4%	5.4%	7.0%	7.0%	0.60%	24%	0.196%	76%	52.4%	207%	15.68%	308%
R262	591035.97	4806582.50	31.9%	72%	6.1%	58%	11.1%	56%	2.84%	91%	0.58%	0.58%	40%	47%	7.8%	20%	20.4%	23.3%	0.73%	2.0%	2.50%	13.5%	5.7%	5.7%	7.3%	7.3%	0.65%	25%	0.216%	76%	61.3%	216%	17.58%	310%
R263	591117.31	4806692.72	25.9%	66%	4.9%	56%	8.9%	54%	2.34%	90%	0.47%	0.47%	42%	49%	7.2%	19%	20.2%	23.1%	0.64%	1.9%	2.10%	13.1%	5.2%	5.2%	6.7%	6.7%	0.55%	24%	0.180%	76%	46.5%	202%	14.18%	307%
R264	591236.66	4806622.03	26.3%	66%	4.4%	56%	9.5%	54%	2.15%	90%	0.43%	0.43%	36%	43%	6.1%	18%	18.0%	20.8%	0.65%	1.9%	1.96%	13.0%	5.4%	5.4%	7.0%	7.0%	0.56%	24%	0.160%	76%	50.3%	205%	12.97%	305%
R265	591210.05	4806550.57	28.3%	68%	4.6%	56%	9.8%	54%	2.25%	90%	0.43%	0.43%	36%	43%	6.0%	18%	18.3%	21.2%	0.66%	1.9%	2.05%	13.1%	5.6%	5.6%	7.3%	7.3%	0.57%	24%	0.167%	76%	53.5%	208%	13.63%	306%
R266	591169.76	4806533.85	30.4%	71%	5.0%	57%	10.3%	55%	2.39%	90%	0.46%	0.46%	35%	42%	6.2%	18%	18.4%	21.2%	0.68%	2.0%	2.16%	13.2%	5.7%	5.7%	7.4%	7.4%	0.59%	24%	0.178%	76%	57.1%	212%	14.62%	307%
R267	591055.32	4806496.37	36.2%	76%	6.2%	58%	11.7%	56%	2.90%	91%	0.56%	0.56%	35%	42%	7.5%	19%	18.8%	21.7%	0.75%	2.0%	2.55%	13.6%	5.9%	5.9%	7.6%	7.6%	0.67%	25%	0.218%	76%	67.0%	222%	17.99%	310%
R268	590945.40	4806605.50	34.9%	75%	6.8%	58%	11.9%	56%	3.15%	91%	0.60%	0.60%	41%	48%	8.4%	20%	21.6%	24.5%	0.83%	2.1%	2.71%	13.7%	5.7%	5.7%	7.3%	7.3%	0.69%	25%	0.242%	76%	64.8%	220%	19.65%	312%
R269	591153.86	4805932.23	20.8%	61%	2.9%	54%	7.2%	52%	1.46%	89%	0.34%	0.34%	26%	33%	5.7%	18%	13.7%	16.6%	0.57%	1.9%	1.33%	12.3%	8.3%	8.3%	10.7%	10.7%	0.38%	24%	0.104%	76%	35.9%	191%	8.28%	301%
R270	591173.01	4806086.35	24.3%	64%	3.4%	55%	8.0%	53%	1.69%	90%	0.37%	0.37%	26%	33%	5.6%	17%	14.3%	17.1%	0.60%	1.9%	1.54%	12.6%	7.8%	7.8%	10.0%	10.0%	0.44%	24%	0.122%	76%	42.6%	198%	9.83%	302%
R271	590883.45	4806059.73	31.1%	71%	5.1%	57%	10.1%	55%	2.52%	90%	0.47%	0.47%	29%	36%	7.9%	20%	16.3%	19.1%	0.71%	2.0%	2.31%	13.3%	7.9%	7.9%	10.1%	10.1%	0.54%	24%	0.178%	76%	55.0%	210%	14.97%	307%
R272	591084.23	4806254.79	31.7%	72%	4.7%	56%	10.6%	55%	2.29%	90%	0.47%	0.47%	29%	36%	7.0%	19%	15.8%	18.6%	0.78%	2.1%	2.06%	13.1%	7.0%	7.0%	9.0%	9.0%	0.58%	24%	0.167%	76%	56.5%	212%	13.80%	306%
R273	591110.44	4806235.73	30.1%	70%	4.4%	56%	10.1%	55%	2.15%	90%	0.45%	0.45%	28%	35%	6.9%	19%	15.7%	18.6%	0.74%	2.0%	1.93%	12.9%	6.9%	6.9%	8.9%	8.9%	0.55%	24%	0.158%	76%	53.7%	209%	12.89%	305%
R274	591154.50	4806189.68	27.3%	67%	3.9%	56%	9.2%	54%	1.92%	90%	0.41%	0.41%	28%	35%	6.2%	18%	15.3%	18.2%	0.67%	2.0%	1.73%	12.7%	7.0%	7.0%	9.1%	9.1%	0.50%	24%	0.140%	76%	48.8%	204%	11.40%	304%
R275	591271.28	4806254.56	25.9%	66%	3.6%	55%	8.8%	53%	1.74%	90%	0.38%	0.38%	29%	37%	6.2%	18%	15.3%	18.2%	0.66%	1.9%	1.56%	12.6%	6.7%	6.7%	8.6%	8.6%	0.48%	24%	0.129%	76%	46.6%	202%	10.30%	303%
R276	591515.74	4806421.68	22.5%	63%	2.9%	54%	7.7%	52%	1.43%	89%	0.33%	0.33%	31%	38%	5.6%	17%	14.9%	17.7%	0.58%	1.9%	1.29%	12.3%	5.8%	5.8%	7.4%	7.4%	0.41%	24%	0.107%	76%	41.0%	196%	8.35%	301%
R277	591462.49	4806297.83	22.5%	63%	2.9%	54%	7.7%	52%	1.41%	89%	0.33%	0.33%	30%	38%	5.6%	17%	15.1%	18.0%	0.58%	1.9%	1.27%	12.3%	6.3%	6.3%	8.2%	8.2%	0.41%	24%	0.104%	76%	40.7%	196%	8.21%	301%
R278	591626.91	4806044.49	16.1%	56%	1.9%	53%	5.8%	50%	0.98%	89%	0.25%	0.25%	32%	40%	4.6%	16%	14.9%	17.7%	0.46%	1.7%	0.92%	11.9%	7.1%	7.1%	9.2%	9.2%	0.32%	24%	0.071%	76%	27.9%	183%	5.55%	298%
R279	591566.46	4805968.10	16.7%	57%	1.9%	53%	5.9%	51%	0.97%	89%	0.26%	0.26%	28%	35%	4.6%	16%	13.3%	16.1%	0.47%	1.8%	0.91%	11.9%	7.3%	7.3%	9.4%	9.4%	0.33%	24%	0.071%	76%	28.6%	184%	5.55%	298%
R280	591514.80	4806050.53	17.7%	58%	2.2%	54%	6.2%	51%	1.11%	89%	0.27%	0.27%	28%	35%	4.8%	17%	14.0%	16.9%	0.49%	1.8%	1.03%	12.0%	7.5%	7.5%	9.7%	9.7%	0.34%	24%	0.080%	76%	30.6%	186%	6.34%	299%
R281	591496.67	4806080.21	18.1%	58%	2.3%	54%	6.3%	51%	1.16%	89%	0.28%	0.28%	29%	36%	4.7%	16%	14.3%	17.2%	0.49%	1.8%	1.07%	12.1%	6.8%	6.8%	8.8%	8.8%	0.35%	24%	0.084%	76%	31.3%	186%	6.64%	299%
R282	591515.90	4805960.41	17.1%	57%	2.0%	54%	6.1%	51%	1.02%	89%	0.26%	0.26%	27%	34%	4.6%	16%	13.1%	16.0%	0.48%	1.8%	0.95%	12.0%	7.6%	7.6%	9.8%	9.8%	0.33%	24%	0.073%	76%	29.3%	184%	5.79%	298%
R283	591574.70	4805918.10	16.4%	57%	1.8%	53%	5.8%	50%	0.92%	89%	0.26%	0.26%	28%	35%	4.4%	16%	13.4%	16.3%	0.45%	1.7%	0.86%	11.9%	6.9%	6.9%	8.9%	8.9%	0.33%	24%	0.067%	76%	27.8%	183%	5.24%	298%
R284	591633.50	4805907.11	16.0%	56%	1.7%	53%	5.7%	50%	0.86%	89%	0.25%	0.25%	27%	34%	4.2%	16%	13.1%	15.9%	0.43%	1.7%	0.81%	11.8%	6.8%	6.8%	8.7%	8.7%	0.32%	24%	0.064%	76%	27.0%	182%	4.93%	297%
R285	591700.55	4805960.96	15.8%	56%	1.7%	53%	5.6%	50%	0.86%	89%	0.25%	0.25%	26%	33%	4.3%	16%	12.6%	15.4%	0.43%	1.7%	0.81%	11.8%	6.6%	6.6%	8.5%	8.5%	0.31%	24%	0.062%	76%	27.0%	182%	4.90%	297%
R286	591754.40	4805913.15	15.4%	56%	1.5%	53%	5.4%	50%	0.79%	89%	0.24%	0.24%	24%	31%	3.9%	16%	12.0%	14.9%	0.41%	1.7%	0.74%	11.8%	6.6%	6.6%	8.4%	8.4%	0.30%	24%	0.058%	76%	25.9%	181%	4.52%	297%
R287	591656.03	4806002.72	15.8%	56%	1.8%	53%	5.7%	50%	0.92%	89%	0.24%	0.24%	31%	39%	4.6%	16%	14.4%	17.3%	0.45%	1.7%	0.86%	11.9%	6.9%	6.9%	8.9%	8.9%	0.32%	24%	0.067%	76%	27.3%	182%	5.21%	298%
R288	591807.92	4805987.25	15.0%	55%	1.6%	53%	5.3%	50%	0.80%	89%	0.23%	0.23%	24%	31%	4.0%	16%	12.0%	14.9%	0.41%	1.7%	0.76%	11.8%	6.2%	6.2%	7.9%	7.9%	0.29%	24%	0.060%	76%	25.7%	181%	4.59%	297%
R289	592160.67	4804305.92	6.0%	46%	0.4%	52%	2.3%	47%	0.23%	88%	0.08%	0.08%	17%	24%	1.9%	14%	8.5%	11.3%	0.20%	1.5%	0.22%	11.2%	5.2%	5.2%	6.7%	6.7%	0.12%	24%	0.018%	76%	11.4%	166%	1.21%	294%
R290	591994.34	4804188.62	6.0%	46%	0.4%	52%	2.3%	47%	0.22%	88%	0.09%	0.09%	17%	24%	2.1%	14%	9.2%	12.1%	0.21%	1.5%	0.21%	11.2%	4.1%	4.1%	5.3%	5.3%	0.12%	24%	0.018%	76%	11.6%	167%	1.19%	294%
R291	591920.81	4804129.09	6.1%	46%	0.4%	52%	2.3%	47%	0.22%	88%	0.09%	0.09%	18%	26%	2.1%	14%	9.8%	12.6%	0.21%	1.5%	0.21%	11.2%	6.3%	6.3%	8.2%	8.2%	0.12%	24%	0.018%	76%	11.6%	167%	1.18%	294%
R292	591854.27	4804059.05	6.6%	47%	0.4%	52%	2.5%	47%	0.22%	88%	0.10%	0.10%	19%	27%	2.1%	14%	10.1%	12.9%	0.20%	1.5%	0.21%	11.2%	6.2%	6.2%	8.0%	8.0%	0.13%	24%	0.018%	76%	12.1%	167%	1.16%	294%
R293	591767.05	4803967.41	6.3%	46%	0.4%	52%	2.2%	47%	0.22%	88%	0.09%	0.09%	17%	24%	1.6%	13%	9.1%	11.9%	0.17%	1.5%	0.21%	11.2%	5.8%	5.8%	7.4%	7.4%	0.12%	24%	0.016%	76%	11.5%	167%	1.15%	294%
R294	591339.02	4803835.11	6.3%	46%	0.4%	52%	2.1%	47%	0.21%	88%	0.10%	0.10%	18%	25%	1.9%	14%	9.3%	12.2%	0.19%	1.5%	0.20%	11.2%	6.4%	6.4%	8.3%	8.3%	0.12%	24%	0.016%	76%	11.0%	166%	1.18%	294%
R295	590844.25	4803738.73	6.4%	47%	0.4%	52%	2.4%	47%	0.21%	88%	0.11%	0.11%	18%	25%	2.0%	14%	9.3%	12.2%	0.19%	1.5%	0.19%	11.2%	7.7%	7.7%	9.9%	9.9%	0.13%	24%	0.016%	76%	10.6%	166%	1.13%	294%
R296	590246.67	4803815.84	7.0%	47%	0.4%	52%	2.4%	47%	0.23%	88%	0.13%	0.13%	18%	25%	2.8%	15%	9.8%	12.6%	0.23%	1.5%	0.20%	11.2%	9.2%	9.2%	11.8%	11.8%	0.12%	24%	0.018%	76%	11.4%	166%	1.20%	294%
R297	589925.40	4804008.60	11.4%	52%	0.5%	52%	3.1%	48%	0.27%	88%	0.22%	0.22%	19%	27%	2.9%	15%	10.4%	13.3%	0.25%	1.5%	0.24%	11.3%	10.0%	10.0%	12.8%	12.8%	0.15%	24%	0.020%	76%	14.6%	170%	1.44%	294%
R298	590548.68	4803764.43	5.5%	46%	0.4%	52%	2.0%	47%	0.22%	88%	0.10%	0.10%	19%	26%	2.1%	14%	10.1%	13.0%	0.16%	1.4%	0.20%	11.2%	7.6%	7.6%	9.7%	9.7%	0.10%	24%	0.016%	76%	10.1%	165%	1.16%	294%
R299	591101.27	4803770.86	6.8%	47%	0.4%	52%	2.4%	47%	0.21%	88%	0.12%	0.12%	18%	25%	2.0%	14%	9.2%	12.1%	0.19%	1.5%	0.19%	11.2%	6.6%	6.6%	8.6%	8.6%	0.14%	24%	0.016%	76%	11.3%	166%	1.14%	294%
R300	591551.06	4803860.81	5.6%	46%	0.4%	52%	1.9%	46%	0.21%	88%	0.08%	0.08%	18%	25%	2.0%	14%	9.2%	12.1%	0.19%	1.5%	0.21%	11.2%	6.1%	6.1%	7.8%	7.8%	0.10%	24%	0.016%	76%	10.3%	165%	1.16%	294%
R301	586572.95	4805620.11	3.7%	44%	0.2%	52%	1.6%	46%	0.12%	88%	0.06%	0.06%	15%	22%	1.1%	13%	7.5%	10.3%	0.11%	1.4%	0.11%	11.1%	3.2%	3.2%	4.1%	4.1%	0.10%	24%	0.011%	76%	7.0%	162%	0.64%	293%
R302	588597.17	4808143.62	5.2%	45%	0.2%	52%	1.8%	46%	0.11%	88%	0.08%	0.08%	15%	22%	1.4%	13%	7.8%	10.6%	0.14%	1.4%	0.10%	11.1%	2.9%	2.9%	3.7%	3.7%	0.10%	24%	0.009%	76%	8.7%	164%	0.64%	293%
R303	588982.92	4808143.62	7.0%	47%	0.3%	52%	2.6%	47%	0.14%	88%	0.11%	0.11%	16%	24%	2.0%	14%	8.8%	11.6%	0.21%	1.5%	0.13%	11.1%	3.0%	3.0%	3.9%	3.9%	0.14%	24%	0.011%	76%	12.0%	167%	0.80%	293%
R304	589386.61	4808125.68	9.2%	49%	0.4%	52%	2.8%	47%	0.19%	88%	0.16%	0.16%	19%	26%	2.3%	14%	10.0%	12.9%	0.25%	1.5%	0.19%	11.2%	3.1%	3.1%	4.0%	4.0%	0.15%	24%	0.016%	76%	13.3%	168%	1.14%	294%
R305	589772.36	4808125.68	8.9%	49%	0.5%	52%	2.9%	48%	0.27%	88%	0.15%	0.15%	20%	27%	2.8%	15%	10.3%	13.2%	0.25%	1.5%	0.26%	11.3%	3.0%	3.0%	3.9%	3.9%	0.17%	24%	0.022%	76%	15.1%	170%	1.59%	294%
R306	590143.84	4808204.91	12.3%	52%	0.8%	52%	4.3%	49%	0.39%	88%	0.19%	0.19%	19%	26%	2.7%	14%	12.0%	14.8%	0.33%	1.6%	0.35%	11.4%	3.1%	3.1%	4.0%	4.0%	0.25%	24%	0.033%	76%	20.7%	176%	2.22%	295%
R307	590552.82	4808089.80	11.7%	52%	1.3%	53%	4.3%	49%	0.64%	89%	0.17%	0.17%	20%	27%	3.2%	15%	12.7%	15.5%	0.32%	1.6%	0.58%	11.6%	3.6%	3.6%	4.6%	4.6%	0.24%	24%	0.056%	76%	21.6%	177%	3.64%	296%
R308	590893.72	4808098.77	11.5%	52%	1.3%	53%	4.2%	49%	0.68%	89%	0.18%	0.18%	25%	32%	2.7%	15%	12.3%	15.2%	0.31%	1.6%	0.63%	11.6%	3.4%	3.4%	4.4%	4.4%	0.28%	24%	0.058%	76%	21.5%	177%	3.83%	296%
R309	591315.35	4808107.74	11.4%	51%	1.3%	53%	4.3%	49%	0.68%	89%	0.17%	0.17%	25%	32%	3.0%	15%	12.0%	14.9%	0.30%	1.6%	0.65%	11.7%	3.3%	3.3%	4.2%	4.2%	0.25%	24%	0.058%	76%	21.2%	176%	3.76%	296%
R310	588292.16	4808027.00	4.3%	44%	0.2%	52%	1.5%	46%	0.10%	88%	0.08%	0.08%	15%	22%	1.1%	13%	7.7%	10.6%	0.11%	1.4%	0.10%	11.1%	2.9%	2.9%	3.8%	3.8%	0.09%	24%	0.009%	76%	7.5%	163%	0.60%	293%
R311	587448.90	4807829.64	3.0%	43%	0.1%	52%	1.2%	46%	0.07%	88%	0.04%	0.04%	12%	19%	1.1%	13%	6.2%	9.1%	0.12%	1.4%	0.07%	11.1%	2.8%	2.8%	3.5%	3.5%	0.06%	24%	0.004%	76%	6.0%	161%	0.40%	293%
R312	587054.18	4807578.46	3.8%	44%	0.1%	52%	1.6%	46%	0.07%	88%	0.05%	0.05%	12%	19%	1.4%	13%	6.4%	9.2%	0.14%	1.4%	0.08%	11.1%	3.3%	3.3%	4.3%	4.3%	0.09%	24%	0.007%	76%	7.7%	163%	0.43%	293%
R313	586874.76	4807085.06	4.0%	44%	0.2%	52%	1.7%	46%	0.09%	88%	0.06%	0.06%	13%	20%	1.3%	13%	6.6%	9.5%	0.13%	1.4%	0.10%	11.1%	4.2%	4.2%	5.4%	5.4%	0.10%	24%	0.007%	76%	7.6%	163%	0.54%	293%
R314	588417.75	4803810.68	5.4%	46%	0.6%	52%	2.2%	47%	0.33%	88%	0.10%	0.10%	20%	27%	1.7%	14%	9.2%	12.1%	0.16%	1.4%	0.31%	11.3%	3.8%	3.8%	4.9%	4.9%	0.13%	24%	0.024%	76%	10.1%	165%	1.70%	294%
R315	589027.77	4803801.71	8.6%	49%	0.6%	52%	2.7%	47%	0.30%	88%	0.16%	0.16%	21%	28%	2.5%	14%	10.9%	13.8%	0.21%	1.5%	0.29%	11.3%	4.8%	4.8%	6.2%	6.2%	0.15%	24%	0.022%	76%	13.1%	168%	1.58%	294%
R316	589467.35	4803774.80	8.3%	48%	0.4%	52%	2.9%	48%	0.23%	88%	0.13%	0.13%	17%	25%	2.0%	14%	10.3%	13.2%	0.21%	1.5%	0.22%	11.2%	5.6%	5.6%	7.3%	7.3%	0.17%	24%	0.018%	76%	14.7%	170%	1.23%	294%
R317	587852.59	4804052.90	6.2%	46%	0.6%	52%	2.2%	47%	0.30%	88%	0.10%	0.10%	17%	24%	2.0%	14%	8.2%	11.0%	0.18%	1.5%	0.27%	11.3%	4.3%	4.3%	5.5%	5.5%	0.14%	24%	0.024%	76%	10.2%	165%	1.46%	294%
R318	591979.19	4808062.88	8.0%	48%	1.0%	53%	2.8%	47%	0.55%	88%	0.13%	0.13%	16%	24%	2.4%	14%	8.5%	11.3%	0.22%	1.5%	0.55%	11.6%	2.2%	2.2%	2.9%	2.9%	0.15%	24%	0.044%	76%	12.8%	168%	3.11%	296%
R319	592965.99	4804689.83	3.9%	44%	0.3%	52%	1.6%	46%	0.19%	88%	0.06%	0.06%	13%	20%	1.5%	13%	6.4%	9.2%	0.13%	1.4%	0.19%	11.2%	3.0%	3.0%	3.8%	3.8%	0.09%	24%	0.016%	76%	6.4%	161%	1.03%	294%
R320	592903.19	4804447.62	3.4%	44%	0.3%	52%	1.3%	46%	0.17%	88%	0.06%	0.06%	13%	20%	1.4%	13%	6.4%	9.2%	0.12%	1.4%	0.17%	11.2%	3.1%	3.1%	4.0%	4.0%	0.07%	24%	0.013%	76%	5.6%	161%	0.93%	293%
R321	589917.34	4807771.52	13.2%	53%	0.9%	53%	4.3%	49%	0.45%	88%	0.20%	0.20%	21%	29%	3.2%	15%	13.6%	16.4%	0.33%	1.6%	0.39%	11.4%	3.5%	3.5%	4.5%	4.5%	0.25%	24%	0.038%	76%	21.6%	177%	2.67%	295%
R322	589928.61	4808104.27	10.5%	51%	0.6%	52%	3.5%	48%	0.33%	88%	0.16%	0.16%	20%	27%	2.9%	15%	11.4%	14.2%	0.27%	1.6%	0.30%	11.3%	3.0%	3.0%	3.8%	3.8%	0.20%	24%	0.027%	76%	17.1%	172%	1.92%	294%
R323	590196.67	4807870.35	14.5%	55%	1.2%	53%	5.0%	50%	0.59%	89%	0.22%	0.22%	20%	27%	3.2%	15%	15.3%	18.2%	0.38%	1.7%	0.53%	11.5%	4.0%	4.0%	5.2%	5.2%	0.29%	24%	0.051%	76%	25.8%	181%	3.47%	296%

Percentages of Criteria at Sensitive Receptors (Scenario C)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			54.6%	94.7%	10.6%	62.2%	16.6%	61.2%	4.7%	92.6%	0.8%	0.8%	47.4%	54.6%	11.5%	23.3%	29.3%	32.2%	1.1%	2.4%	4.0%	15.0%	26.8%	26.8%	34.5%	34.5%	0.9%	24.8%	0.4%	76.4%	92.3%	247.3%	29.5%	321.9%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R1	590428.52	4805587.50	28.2%	68%	4.9%	56%	9.2%	54%	2.04%	90%	0.39%	0.39%	33%	40%	8.2%	20%	18.3%	21.2%	0.66%	2.0%	1.52%	12.5%	8.1%	8.1%	10.5%	10.5%	0.50%	24%	0.164%	76%	48.9%	204%	11.70%	304%
R2	590715.91	4805728.09	25.3%	65%	4.1%	56%	7.3%	52%	1.88%	90%	0.35%	0.35%	32%	40%	9.5%	21%	15.6%	18.5%	0.67%	2.0%	1.67%	12.7%	6.9%	6.9%	8.9%	8.9%	0.42%	24%	0.140%	76%	37.4%	192%	10.80%	303%
R3	590357.58	4805478.22	28.3%	68%	4.3%	56%	8.9%	54%	1.79%	90%	0.39%	0.39%	29%	36%	7.3%	19%	16.7%	19.5%	0.59%	1.9%	1.30%	12.3%	9.8%	9.8%	12.6%	12.6%	0.51%	24%	0.147%	76%	47.9%	203%	10.00%	302%
R4	590307.77	4805411.02	28.4%	69%	4.1%	56%	8.8%	53%	1.69%	90%	0.39%	0.39%	26%	33%	7.9%	20%	15.9%	18.7%	0.60%	1.9%	1.21%	12.2%	10.8%	10.8%	13.9%	13.9%	0.51%	24%	0.138%	76%	47.8%	203%	9.23%	302%
R5	590307.86	4805232.30	22.4%	63%	3.1%	55%	7.0%	52%	1.28%	89%	0.31%	0.31%	22%	30%	6.5%	18%	14.9%	17.8%	0.50%	1.8%	0.91%	11.9%	13.1%	13.1%	16.9%	16.9%	0.40%	24%	0.104%	76%	39.2%	194%	6.70%	299%
R6	590268.71	4805171.18	21.1%	61%	2.9%	54%	6.6%	51%	1.20%	89%	0.30%	0.30%	24%	31%	6.4%	18%	14.9%	17.8%	0.51%	1.8%	0.85%	11.9%	14.1%	14.1%	18.1%	18.1%	0.38%	24%	0.098%	76%	36.9%	192%	6.25%	299%
R7	590101.81	4805169.13	28.4%	69%	3.6%	55%	8.1%	53%	1.47%	89%	0.39%	0.39%	28%	35%	5.5%	17%	17.3%	20.2%	0.48%	1.8%	1.02%	12.0%	16.4%	16.4%	21.1%	21.1%	0.46%	24%	0.122%	76%	40.3%	195%	7.53%	300%
R8	590039.80	4805108.86	28.3%	68%	3.4%	55%	8.3%	53%	1.39%	89%	0.39%	0.39%	31%	39%	5.9%	18%	18.0%	20.8%	0.53%	1.8%	0.97%	12.0%	18.4%	18.4%	23.8%	23.8%	0.46%	24%	0.113%	76%	34.2%	189%	7.05%	300%
R9	590051.99	4805042.66	21.9%	62%	2.8%	54%	6.1%	51%	1.17%	89%	0.36%	0.36%	31%	38%	5.7%	17%	16.9%	19.8%	0.50%	1.8%	0.83%	11.8%	18.3%	18.3%	23.5%	23.5%	0.34%	24%	0.096%	76%	31.3%	186%	6.00%	298%
R10	589949.68	4804950.27	21.1%	61%	2.5%	54%	6.2%	51%	1.04%	89%	0.33%	0.33%	33%	40%	4.2%	16%	16.3%	19.1%	0.38%	1.7%	0.76%	11.8%	19.4%	19.4%	25.0%	25.0%	0.35%	24%	0.084%	76%	28.1%	183%	5.20%	298%
R12	589649.06	4804788.02	20.6%	61%	2.2%	54%	6.0%	51%	0.98%	89%	0.29%	0.29%	38%	45%	4.9%	17%	18.2%	21.1%	0.42%	1.7%	0.76%	11.8%	22.5%	22.5%	28.9%	28.9%	0.34%	24%	0.076%	76%	24.2%	179%	4.63%	297%
R13	589565.47	4804836.84	27.9%	68%	2.7%	54%	8.4%	53%	1.16%	89%	0.43%	0.43%	44%	52%	6.5%	18%	21.2%	24.0%	0.57%	1.9%	0.88%	11.9%	26.1%	26.1%	33.6%	33.6%	0.45%	24%	0.089%	76%	33.2%	188%	5.32%	298%
R14	589552.40	4804850.98	29.8%	70%	2.8%	54%	8.9%	54%	1.21%	89%	0.45%	0.45%	45%	53%	6.8%	19%	21.6%	24.5%	0.59%	1.9%	0.91%	11.9%	26.6%	26.6%	34.3%	34.3%	0.48%	24%	0.093%	76%	35.0%	190%	5.51%	298%
R15	589487.71	4804854.82	36.3%	76%	3.0%	55%	10.8%	55%	1.28%	89%	0.54%	0.54%	46%	53%	7.6%	19%	21.7%	24.6%	0.67%	2.0%	0.96%	12.0%	26.8%	26.8%	34.5%	34.5%	0.59%	24%	0.100%	76%	41.4%	196%	5.73%	298%
R16	589391.42	4804818.71	34.4%	75%	3.0%	55%	8.1%	53%	1.29%	89%	0.42%	0.42%	35%	42%	5.6%	17%	19.6%	22.4%	0.51%	1.8%	0.95%	12.0%	20.3%	20.3%	26.2%	26.2%	0.45%	24%	0.100%	76%	31.6%	187%	5.66%	298%
R17	589341.30	4804854.89	34.6%	75%	3.7%	55%	9.2%	54%	1.53%	89%	0.48%	0.48%	36%	44%	6.0%	18%	21.7%	24.6%	0.55%	1.8%	1.08%	12.1%	18.9%	18.9%	24.3%	24.3%	0.51%	24%	0.120%	76%	35.7%	191%	6.41%	299%
R18	589237.00	4804804.05	26.5%	67%	3.1%	55%	6.5%	51%	1.32%	89%	0.36%	0.36%	36%	43%	4.4%	16%	20.0%	22.9%	0.41%	1.7%	0.95%	12.0%	13.9%	13.9%	18.0%	18.0%	0.37%	24%	0.104%	76%	27.8%	183%	5.64%	298%
R19	589214.42	4804827.86	27.2%	67%	3.3%	55%	6.8%	51%	1.38%	89%	0.37%	0.37%	35%	42%	4.4%	16%	20.0%	22.8%	0.42%	1.7%	0.99%	12.0%	13.7%	13.7%	17.7%	17.7%	0.38%	24%	0.109%	76%	28.3%	183%	5.86%	298%
R20	589161.88	4804859.47	27.8%	68%	3.5%	55%	7.0%	52%	1.45%	89%	0.38%	0.38%	34%	42%	4.8%	17%	19.7%	22.5%	0.44%	1.7%	1.02%	12.0%	12.1%	12.1%	15.6%	15.6%	0.39%	24%	0.116%	76%	29.0%	184%	6.06%	299%
R21	589148.36	4804897.75	29.8%	70%	3.8%	55%	7.3%	52%	1.57%	89%	0.40%	0.40%	35%	42%	5.3%	17%	20.1%	23.0%	0.48%	1.8%	1.09%	12.1%	12.5%	12.5%	16.0%	16.0%	0.41%	24%	0.124%	76%	29.8%	185%	6.45%	299%
R22	589087.10	4804971.33	31.3%	71%	4.2%	56%	9.1%	54%	1.71%	90%	0.41%	0.41%	35%	42%	6.2%	18%	21.1%	24.0%	0.56%	1.8%	1.16%	12.2%	11.8%	11.8%	15.2%	15.2%	0.50%	24%	0.138%	76%	35.9%	191%	6.93%	299%
R23	589148.96	4805035.30	37.5%	78%	5.5%	57%	11.1%	56%	2.18%	90%	0.49%	0.49%	38%	46%	7.4%	19%	22.9%	25.8%	0.67%	2.0%	1.41%	12.4%	14.7%	14.7%	18.9%	18.9%	0.62%	24%	0.178%	76%	43.5%	199%	8.44%	301%
R24	589128.67	4805086.01	40.7%	81%	5.9%	58%	12.4%	57%	2.36%	90%	0.52%	0.52%	40%	47%	8.2%	20%	23.9%	26.7%	0.75%	2.0%	1.51%	12.5%	14.8%	14.8%	19.0%	19.0%	0.69%	25%	0.193%	76%	48.7%	204%	9.05%	302%
R25	589105.01	4805060.41	37.7%	78%	5.3%	57%	11.5%	56%	2.12%	90%	0.48%	0.48%	38%	45%	7.7%	19%	23.0%	25.8%	0.70%	2.0%	1.38%	12.4%	13.2%	13.2%	17.0%	17.0%	0.64%	25%	0.173%	76%	45.4%	200%	8.29%	301%
R26	589133.34	4805172.65	51.4%	92%	7.6%	59%	15.5%	60%	2.98%	91%	0.67%	0.67%	44%	51%	9.9%	22%	26.2%	29.1%	0.91%	2.2%	1.83%	12.8%	18.4%	18.4%	23.8%	23.8%	0.87%	25%	0.247%	76%	60.3%	215%	11.01%	304%
R27	588993.00	4805046.07	32.0%	72%	4.1%	56%	10.0%	55%	1.67%	90%	0.42%	0.42%	34%	42%	6.9%	19%	20.1%	22.9%	0.63%	1.9%	1.14%	12.2%	10.8%	10.8%	13.9%	13.9%	0.55%	24%	0.138%	76%	40.6%	196%	6.83%	299%
R28	588933.88	4805108.89	31.6%	72%	3.8%	55%	10.0%	55%	1.56%	89%	0.41%	0.41%	36%	43%	6.8%	19%	18.5%	21.3%	0.64%	1.9%	1.08%	12.1%	11.6%	11.6%	15.0%	15.0%	0.55%	24%	0.129%	76%	41.6%	197%	6.51%	299%
R29	589053.75	4804987.00	30.5%	71%	4.2%	56%	9.4%	54%	1.68%	90%	0.40%	0.40%	34%	42%	6.4%	18%	21.0%	23.9%	0.59%	1.9%	1.15%	12.2%	11.5%	11.5%	14.8%	14.8%	0.52%	24%	0.136%	76%	37.5%	192%	6.84%	299%
R30	589022.84	4805021.77	31.9%	72%	4.2%	56%	9.9%	54%	1.70%	90%	0.41%	0.41%	35%	42%	6.8%	19%	20.9%	23.7%	0.62%	1.9%	1.16%	12.2%	11.3%	11.3%	14.6%	14.6%	0.55%	24%	0.138%	76%	39.8%	195%	6.92%	299%
R31	588909.44	4805151.99	31.9%	72%	3.6%	55%	10.0%	55%	1.51%	89%	0.41%	0.41%	36%	44%	6.8%	19%	19.3%	22.1%	0.64%	1.9%	1.05%	12.1%	12.7%	12.7%	16.3%	16.3%	0.56%	24%	0.124%	76%	42.3%	197%	6.38%	299%
R32	588882.16	4805178.52	31.9%	72%	3.3%	55%	9.8%	54%	1.42%	89%	0.41%	0.41%	35%	42%	6.9%	19%	18.4%	21.2%	0.63%	1.9%	1.00%	12.0%	13.2%	13.2%	17.0%	17.0%	0.54%	24%	0.118%	76%	40.7%	196%	6.10%	299%
R33	588837.60	4805190.59	29.0%	69%	2.9%	54%	9.1%	54%	1.26%	89%	0.38%	0.38%	30%	37%	6.5%	18%	15.6%	18.4%	0.60%	1.9%	0.92%	11.9%	13.0%	13.0%	16.7%	16.7%	0.49%	24%	0.107%	76%	37.2%	192%	5.57%	298%
R34	588906.04	4805227.93	34.1%	74%	3.5%	55%	10.5%	55%	1.51%	89%	0.44%	0.44%	33%	40%	7.3%	19%	17.3%	20.1%	0.67%	2.0%	1.05%	12.1%	15.6%	15.6%	20.1%	20.1%	0.57%	24%	0.127%	76%	42.6%	198%	6.45%	299%
R35	588863.99	4805271.68	29.8%	70%	2.9%	54%	9.4%	54%	1.29%	89%	0.40%	0.40%	28%	35%	6.2%	18%	13.3%	16.2%	0.58%	1.9%	0.93%	11.9%	16.4%	16.4%	21.2%	21.2%	0.52%	24%	0.109%	76%	36.7%	192%	5.77%	298%
R36	588774.77	4805264.86	23.0%	63%	2.3%	54%	7.4%	52%	1.05%	89%	0.31%	0.31%	24%	31%	5.4%	17%	11.3%	14.2%	0.50%	1.8%	0.79%	11.8%	14.0%	14.0%	18.0%	18.0%	0.40%	24%	0.089%	76%	31.7%	187%	4.88%	297%
R37	588767.37	4805274.62	22.5%	63%	2.2%	54%	7.3%	52%	1.03%	89%	0.30%	0.30%	24%	31%	5.2%	17%	11.5%	14.3%	0.49%	1.8%	0.78%	11.8%	14.1%	14.1%	18.2%	18.2%	0.39%	24%	0.087%	76%	31.1%	186%	4.80%	297%
R38	588739.80	4805301.49	21.0%	61%	2.1%	54%	6.8%	51%	0.96%	89%	0.28%	0.28%	24%	31%	4.9%	17%	11.3%	14.2%	0.46%	1.7%	0.74%	11.8%	14.0%	14.0%	18.0%	18.0%	0.37%	24%	0.082%	76%	29.9%	185%	4.57%	297%
R39	588701.19	4805324.41	19.4%	60%	1.9%	54%	6.3%	51%	0.89%	89%	0.26%	0.26%	23%	30%	4.7%	16%	11.0%	13.8%	0.42%	1.7%	0.70%	11.7%	13.5%	13.5%	17.4%	17.4%	0.34%	24%	0.078%	76%	29.3%	184%	4.30%	297%
R40	588676.08	4805360.64	18.8%	59%	1.8%	53%	6.2%	51%	0.86%	89%	0.25%	0.25%	23%	30%	4.6%	16%	10.9%	13.8%	0.42%	1.7%	0.67%	11.7%	13.5%	13.5%	17.3%	17.3%	0.33%	24%	0.076%	76%	29.6%	185%	4.16%	297%
R41	588628.93	4805409.57	17.6%	58%	1.7%	53%	5.8%	50%	0.80%	89%	0.24%	0.24%	25%	33%	4.4%	16%	12.1%	15.0%	0.42%	1.7%	0.63%	11.6%	14.9%	14.9%	19.2%	19.2%	0.33%	24%	0.069%	76%	29.4%	184%	3.89%	296%
R42	588586.22	4805444.06	16.8%	57%	1.6%	53%	5.7%	50%	0.75%	89%	0.23%	0.23%	27%	34%	4.2%	16%	13.0%	15.9%	0.41%	1.7%	0.59%	11.6%	16.0%	16.0%	20.7%	20.7%	0.32%	24%	0.067%	76%	28.8%	184%	3.68%	296%
R43	588557.06	4805464.32	16.4%	57%	1.5%	53%	5.5%	50%	0.71%	89%	0.22%	0.22%	27%	34%	4.1%	16%	13.0%	15.8%	0.40%	1.7%	0.57%	11.6%	16.0%	16.0%	20.6%	20.6%	0.31%	24%	0.064%	76%	28.1%	183%	3.54%	296%
R44	588670.10	4805576.40	16.0%	56%	1.6%	53%	5.5%	50%	0.76%	89%	0.23%	0.23%	34%	41%	4.0%	16%	16.1%	18.9%	0.40%	1.7%	0.61%	11.6%	19.8%	19.8%	25.5%	25.5%	0.34%	24%	0.069%	76%	29.2%	184%	3.95%	296%
R45	588670.28	4805615.19	15.5%	56%	1.6%	53%	5.3%	50%	0.75%	89%	0.23%	0.23%	30%	37%	3.7%	15%	14.4%	17.2%	0.39%	1.7%	0.60%	11.6%	17.7%	17.7%	22.8%	22.8%	0.34%	24%	0.067%	76%	28.8%	184%	3.93%	296%
R46	589003.59	4805937.72	28.6%	69%	2.7%	54%	9.4%	54%	1.20%	89%	0.39%	0.39%	34%	42%	4.7%	16%	16.4%	19.2%	0.61%	1.9%	0.90%	11.9%	20.2%	20.2%	26.0%	26.0%	0.54%	24%	0.111%	76%	53.6%	209%	6.82%	299%
R47	589041.99	4805974.72	30.6%	71%	2.8%	54%	10.1%	55%	1.27%	89%	0.41%	0.41%	26%	33%	4.9%	17%	15.4%	18.3%	0.65%	1.9%	0.94%	12.0%	13.8%	13.8%	17.8%	17.8%	0.58%	24%	0.118%	76%	57.2%	212%	7.28%	300%
R48	589293.19	4806505.50	22.0%	62%	2.0%	54%	7.1%	52%	0.87%	89%	0.33%	0.33%	26%	33%	4.5%	16%	13.9%	16.8%	0.54%	1.8%	0.70%	11.7%	7.7%	7.7%	9.9%	9.9%	0.41%	24%	0.078%	76%	40.3%	195%	5.28%	298%
R49	589219.60	4806515.59	19.6%	60%	1.7%	53%	6.4%	51%	0.74%	89%	0.29%	0.29%	24%	31%	4.3%	16%	13.7%	16.6%	0.51%	1.8%	0.60%	11.6%	8.0%	8.0%	10.3%	10.3%	0.37%	24%	0.064%	76%	36.5%	192%	4.45%	297%
R50	589338.17	4806485.88	24.2%	64%	2.3%	54%	7.8%	52%	1.01%	89%	0.36%	0.36%	26%	33%	4.6%	16%	14.4%	17.3%	0.59%	1.9%	0.81%	11.8%	7.6%	7.6%	9.8%	9.8%	0.46%	24%	0.091%	76%	43.9%	199%	6.15%	299%
R51	589518.84	4806584.75	29.4%	70%	3.4%	55%	9.7%	54%	1.43%	89%	0.43%	0.43%	29%	36%	4.9%	17%	16.3%	19.2%	0.65%	1.9%	1.09%	12.1%	6.5%	6.5%	8.4%	8.4%	0.55%	24%	0.127%	76%	53.7%	209%	8.91%	301%
R52	589557.86	4806649.65	28.9%	69%	3.3%	55%	9.5%	54%	1.38%	89%	0.43%	0.43%	27%	34%	4.5%	16%	15.8%	18.6%	0.65%	1.9%	1.04%	12.0%	6.6%	6.6%	8.5%	8.5%	0.55%	24%	0.122%	76%	52.7%	208%	8.60%	301%
R53	589474.48	4806602.41	26.7%	67%	2.7%	54%	8.8%	53%	1.16%	89%	0.39%	0.39%	29%	36%	4.7%	16%	16.3%	19.2%	0.62%	1.9%	0.89%	11.9%	6.4%	6.4%	8.2%	8.2%	0.50%	24%	0.104%	76%	48.6%	204%	7.22%	300%
R54	589897.77	4807374.19	20.6%	61%	1.9%	53%	6.9%	52%	0.82%	89%	0.32%	0.32%	24%	32%	4.2%	16%	16.2%	19.1%	0.47%	1.8%	0.66%	11.7%	4.7%	4.7%	6.0%	6.0%	0.42%	24%	0.073%	76%	34.0%	189%	4.81%	297%
R55	590214.06	4807506.19	21.6%	62%	2.4%	54%	7.3%	52%	1.08%	89%	0.29%	0.29%	27%	34%	4.4%	16%	20.2%	23.0%	0.54%	1.8%	0.93%	11.9%	4.0%	4.0%	5.2%	5.2%	0.42%	24%	0.098%	76%	37.0%	192%	6.15%	299%
R56	590337.28	4807588.62	18.3%	58%	2.3%	54%	6.2%	51%	1.04%	89%	0.25%	0.25%	26%	33%	4.1%	16%	18.7%	21.6%	0.46%	1.7%	0.90%	11.9%	3.9%	3.9%	5.0%	5.0%	0.36%	24%	0.093%	76%	31.9%	187%	5.90%	298%
R57	590735.46	4807580.37	18.6%	59%	2.5%	54%	6.3%	51%	1.18%	89%	0.24%	0.24%	21%	28%	3.9%	16%	13.6%	16.4%	0.44%	1.7%	1.08%	12.1%	3.4%	3.4%	4.4%	4.4%	0.38%	24%	0.100%	76%	31.6%	187%	6.78%	299%
R58	590836.21	4807430.87	18.3%	58%	2.9%	55%	6.1%	51%	1.40%	89%	0.26%	0.26%	23%	30%	3.7%	15%	14.1%	16.9%	0.42%	1.7%	1.29%	12.3%	3.4%	3.4%	4.4%	4.4%	0.36%	24%	0.120%	76%	30.9%	186%	8.06%	301%
R59	590841.35	4807247.63	21.2%	61%	3.7%	55%	6.5%	51%	1.76%	90%	0.32%	0.32%	22%	30%	4.0%	16%	14.3%	17.1%	0.45%	1.7%	1.60%	12.6%	3.5%	3.5%	4.5%	4.5%	0.40%	24%	0.151%	76%	33.3%	188%	10.20%	303%
R60	590953.11	4807285.94	20.2%	60%	3.4%	55%	6.2%	51%	1.62%	90%	0.31%	0.31%	23%	30%	4.0%	16%	14.2%	17.1%	0.44%	1.7%	1.47%	12.5%	3.5%	3.5%	4.4%	4.4%	0.37%	24%	0.138%	76%	30.7%	186%	9.31%	302%
R61	590858.15	4807196.55	22.2%	62%	4.0%	56%	6.8%	51%	1.87%	90%	0.34%	0.34%	23%	30%	4.3%	16%	14.5%	17.4%	0.47%	1.8%	1.68%	12.7%	3.5%	3.5%	4.5%	4.5%	0.41%	24%	0.160%	76%	33.9%	189%	10.85%	303%
R62	590899.99	4807147.81	22.8%	63%	4.1%	56%	7.0%	52%	1.94%	90%	0.35%	0.35%	25%	32%	4.5%	16%	15.2%	18.0%	0.49%	1.8%	1.72%	12.7%	3.8%	3.8%	4.8%	4.8%	0.41%	24%	0.167%	76%	35.1%	190%	11.25%	304%
R63	590908.06	4807085.06	23.8%	64%	4.4%	56%	7.2%	52%	2.06%	90%	0.36%	0.36%	28%	35%	4.8%	17%	16.0%	18.8%	0.52%	1.8%	1.80%	12.8%	3.8%	3.8%	4.9%	4.9%	0.44%	24%	0.178%	76%	36.2%	191%	11.93%	304%
R64	590967.33	4807021.48	24.5%	65%	4.5%	56%	7.4%	52%	2.10%	90%	0.37%	0.37%	31%	38%	5.4%	17%	16.6%	19.5%	0.52%	1.8%	1.80%	12.8%	3.9%	3.9%	5.0%	5.0%	0.43%	24%	0.178%	76%	36.6%	192%	12.27%	305%
R65	590865.33	4806894.56	28.3%	68%	5.7%	57%	8.3%	53%	2.58%	91%	0.43%	0.43%	31%	38%	6.2%	18%	17.8%	20.6%	0.58%	1.9%	2.14%	13.2%	4.1%	4.1%	5.3%	5.3%	0.53%	24%	0.218%	76%	42.2%	197%	15.46%	308%
R66	590875.79	4806848.38	29.0%	69%	6.0%	58%	8.6%	53%	2.68%	91%	0.44%	0.44%	33%	40%	6.5%	18%	18.8%	21.6%	0.62%	1.9%	2.23%	13.2%	4.1%	4.1%	5.3%	5.3%	0.50%	24%	0.224%	76%	46.3%	201%	16.21%	309%
R67	590920.31	4806789.89	29.0%	69%	6.1%	58%	9.5%	54%	2.74%	91%	0.48%	0.48%	38%	45%	7.2%	19%	20.5%	23.4%	0.70%	2.0%	2.31%	13.3%	4.2%	4.2%	5.3%	5.3%	0.53%	24%	0.224%	76%	50.6%	206%	16.62%	309%
R68	590961.66	4806888.64	26.7%	67%	5.3%	57%	8.1%	53%	2.39%	90%	0.42%	0.42%	34%	42%	6.4%	18%	19.1%	21.9%	0.61%	1.9%	2.01%	13.0%	4.0%	4.0%	5.2%	5.2%	0.46%	24%	0.198%	76%	41.1%	196%	14.28%	307%
R69	590903.03	4806672.93	36.3%	76%	7.2%	59%	12.0%	57%	3.20%	91%	0.58%	0.58%	41%	48%	7.9%	20%	22.0%	24.8%	0.87%	2.2%	2.69%	13.7%	4.3%	4.3%	5.6%	5.6%	0.69%	25%	0.258%	76%	64.2%	219%	19.66%	312%
R70	590963.12	4806680.26	33.8%	74%	6.6%	58%	11.2%	56%	2.98%	91%	0.56%	0.56%	41%	49%	7.9%	20%	22.0%	24.9%	0.81%	2.1%	2.54%	13.6%	4.3%	4.3%	5.5%	5.5%	0.64%	25%	0.238%	76%	59.4%	214%	18.18%	311%
R71	591025.30	4806745.59	30.5%	71%	5.8%	57%	9.5%	54%	2.63%	91%	0.50%	0.50%	40%	47%	7.2%	19%	21.2%	24.1%	0.70%	2.0%	2.26%	13.3%	4.2%	4.2%	5.4%	5.4%	0.54%	24%	0.211%	76%	50.8%	206%	15.91%	308%
R72	591093.90	4806613.91	29.3%	69%	5.7%	57%	10.4%	55%	2.63%	91%	0.48%	0.48%	47%	55%	7.7%	19%	22.7%	25.5%	0.71%	2.0%	2.34%	13.4%	4.2%	4.2%	5.4%	5.4%	0.63%	25%	0.202%	76%	53.4%	208%	15.77%	308%
R73	591080.34	4806562.13	33.5%	74%	6.1%	58%	11.3%	56%	2.81%	91%	0.51%	0.51%	45%	52%	7.7%	19%	22.9%	25.8%	0.75%	2.0%	2.48%	13.5%	4.5%	4.5%	5.8%	5.8%	0.66%	25%	0.218%	76%	61.3%	216%	17.04%	310%
R74	590955.72	4806489.27	42.9%	83%	8.1%	60%	13.6%	58%	3.61%	92%	0.66%	0.66%	44%	51%	8.9%	21%	23.9%	26.8%	0.87%	2.2%	3.07%	14.1%	4.8%	4.8%	6.2%	6.2%	0.78%	25%	0.280%	76%	77.0%	232%	22.41%	315%
R75	591005.07	4806448.29	43.0%	83%	7.4%	59%	13.2%	58%	3.33%	91%	0.61%	0.61%	41%	48%	8.3%	20%	21.7%	24.6%	0.85%	2.1%	2.87%	13.9%	4.8%	4.8%	6.2%	6.2%	0.75%	25%	0.256%	76%	74.6%	230%	20.50%	313%
R76	590884.05	4806449.67	49.8%	90%	9.7%	61%	15.3%	60%	4.24%	92%	0.75%	0.75%	45%	52%	10.0%	22%	24.9%	27.8%	0.98%	2.3%	3.53%	14.5%	4.9%	4.9%	6.4%	6.4%	0.88%	25%	0.331%	76%	87.1%	242%	26.64%	319%
R77	590883.54	4806430.39	51.1%	91%	9.7%	61%	15.6%	60%	4.26%	92%	0.75%	0.75%	44%	51%	10.2%	22%	24.8%	27.7%	0.97%	2.3%	3.55%	14.6%	5.0%	5.0%	6.4%	6.4%	0.89%	25%	0.331%	76%	88.9%	244%	26.75%	319%
R78	590891.65	4806348.55	48.7%	89%	8.6%	60%	14.9%	59%	3.87%	92%	0.70%	0.70%	38%	46%	9.5%	21%	22.1%	24.9%	0.96%	2.2%	3.34%	14.3%	5.1%	5.1%	6.6%	6.6%	0.84%	25%	0.293%	76%	81.2%	236%	23.95%	316%
R79	590869.78	4806365.29	51.3%	91%	9.4%	61%	15.6%	60%	4.16%	92%	0.73%	0.73%	41%	48%	10.3%	22%	23.3%	26.2%	1.00%	2.3%	3.54%	14.5%	5.1%	5.1%	6.6%	6.6%	0.88%	25%	0.318%	76%	86.5%	241%	25.95%	318%
R80	590867.26	4806331.34	49.5%	90%	8.9%	60%	15.1%	60%	3.99%	92%	0.71%	0.71%	39%	46%	9.8%	22%	22.4%	25.3%	0.98%	2.3%	3.46%	14.5%	5.2%	5.2%	6.6%	6.6%	0.86%	25%	0.302%	76%	82.5%	237%	24.71%	317%
R81	590803.61	4806333.49	54.6%	95%	10.6%	62%	16.6%	61%	4.70%	93%	0.78%	0.78%	44%	51%	11.5%	23%	25.5%	28.3%	1.07%	2.4%	3.99%	15.0%	5.3%	5.3%	6.8%	6.8%	0.94%	25%	0.360%	76%	92.3%	247%	29.46%	322%
R82	590868.28	4806278.10	46.2%	86%	8.1%	60%	14.4%	59%	3.69%	92%	0.66%	0.66%	37%	44%	8.5%	20%	21.0%	23.9%	0.96%	2.2%	3.28%	14.3%	5.1%	5.1%	6.6%	6.6%	0.81%	25%	0.276%	76%	77.6%	233%	22.62%	315%
R83	590864.42	4806258.79	45.3%	85%	7.9%	59%	14.2%	59%	3.62%	92%	0.65%	0.65%	36%	43%	8.6%	20%	20.4%	23.3%	0.96%	2.2%	3.24%	14.2%	5.2%	5.2%	6.6%	6.6%	0.79%	25%	0.269%	76%	76.3%	231%	22.13%	315%
R84	590831.33	4806209.69	44.4%	85%	7.8%	59%	13.9%	59%	3.63%	92%	0.63%	0.63%	34%	41%	9.0%	21%	19.3%	22.1%	0.96%	2.2%	3.28%	14.3%	5.3%	5.3%	6.9%	6.9%	0.77%	25%	0.267%	76%	75.0%	230%	22.03%	315%

Percentages of Criteria at Sensitive Receptors (Scenario C)

			TSP				PM$_{2.5}$				RCS		NO$_2$				SO$_2$						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m^3)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			54.6%	94.7%	10.6%	62.2%	16.6%	61.2%	4.7%	92.6%	0.8%	0.8%	47.4%	54.6%	11.5%	23.3%	29.3%	32.2%	1.1%	2.4%	4.0%	15.0%	26.8%	26.8%	34.5%	34.5%	0.9%	24.8%	0.4%	76.4%	92.3%	247.3%	29.5%	321.9%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R85	590817.26	4806242.44	47.3%	87%	8.5%	60%	14.7%	59%	3.94%	92%	0.67%	0.67%	38%	45%	9.2%	21%	21.6%	24.5%	0.98%	2.3%	3.53%	14.5%	5.3%	5.3%	6.8%	6.8%	0.82%	25%	0.291%	76%	79.4%	234%	24.11%	317%
R86	590874.92	4806136.21	38.5%	79%	6.3%	58%	12.1%	57%	2.96%	91%	0.54%	0.54%	29%	36%	7.8%	20%	16.9%	19.7%	0.85%	2.1%	2.68%	13.7%	5.7%	5.7%	7.3%	7.3%	0.66%	25%	0.218%	76%	64.6%	220%	17.68%	310%
R87	591051.40	4806231.39	34.8%	75%	5.3%	57%	11.3%	56%	2.45%	90%	0.49%	0.49%	30%	37%	7.5%	19%	16.4%	19.2%	0.82%	2.1%	2.19%	13.2%	5.2%	5.2%	6.7%	6.7%	0.62%	24%	0.184%	76%	58.9%	214%	14.56%	307%
R88	590857.90	4806098.80	37.5%	78%	6.2%	58%	11.8%	56%	2.89%	91%	0.53%	0.53%	30%	37%	8.3%	20%	17.1%	20.0%	0.83%	2.1%	2.64%	13.6%	5.8%	5.8%	7.4%	7.4%	0.64%	25%	0.213%	76%	62.6%	218%	17.21%	310%
R89	590831.13	4806085.17	38.0%	78%	6.3%	58%	11.9%	57%	2.98%	91%	0.53%	0.53%	30%	37%	8.7%	20%	17.4%	20.3%	0.84%	2.1%	2.73%	13.7%	5.8%	5.8%	7.5%	7.5%	0.64%	25%	0.218%	76%	63.4%	218%	17.75%	310%
R90	590794.58	4805959.59	33.6%	74%	5.5%	57%	10.5%	55%	2.60%	91%	0.47%	0.47%	30%	37%	9.3%	21%	16.6%	19.5%	0.76%	2.0%	2.38%	13.4%	6.1%	6.1%	7.9%	7.9%	0.56%	24%	0.189%	76%	54.6%	210%	15.21%	308%
R91	590797.37	4805895.64	30.5%	71%	4.9%	56%	9.5%	54%	2.29%	90%	0.42%	0.42%	26%	34%	8.6%	20%	14.1%	16.9%	0.73%	2.0%	2.08%	13.1%	6.7%	6.7%	8.6%	8.6%	0.51%	24%	0.169%	76%	48.8%	204%	13.33%	306%
R92	591122.86	4805917.21	22.9%	63%	3.1%	55%	7.6%	52%	1.50%	89%	0.33%	0.33%	26%	33%	6.1%	18%	13.9%	16.8%	0.59%	1.9%	1.38%	12.4%	5.9%	5.9%	7.5%	7.5%	0.41%	24%	0.111%	76%	37.5%	192%	8.60%	301%
R93	591390.75	4805924.41	19.6%	60%	2.3%	54%	6.7%	51%	1.13%	89%	0.28%	0.28%	28%	35%	5.1%	17%	13.9%	16.7%	0.52%	1.8%	1.05%	12.1%	5.1%	5.1%	6.5%	6.5%	0.37%	24%	0.084%	76%	31.7%	187%	6.42%	299%
R94	591469.94	4806107.41	21.3%	61%	2.6%	54%	6.9%	52%	1.25%	89%	0.29%	0.29%	29%	36%	4.9%	17%	14.7%	17.5%	0.51%	1.8%	1.16%	12.2%	5.1%	5.1%	6.6%	6.6%	0.39%	24%	0.096%	76%	34.2%	189%	7.18%	300%
R95	591624.05	4806094.57	17.9%	58%	2.1%	54%	6.1%	51%	1.05%	89%	0.26%	0.26%	32%	39%	4.9%	17%	15.1%	18.0%	0.47%	1.8%	0.98%	12.0%	4.6%	4.6%	5.9%	5.9%	0.35%	24%	0.080%	76%	28.9%	184%	5.97%	298%
R96	591554.49	4806013.23	18.5%	59%	2.1%	54%	6.4%	51%	1.05%	89%	0.27%	0.27%	31%	38%	5.0%	17%	14.8%	17.6%	0.50%	1.8%	0.98%	12.0%	4.6%	4.6%	5.9%	5.9%	0.36%	24%	0.080%	76%	30.3%	185%	5.98%	298%
R97	591668.99	4806053.90	17.2%	57%	2.0%	54%	6.0%	51%	0.97%	89%	0.25%	0.25%	32%	39%	4.7%	17%	14.9%	17.8%	0.47%	1.8%	0.91%	11.9%	4.3%	4.3%	5.6%	5.6%	0.34%	24%	0.073%	76%	28.2%	183%	5.51%	298%
R98	591610.13	4805965.08	17.6%	58%	1.9%	54%	6.1%	51%	0.95%	89%	0.26%	0.26%	30%	37%	4.7%	17%	13.8%	16.6%	0.47%	1.8%	0.90%	11.9%	4.6%	4.6%	6.0%	6.0%	0.34%	24%	0.071%	76%	28.6%	184%	5.42%	298%
R99	591719.29	4806025.01	16.7%	57%	1.8%	53%	5.9%	50%	0.91%	89%	0.24%	0.24%	32%	39%	4.6%	16%	14.6%	17.4%	0.46%	1.7%	0.85%	11.9%	4.4%	4.4%	5.7%	5.7%	0.33%	24%	0.069%	76%	27.3%	182%	5.15%	298%
R100	591749.26	4805984.34	16.7%	57%	1.8%	53%	5.7%	50%	0.86%	89%	0.24%	0.24%	26%	33%	4.4%	16%	12.8%	15.7%	0.44%	1.7%	0.81%	11.8%	4.5%	4.5%	5.8%	5.8%	0.32%	24%	0.067%	76%	27.1%	182%	4.92%	297%
R101	591698.96	4805855.92	15.8%	56%	1.7%	53%	5.4%	50%	0.81%	89%	0.23%	0.23%	24%	31%	4.0%	16%	12.0%	14.9%	0.41%	1.7%	0.76%	11.8%	4.5%	4.5%	5.8%	5.8%	0.31%	24%	0.062%	76%	25.4%	180%	4.61%	297%
R102	591824.17	4805930.83	15.7%	56%	1.6%	53%	5.3%	50%	0.79%	89%	0.23%	0.23%	24%	31%	4.0%	16%	11.9%	14.8%	0.41%	1.7%	0.74%	11.8%	4.5%	4.5%	5.8%	5.8%	0.30%	24%	0.060%	76%	25.4%	180%	4.46%	297%
R103	591805.98	4805838.80	14.8%	55%	1.5%	53%	5.0%	50%	0.75%	89%	0.22%	0.22%	22%	30%	3.8%	16%	11.2%	14.1%	0.38%	1.7%	0.70%	11.7%	4.7%	4.7%	6.1%	6.1%	0.29%	24%	0.058%	76%	23.9%	179%	4.21%	297%
R104	591746.05	4805766.02	13.9%	54%	1.5%	53%	4.8%	49%	0.74%	89%	0.20%	0.20%	21%	28%	3.6%	15%	9.8%	12.7%	0.38%	1.7%	0.68%	11.7%	4.9%	4.9%	6.3%	6.3%	0.28%	24%	0.056%	76%	22.7%	178%	4.13%	297%
R105	592064.72	4805863.19	12.8%	53%	1.3%	53%	4.4%	49%	0.64%	89%	0.19%	0.19%	23%	30%	3.4%	15%	11.1%	14.0%	0.33%	1.6%	0.60%	11.6%	4.5%	4.5%	5.7%	5.7%	0.25%	24%	0.049%	76%	20.9%	176%	3.57%	296%
R106	591457.80	4806263.06	25.0%	65%	3.0%	55%	8.2%	53%	1.44%	89%	0.35%	0.35%	30%	38%	5.9%	18%	15.3%	18.2%	0.61%	1.9%	1.29%	12.3%	4.4%	4.4%	5.7%	5.7%	0.45%	24%	0.111%	76%	41.8%	197%	8.31%	301%
R107	591300.05	4806336.50	29.4%	70%	4.0%	56%	9.6%	54%	1.87%	90%	0.41%	0.41%	31%	38%	6.7%	18%	15.7%	18.5%	0.71%	2.0%	1.66%	12.7%	4.7%	4.7%	6.1%	6.1%	0.52%	24%	0.142%	76%	50.2%	205%	10.98%	303%
R108	591252.74	4806220.96	28.5%	69%	3.9%	55%	9.3%	54%	1.81%	90%	0.40%	0.40%	29%	36%	6.4%	18%	15.6%	18.4%	0.69%	2.0%	1.61%	12.6%	4.9%	4.9%	6.3%	6.3%	0.51%	24%	0.138%	76%	47.8%	203%	10.55%	303%
R109	591205.44	4806270.09	30.8%	71%	4.3%	56%	10.0%	55%	2.02%	90%	0.43%	0.43%	29%	36%	6.9%	19%	15.9%	18.8%	0.74%	2.0%	1.80%	12.8%	5.0%	5.0%	6.4%	6.4%	0.55%	24%	0.153%	76%	52.2%	207%	11.92%	304%
R110	591252.74	4806340.13	30.8%	71%	4.3%	56%	10.0%	55%	2.01%	90%	0.43%	0.43%	31%	38%	6.8%	19%	15.8%	18.6%	0.74%	2.0%	1.79%	12.8%	4.8%	4.8%	6.1%	6.1%	0.54%	24%	0.153%	76%	52.7%	208%	11.88%	304%
R111	591139.92	4806297.13	33.1%	73%	4.9%	57%	10.8%	55%	2.29%	90%	0.47%	0.47%	31%	38%	7.3%	19%	16.1%	19.0%	0.79%	2.1%	2.04%	13.1%	4.9%	4.9%	6.4%	6.4%	0.59%	24%	0.173%	76%	56.6%	212%	13.64%	306%
R112	591122.35	4806325.63	34.4%	75%	5.2%	57%	11.1%	56%	2.43%	90%	0.49%	0.49%	33%	40%	7.4%	19%	17.2%	20.1%	0.81%	2.1%	2.16%	13.2%	4.8%	4.8%	6.1%	6.1%	0.61%	24%	0.184%	76%	58.9%	214%	14.53%	307%
R113	591089.88	4806341.73	36.4%	77%	5.7%	57%	11.6%	56%	2.61%	91%	0.52%	0.52%	33%	40%	7.3%	19%	17.5%	20.3%	0.83%	2.1%	2.32%	13.3%	4.8%	4.8%	6.2%	6.2%	0.64%	25%	0.198%	76%	62.1%	217%	15.74%	308%
R114	591068.77	4806395.97	38.6%	79%	6.2%	58%	12.1%	57%	2.85%	91%	0.55%	0.55%	38%	46%	7.2%	19%	20.1%	22.9%	0.82%	2.1%	2.52%	13.5%	4.6%	4.6%	6.0%	6.0%	0.67%	25%	0.216%	76%	65.3%	220%	17.29%	310%
R115	591097.40	4806450.01	37.7%	78%	6.1%	58%	11.7%	56%	2.80%	91%	0.54%	0.54%	40%	47%	6.9%	19%	20.6%	23.5%	0.78%	2.1%	2.47%	13.5%	4.6%	4.6%	5.9%	5.9%	0.66%	25%	0.213%	76%	64.8%	220%	16.98%	309%
R116	591085.71	4806416.77	38.0%	78%	6.1%	58%	11.9%	56%	2.80%	91%	0.54%	0.54%	39%	47%	7.1%	19%	20.3%	23.1%	0.80%	2.1%	2.48%	13.5%	4.6%	4.6%	5.9%	5.9%	0.66%	25%	0.213%	76%	64.3%	219%	17.00%	309%
R117	591079.53	4806430.99	38.5%	79%	6.2%	58%	11.9%	57%	2.86%	91%	0.55%	0.55%	40%	48%	7.1%	19%	20.6%	23.4%	0.80%	2.1%	2.53%	13.5%	4.6%	4.6%	5.9%	5.9%	0.67%	25%	0.218%	76%	65.2%	220%	17.37%	310%
R118	591150.65	4806443.64	35.5%	76%	5.5%	57%	11.1%	56%	2.55%	90%	0.50%	0.50%	38%	45%	6.7%	18%	19.5%	22.4%	0.76%	2.0%	2.27%	13.3%	4.5%	4.5%	5.8%	5.8%	0.62%	24%	0.193%	76%	60.3%	215%	15.37%	308%
R119	591471.93	4806336.37	25.3%	65%	3.2%	55%	8.3%	53%	1.49%	89%	0.35%	0.35%	31%	38%	6.0%	18%	15.6%	18.5%	0.62%	1.9%	1.33%	12.3%	4.4%	4.4%	5.7%	5.7%	0.45%	24%	0.116%	76%	43.0%	198%	8.60%	301%
R120	591492.86	4806392.79	25.2%	65%	3.2%	55%	8.3%	53%	1.51%	89%	0.35%	0.35%	31%	38%	5.9%	18%	15.0%	17.9%	0.62%	1.9%	1.35%	12.4%	4.4%	4.4%	5.7%	5.7%	0.45%	24%	0.116%	76%	43.0%	198%	8.72%	301%
R121	591535.63	4806441.92	24.3%	64%	3.1%	55%	8.1%	53%	1.47%	89%	0.34%	0.34%	31%	38%	5.7%	17%	15.2%	18.1%	0.60%	1.9%	1.32%	12.3%	4.3%	4.3%	5.6%	5.6%	0.44%	24%	0.113%	76%	41.8%	197%	8.51%	301%
R122	591579.31	4806526.55	23.4%	63%	3.1%	55%	7.8%	52%	1.47%	89%	0.33%	0.33%	31%	38%	5.3%	17%	15.5%	18.4%	0.58%	1.9%	1.33%	12.3%	4.2%	4.2%	5.4%	5.4%	0.43%	24%	0.113%	76%	40.5%	195%	8.48%	301%
R123	591646.64	4806484.69	22.8%	63%	2.8%	54%	7.6%	52%	1.33%	89%	0.32%	0.32%	29%	36%	5.3%	17%	14.4%	17.3%	0.56%	1.8%	1.20%	12.2%	4.3%	4.3%	5.5%	5.5%	0.41%	24%	0.102%	76%	39.1%	194%	7.65%	300%
R124	591773.92	4806328.52	19.7%	60%	2.2%	54%	6.6%	51%	1.06%	89%	0.27%	0.27%	31%	38%	5.1%	17%	14.8%	17.6%	0.50%	1.8%	0.96%	12.0%	4.2%	4.2%	5.5%	5.5%	0.36%	24%	0.082%	76%	33.1%	188%	6.00%	298%
R125	591926.32	4806358.75	18.2%	58%	1.9%	54%	6.1%	51%	0.94%	89%	0.25%	0.25%	29%	36%	4.6%	16%	13.9%	16.8%	0.46%	1.7%	0.86%	11.9%	4.3%	4.3%	5.5%	5.5%	0.33%	24%	0.073%	76%	30.4%	185%	5.29%	298%
R126	592036.41	4805335.50	10.7%	51%	0.9%	53%	3.6%	48%	0.46%	88%	0.15%	0.15%	17%	24%	3.3%	15%	8.6%	11.5%	0.29%	1.6%	0.43%	11.4%	4.6%	4.6%	5.9%	5.9%	0.19%	24%	0.036%	76%	15.6%	171%	2.46%	295%
R127	592165.42	4805344.21	10.2%	50%	0.9%	52%	3.6%	48%	0.44%	88%	0.14%	0.14%	18%	25%	3.3%	15%	8.8%	11.7%	0.29%	1.6%	0.42%	11.4%	4.4%	4.4%	5.7%	5.7%	0.19%	24%	0.033%	76%	15.1%	170%	2.35%	295%
R128	592088.71	4805265.77	10.0%	50%	0.9%	52%	3.4%	48%	0.43%	88%	0.14%	0.14%	17%	24%	3.2%	15%	8.0%	10.9%	0.28%	1.6%	0.40%	11.4%	4.5%	4.5%	5.8%	5.8%	0.18%	24%	0.033%	76%	14.7%	170%	2.29%	295%
R129	592104.40	4805032.16	8.0%	48%	0.7%	52%	2.4%	47%	0.37%	88%	0.12%	0.12%	17%	24%	2.5%	14%	8.3%	11.1%	0.22%	1.5%	0.35%	11.4%	4.5%	4.5%	5.8%	5.8%	0.13%	24%	0.029%	76%	10.8%	166%	1.94%	294%
R130	592121.65	4804904.95	7.1%	47%	0.7%	52%	2.5%	47%	0.34%	88%	0.10%	0.10%	17%	24%	2.5%	14%	8.4%	11.2%	0.21%	1.5%	0.32%	11.3%	4.6%	4.6%	5.9%	5.9%	0.14%	24%	0.027%	76%	10.6%	166%	1.78%	294%
R131	592733.56	4805621.46	6.8%	47%	0.7%	52%	2.4%	47%	0.36%	88%	0.10%	0.10%	14%	21%	2.1%	14%	6.5%	9.3%	0.20%	1.5%	0.34%	11.4%	2.8%	2.8%	3.6%	3.6%	0.13%	24%	0.027%	76%	10.9%	166%	1.92%	294%
R132	591880.73	4804726.91	7.3%	47%	0.6%	52%	2.6%	47%	0.32%	88%	0.10%	0.10%	19%	26%	2.0%	14%	9.8%	12.7%	0.21%	1.5%	0.30%	11.3%	5.2%	5.2%	6.7%	6.7%	0.15%	24%	0.024%	76%	13.0%	168%	1.72%	294%
R133	592084.55	4804243.52	6.4%	46%	0.5%	52%	2.4%	47%	0.24%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.5%	11.4%	0.21%	1.5%	0.23%	11.2%	4.4%	4.4%	5.6%	5.6%	0.13%	24%	0.018%	76%	11.8%	167%	1.26%	294%
R134	592142.24	4804838.49	7.4%	47%	0.6%	52%	2.5%	47%	0.32%	88%	0.10%	0.10%	17%	24%	2.4%	14%	8.5%	11.3%	0.21%	1.5%	0.30%	11.3%	4.0%	4.0%	5.1%	5.1%	0.14%	24%	0.024%	76%	10.7%	166%	1.70%	294%
R135	592152.71	4804725.17	7.0%	47%	0.6%	52%	2.4%	47%	0.30%	88%	0.10%	0.10%	17%	24%	2.1%	14%	8.7%	11.6%	0.18%	1.5%	0.28%	11.3%	4.3%	4.3%	5.6%	5.6%	0.13%	24%	0.022%	76%	10.5%	166%	1.57%	294%
R136	592229.41	4804808.85	7.0%	47%	0.6%	52%	2.5%	47%	0.31%	88%	0.10%	0.10%	17%	24%	2.4%	14%	8.4%	11.3%	0.21%	1.5%	0.29%	11.3%	3.8%	3.8%	4.9%	4.9%	0.13%	24%	0.024%	76%	10.3%	165%	1.62%	294%
R137	589317.83	4804722.44	24.6%	65%	2.4%	54%	5.9%	51%	1.04%	89%	0.30%	0.30%	31%	39%	4.0%	16%	19.2%	22.1%	0.38%	1.7%	0.80%	11.8%	15.2%	15.2%	19.6%	19.6%	0.34%	24%	0.080%	76%	25.0%	180%	4.74%	297%
R138	589495.01	4804396.18	14.3%	54%	1.1%	53%	3.7%	48%	0.52%	88%	0.19%	0.19%	23%	30%	3.5%	15%	11.1%	13.9%	0.29%	1.6%	0.45%	11.5%	13.6%	13.6%	17.5%	17.5%	0.22%	24%	0.040%	76%	16.2%	171%	2.63%	295%
R139	589125.91	4804733.79	22.8%	63%	2.6%	54%	5.6%	50%	1.10%	89%	0.31%	0.31%	32%	39%	3.8%	16%	18.1%	20.9%	0.36%	1.6%	0.83%	11.8%	10.3%	10.3%	13.3%	13.3%	0.32%	24%	0.087%	76%	24.6%	180%	4.85%	297%
R140	588444.94	4804827.67	16.8%	57%	1.5%	53%	5.7%	50%	0.67%	89%	0.22%	0.22%	27%	34%	4.2%	16%	13.9%	16.7%	0.40%	1.7%	0.54%	11.6%	6.3%	6.3%	8.2%	8.2%	0.31%	24%	0.056%	76%	24.8%	180%	3.10%	296%
R141	588542.38	4804754.86	17.1%	57%	1.6%	53%	5.5%	50%	0.72%	89%	0.22%	0.22%	27%	34%	4.3%	16%	13.6%	16.5%	0.39%	1.7%	0.57%	11.6%	6.4%	6.4%	8.2%	8.2%	0.30%	24%	0.060%	76%	23.7%	179%	3.31%	296%
R142	588090.16	4805534.02	11.9%	52%	0.8%	52%	4.2%	49%	0.42%	88%	0.16%	0.16%	18%	26%	3.0%	15%	9.8%	12.7%	0.31%	1.6%	0.36%	11.4%	7.9%	7.9%	10.2%	10.2%	0.23%	24%	0.038%	76%	19.9%	175%	2.12%	295%
R143	588850.56	4806928.34	11.5%	52%	0.6%	52%	3.9%	49%	0.30%	88%	0.17%	0.17%	21%	28%	2.6%	14%	13.0%	15.8%	0.30%	1.6%	0.26%	11.3%	6.6%	6.6%	8.5%	8.5%	0.22%	24%	0.027%	76%	21.3%	176%	1.78%	294%
R144	588954.41	4807073.96	10.4%	51%	0.6%	52%	3.5%	48%	0.29%	88%	0.15%	0.15%	22%	29%	2.1%	14%	11.4%	14.3%	0.26%	1.5%	0.25%	11.3%	6.0%	6.0%	7.7%	7.7%	0.19%	24%	0.024%	76%	19.4%	174%	1.71%	294%
R145	589453.28	4806793.60	21.2%	61%	1.7%	53%	7.1%	52%	0.75%	89%	0.31%	0.31%	29%	37%	3.6%	15%	29.3%	32.2%	0.55%	1.8%	0.64%	11.7%	5.9%	5.9%	7.5%	7.5%	0.40%	24%	0.064%	76%	38.3%	193%	4.60%	297%
R146	589336.96	4806802.19	18.1%	58%	1.3%	53%	6.1%	51%	0.60%	89%	0.27%	0.27%	25%	32%	3.3%	15%	21.6%	24.5%	0.47%	1.8%	0.51%	11.5%	6.2%	6.2%	8.0%	8.0%	0.34%	24%	0.051%	76%	33.3%	188%	3.62%	296%
R147	589112.04	4806966.65	13.6%	54%	0.8%	52%	4.1%	49%	0.37%	88%	0.20%	0.20%	23%	30%	2.6%	14%	13.7%	16.6%	0.31%	1.6%	0.31%	11.3%	6.2%	6.2%	8.0%	8.0%	0.23%	24%	0.031%	76%	22.9%	178%	2.21%	295%
R148	589817.35	4807475.92	17.7%	58%	1.4%	53%	5.3%	50%	0.61%	89%	0.28%	0.28%	25%	32%	3.6%	15%	13.9%	16.8%	0.40%	1.7%	0.50%	11.5%	4.7%	4.7%	6.1%	6.1%	0.32%	24%	0.053%	76%	25.5%	181%	3.54%	296%
R149	589212.29	4807135.17	14.2%	54%	0.8%	52%	3.8%	48%	0.35%	88%	0.21%	0.21%	23%	30%	2.6%	14%	14.6%	17.4%	0.28%	1.6%	0.29%	11.3%	5.4%	5.4%	6.9%	6.9%	0.22%	24%	0.029%	76%	18.8%	174%	2.05%	295%
R150	589187.15	4807059.80	14.3%	54%	0.8%	52%	3.8%	48%	0.36%	88%	0.21%	0.21%	22%	29%	2.9%	15%	13.3%	16.1%	0.28%	1.6%	0.30%	11.3%	5.7%	5.7%	7.4%	7.4%	0.22%	24%	0.031%	76%	20.9%	176%	2.17%	295%
R151	589216.89	4807005.39	14.9%	55%	0.9%	52%	4.1%	49%	0.40%	88%	0.22%	0.22%	22%	29%	3.0%	15%	13.1%	16.0%	0.31%	1.6%	0.33%	11.3%	5.8%	5.8%	7.4%	7.4%	0.23%	24%	0.033%	76%	22.8%	178%	2.39%	295%
R152	590965.47	4807254.22	20.7%	61%	3.5%	55%	6.4%	51%	1.67%	90%	0.31%	0.31%	23%	30%	4.1%	16%	14.3%	17.1%	0.45%	1.7%	1.51%	12.5%	3.5%	3.5%	4.5%	4.5%	0.38%	24%	0.142%	76%	31.5%	187%	9.66%	302%
R153	590992.57	4807219.38	21.3%	61%	3.7%	55%	6.5%	51%	1.72%	90%	0.32%	0.32%	24%	31%	4.3%	16%	14.3%	17.2%	0.46%	1.7%	1.54%	12.6%	3.5%	3.5%	4.6%	4.6%	0.38%	24%	0.147%	76%	32.1%	187%	9.95%	302%
R154	591025.08	4807154.35	22.3%	62%	3.9%	55%	6.8%	51%	1.81%	90%	0.34%	0.34%	25%	32%	4.8%	17%	15.2%	18.0%	0.48%	1.8%	1.60%	12.6%	3.7%	3.7%	4.8%	4.8%	0.39%	24%	0.153%	76%	33.3%	188%	10.53%	303%
R155	591085.58	4807264.22	20.0%	60%	3.3%	55%	6.2%	51%	1.58%	90%	0.30%	0.30%	26%	33%	4.3%	16%	14.6%	17.4%	0.44%	1.7%	1.42%	12.4%	3.5%	3.5%	4.5%	4.5%	0.36%	24%	0.136%	76%	29.9%	185%	9.04%	302%
R156	591178.47	4807320.73	19.0%	59%	3.0%	55%	5.9%	51%	1.44%	89%	0.28%	0.28%	25%	32%	4.2%	16%	14.2%	17.0%	0.42%	1.7%	1.30%	12.3%	3.5%	3.5%	4.5%	4.5%	0.34%	24%	0.122%	76%	28.2%	183%	8.25%	301%
R157	591128.15	4807474.79	17.1%	57%	2.6%	54%	5.4%	50%	1.25%	89%	0.26%	0.26%	23%	30%	3.8%	16%	13.4%	16.3%	0.39%	1.7%	1.15%	12.2%	3.2%	3.2%	4.2%	4.2%	0.32%	24%	0.107%	76%	25.7%	181%	7.12%	300%
R158	591137.75	4807525.40	16.5%	57%	2.4%	54%	5.2%	50%	1.19%	89%	0.25%	0.25%	22%	29%	3.7%	15%	13.2%	16.0%	0.38%	1.7%	1.10%	12.1%	3.1%	3.1%	4.1%	4.1%	0.32%	24%	0.100%	76%	24.9%	180%	6.74%	299%
R159	591389.55	4807160.03	19.4%	60%	3.2%	55%	5.8%	50%	1.51%	89%	0.32%	0.32%	29%	36%	5.2%	17%	16.2%	19.0%	0.47%	1.8%	1.34%	12.3%	3.6%	3.6%	4.7%	4.7%	0.32%	24%	0.124%	76%	28.1%	183%	8.80%	301%
R160	591232.04	4806971.44	22.7%	63%	4.1%	56%	6.6%	51%	1.87%	90%	0.38%	0.38%	32%	40%	5.9%	18%	18.0%	20.9%	0.53%	1.8%	1.62%	12.6%	3.9%	3.9%	5.0%	5.0%	0.37%	24%	0.151%	76%	33.1%	188%	11.12%	304%
R161	591435.62	4807128.95	19.2%	59%	3.2%	55%	5.7%	50%	1.50%	89%	0.32%	0.32%	30%	37%	5.0%	17%	16.6%	19.4%	0.45%	1.7%	1.32%	12.3%	3.6%	3.6%	4.7%	4.7%	0.31%	24%	0.122%	76%	27.8%	183%	8.74%	301%
R162	591162.85	4806690.32	26.8%	67%	5.0%	57%	9.4%	54%	2.33%	90%	0.44%	0.44%	46%	53%	7.1%	19%	22.1%	25.0%	0.67%	2.0%	2.08%	13.1%	4.1%	4.1%	5.3%	5.3%	0.57%	24%	0.182%	76%	47.6%	203%	13.87%	306%
R163	591210.95	4806729.12	25.7%	66%	4.7%	56%	8.9%	53%	2.19%	90%	0.42%	0.42%	44%	51%	6.7%	19%	21.6%	24.4%	0.64%	1.9%	1.95%	13.0%	4.1%	4.1%	5.3%	5.3%	0.53%	24%	0.171%	76%	45.7%	201%	12.99%	305%
R164	591105.87	4806818.03	26.7%	67%	5.0%	57%	7.8%	52%	2.28%	90%	0.44%	0.44%	41%	48%	6.6%	18%	20.8%	23.7%	0.61%	1.9%	1.98%	13.0%	4.0%	4.0%	5.2%	5.2%	0.45%	24%	0.182%	76%	41.2%	196%	13.65%	306%
R165	591265.91	4806593.73	28.0%	68%	4.6%	56%	9.7%	54%	2.18%	90%	0.38%	0.38%	41%	48%	6.4%	18%	20.2%	23.1%	0.67%	2.0%	1.97%	13.0%	4.2%	4.2%	5.4%	5.4%	0.58%	24%	0.167%	76%	51.0%	206%	12.92%	305%
R166	591287.73	4806665.26	26.7%	67%	4.5%	56%	9.3%	54%	2.10%	90%	0.39%	0.39%	40%	48%	6.1%	18%	20.3%	23.1%	0.66%	1.9%	1.90%	12.9%	4.2%	4.2%	5.4%	5.4%	0.56%	24%	0.162%	76%	48.8%	204%	12.47%	305%
R167	591333.40	4806722.65	25.1%	65%	4.2%	56%	8.7%	53%	1.97%	90%	0.37%	0.37%	38%	45%	5.9%	18%	19.8%	22.6%	0.62%	1.9%	1.78%	12.8%	4.2%	4.2%	5.4%	5.4%	0.51%	24%	0.153%	76%	46.0%	201%	11.71%	304%

Percentages of Criteria at Sensitive Receptors (Scenario C)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m^3)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			54.6%	94.7%	10.6%	62.2%	16.6%	61.2%	4.7%	92.6%	0.8%	0.8%	47.4%	54.6%	11.5%	23.3%	29.3%	32.2%	1.1%	2.4%	4.0%	15.0%	26.8%	26.8%	34.5%	34.5%	0.9%	24.8%	0.4%	76.4%	92.3%	247.3%	29.5%	321.9%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R168	591234.22	4806518.76	30.5%	71%	4.9%	56%	10.1%	55%	2.28%	90%	0.43%	0.43%	40%	47%	6.1%	18%	19.6%	22.5%	0.68%	2.0%	2.05%	13.1%	4.3%	4.3%	5.5%	5.5%	0.58%	24%	0.173%	76%	54.5%	210%	13.58%	306%
R169	591154.03	4806495.46	34.3%	74%	5.6%	57%	11.1%	56%	2.57%	91%	0.49%	0.49%	40%	47%	6.4%	18%	20.4%	23.3%	0.73%	2.0%	2.29%	13.3%	4.5%	4.5%	5.7%	5.7%	0.63%	25%	0.196%	76%	60.9%	216%	15.51%	308%
R170	592963.29	4806056.44	6.7%	47%	0.7%	52%	2.3%	47%	0.38%	88%	0.09%	0.09%	14%	21%	1.9%	14%	7.0%	9.8%	0.19%	1.5%	0.37%	11.4%	2.4%	2.4%	3.1%	3.1%	0.12%	24%	0.029%	76%	11.9%	167%	2.08%	295%
R171	592548.41	4807420.43	9.9%	50%	1.3%	53%	2.8%	47%	0.64%	89%	0.14%	0.14%	17%	24%	2.8%	15%	8.9%	11.7%	0.25%	1.5%	0.61%	11.6%	2.3%	2.3%	2.9%	2.9%	0.15%	24%	0.051%	76%	13.8%	169%	3.58%	296%
R172	592951.92	4807025.44	7.9%	48%	0.9%	52%	2.7%	47%	0.47%	88%	0.11%	0.11%	15%	22%	2.2%	14%	7.5%	10.4%	0.23%	1.5%	0.45%	11.5%	2.1%	2.1%	2.7%	2.7%	0.14%	24%	0.036%	76%	13.3%	168%	2.51%	295%
R173	592512.22	4807840.43	7.4%	48%	1.1%	53%	2.4%	47%	0.56%	88%	0.12%	0.12%	16%	24%	2.0%	14%	8.6%	11.5%	0.18%	1.5%	0.55%	11.6%	2.0%	2.0%	2.6%	2.6%	0.14%	24%	0.044%	76%	11.3%	166%	3.12%	296%
R174	592241.77	4807860.57	8.2%	48%	1.2%	53%	2.8%	47%	0.63%	89%	0.13%	0.13%	18%	25%	2.5%	14%	9.0%	11.9%	0.21%	1.5%	0.61%	11.6%	2.1%	2.1%	2.7%	2.7%	0.16%	24%	0.051%	76%	14.2%	169%	3.46%	296%
R175	592089.28	4807558.47	9.9%	50%	1.6%	53%	3.2%	48%	0.78%	89%	0.16%	0.16%	19%	26%	2.6%	14%	9.7%	12.6%	0.24%	1.5%	0.74%	11.7%	2.5%	2.5%	3.2%	3.2%	0.18%	24%	0.062%	76%	15.4%	170%	4.40%	297%
R176	593448.24	4806616.60	6.6%	47%	0.6%	52%	2.3%	47%	0.33%	88%	0.09%	0.09%	13%	21%	2.0%	14%	6.9%	9.8%	0.19%	1.5%	0.33%	11.3%	1.8%	1.8%	2.4%	2.4%	0.12%	24%	0.027%	76%	11.5%	166%	1.81%	294%
R177	593312.53	4806745.71	7.4%	48%	0.7%	52%	2.5%	47%	0.36%	88%	0.10%	0.10%	14%	21%	2.2%	14%	7.1%	10.0%	0.21%	1.5%	0.35%	11.4%	2.1%	2.1%	2.8%	2.8%	0.13%	24%	0.029%	76%	12.7%	168%	1.95%	294%
R178	589896.14	4804503.60	14.3%	54%	1.2%	53%	4.3%	49%	0.53%	88%	0.24%	0.24%	23%	31%	2.8%	15%	11.8%	14.7%	0.27%	1.6%	0.42%	11.4%	13.8%	13.8%	17.7%	17.7%	0.24%	24%	0.042%	76%	17.4%	172%	2.66%	295%
R179	589806.86	4804615.64	16.5%	57%	1.5%	53%	5.0%	50%	0.65%	89%	0.24%	0.24%	27%	34%	3.3%	15%	12.9%	15.7%	0.29%	1.6%	0.51%	11.5%	15.9%	15.9%	20.5%	20.5%	0.27%	24%	0.051%	76%	19.5%	175%	3.19%	296%
R180	589696.72	4804647.38	17.7%	58%	1.6%	53%	4.9%	49%	0.73%	89%	0.24%	0.24%	32%	40%	3.9%	16%	15.4%	18.3%	0.32%	1.6%	0.58%	11.6%	19.0%	19.0%	24.5%	24.5%	0.28%	24%	0.058%	76%	20.2%	175%	3.54%	296%
R181	589584.24	4804517.22	18.1%	58%	1.3%	53%	5.6%	50%	0.60%	89%	0.28%	0.28%	26%	34%	4.7%	17%	12.6%	15.4%	0.39%	1.7%	0.50%	11.5%	15.4%	15.4%	19.9%	19.9%	0.29%	24%	0.047%	76%	21.2%	176%	3.00%	295%
R182	589636.85	4804582.64	19.2%	59%	1.5%	53%	5.9%	51%	0.67%	89%	0.29%	0.29%	31%	38%	5.0%	17%	14.7%	17.5%	0.41%	1.7%	0.54%	11.6%	18.1%	18.1%	23.3%	23.3%	0.31%	24%	0.051%	76%	22.5%	178%	3.26%	296%
R183	589520.07	4804445.87	13.7%	54%	1.2%	53%	4.2%	49%	0.55%	88%	0.22%	0.22%	25%	32%	3.9%	16%	11.9%	14.8%	0.32%	1.6%	0.47%	11.5%	14.7%	14.7%	18.9%	18.9%	0.22%	24%	0.042%	76%	16.7%	172%	2.78%	295%
R184	589424.10	4804324.30	15.5%	56%	1.0%	53%	3.7%	48%	0.49%	88%	0.20%	0.20%	20%	27%	3.1%	15%	10.4%	13.3%	0.25%	1.5%	0.43%	11.4%	11.7%	11.7%	15.1%	15.1%	0.22%	24%	0.038%	76%	15.4%	170%	2.49%	295%
R185	589626.45	4804718.61	20.9%	61%	1.9%	54%	6.4%	51%	0.87%	89%	0.32%	0.32%	37%	44%	5.4%	17%	17.4%	20.3%	0.46%	1.7%	0.68%	11.7%	21.5%	21.5%	27.6%	27.6%	0.33%	24%	0.067%	76%	25.3%	180%	4.13%	297%
R186	589475.29	4804698.61	24.2%	64%	1.9%	54%	7.2%	52%	0.87%	89%	0.37%	0.37%	34%	41%	5.7%	17%	16.0%	18.8%	0.50%	1.8%	0.71%	11.7%	19.6%	19.6%	25.3%	25.3%	0.38%	24%	0.067%	76%	28.7%	184%	4.19%	297%
R187	589396.66	4804788.79	32.5%	73%	2.7%	54%	7.6%	52%	1.17%	89%	0.38%	0.38%	34%	41%	5.2%	17%	18.2%	21.0%	0.47%	1.8%	0.88%	11.9%	19.6%	19.6%	25.2%	25.2%	0.43%	24%	0.091%	76%	28.5%	184%	5.23%	298%
R188	589559.04	4804789.94	29.0%	69%	2.4%	54%	8.7%	53%	1.04%	89%	0.44%	0.44%	41%	48%	6.8%	19%	19.4%	22.3%	0.59%	1.9%	0.81%	11.8%	24.0%	24.0%	30.9%	30.9%	0.47%	24%	0.080%	76%	34.2%	189%	4.85%	297%
R189	589464.66	4804561.55	18.5%	59%	1.5%	53%	5.0%	50%	0.68%	89%	0.26%	0.26%	27%	34%	4.4%	16%	13.0%	15.9%	0.38%	1.7%	0.57%	11.6%	16.0%	16.0%	20.6%	20.6%	0.26%	24%	0.051%	76%	20.4%	175%	3.37%	296%
R190	589381.48	4804662.33	25.8%	66%	1.9%	54%	6.0%	51%	0.86%	89%	0.30%	0.30%	28%	35%	4.0%	16%	15.1%	18.0%	0.35%	1.6%	0.70%	11.7%	15.7%	15.7%	20.2%	20.2%	0.34%	24%	0.067%	76%	21.7%	177%	4.11%	297%
R191	589419.87	4804486.37	19.0%	59%	1.3%	53%	4.5%	49%	0.62%	89%	0.23%	0.23%	24%	31%	3.7%	15%	11.5%	14.4%	0.31%	1.6%	0.53%	11.5%	13.7%	13.7%	17.6%	17.6%	0.25%	24%	0.047%	76%	16.6%	172%	3.08%	296%
R192	588195.90	4804357.37	10.8%	51%	1.0%	53%	3.4%	48%	0.46%	88%	0.14%	0.14%	24%	31%	2.9%	15%	11.8%	14.7%	0.26%	1.5%	0.39%	11.4%	4.3%	4.3%	5.6%	5.6%	0.18%	24%	0.038%	76%	14.9%	170%	2.17%	295%
R193	587601.39	4804639.77	9.1%	49%	0.6%	52%	3.3%	48%	0.32%	88%	0.12%	0.12%	19%	26%	2.4%	14%	8.9%	11.8%	0.25%	1.5%	0.28%	11.3%	4.1%	4.1%	5.3%	5.3%	0.19%	24%	0.029%	76%	15.3%	170%	1.54%	294%
R194	587160.07	4805072.46	6.2%	46%	0.4%	52%	2.3%	47%	0.21%	88%	0.08%	0.08%	17%	24%	1.8%	14%	8.4%	11.2%	0.17%	1.5%	0.19%	11.2%	4.3%	4.3%	5.5%	5.5%	0.15%	24%	0.018%	76%	10.0%	165%	1.08%	294%
R195	587350.72	4804886.57	6.8%	47%	0.5%	52%	2.5%	47%	0.27%	88%	0.09%	0.09%	16%	24%	1.9%	14%	8.0%	10.8%	0.20%	1.5%	0.23%	11.2%	4.2%	4.2%	5.4%	5.4%	0.15%	24%	0.024%	76%	11.6%	167%	1.30%	294%
R196	586906.61	4804895.76	5.1%	45%	0.4%	52%	1.9%	47%	0.19%	88%	0.07%	0.07%	16%	23%	1.6%	13%	7.9%	10.7%	0.15%	1.4%	0.17%	11.2%	3.5%	3.5%	4.5%	4.5%	0.13%	24%	0.018%	76%	8.4%	163%	0.95%	293%
R197	587481.04	4806511.43	8.0%	48%	0.3%	52%	2.6%	47%	0.16%	88%	0.11%	0.11%	15%	22%	1.7%	13%	7.5%	10.3%	0.17%	1.5%	0.15%	11.2%	6.1%	6.1%	7.8%	7.8%	0.14%	24%	0.013%	76%	11.8%	167%	0.90%	293%
R198	587364.33	4806419.19	6.3%	46%	0.3%	52%	2.3%	47%	0.16%	88%	0.09%	0.09%	17%	24%	1.7%	14%	8.1%	10.9%	0.17%	1.5%	0.16%	11.2%	5.2%	5.2%	6.6%	6.6%	0.14%	24%	0.013%	76%	10.1%	165%	0.89%	293%
R199	587233.51	4806472.84	5.9%	46%	0.3%	52%	2.2%	47%	0.14%	88%	0.08%	0.08%	16%	23%	1.6%	13%	7.8%	10.7%	0.16%	1.4%	0.14%	11.2%	4.7%	4.7%	6.1%	6.1%	0.13%	24%	0.011%	76%	9.5%	164%	0.82%	293%
R200	587145.04	4806367.42	5.5%	46%	0.3%	52%	2.0%	47%	0.14%	88%	0.07%	0.07%	16%	23%	1.7%	13%	7.7%	10.5%	0.16%	1.4%	0.14%	11.1%	4.9%	4.9%	6.3%	6.3%	0.12%	24%	0.011%	76%	9.0%	164%	0.78%	293%
R201	587045.27	4806250.72	4.8%	45%	0.2%	52%	1.8%	46%	0.13%	88%	0.06%	0.06%	16%	23%	1.7%	13%	7.2%	10.0%	0.16%	1.4%	0.13%	11.1%	4.8%	4.8%	6.2%	6.2%	0.11%	24%	0.011%	76%	9.1%	164%	0.74%	293%
R202	586965.27	4806150.95	5.3%	45%	0.2%	52%	2.0%	47%	0.13%	88%	0.07%	0.07%	15%	23%	1.6%	13%	7.5%	10.3%	0.16%	1.4%	0.13%	11.1%	4.9%	4.9%	6.3%	6.3%	0.11%	24%	0.011%	76%	9.2%	164%	0.72%	293%
R203	587953.83	4806878.51	7.1%	47%	0.3%	52%	2.7%	47%	0.18%	88%	0.10%	0.10%	16%	24%	2.2%	14%	8.2%	11.0%	0.22%	1.5%	0.17%	11.2%	6.0%	6.0%	7.7%	7.7%	0.15%	24%	0.016%	76%	13.3%	168%	1.02%	294%
R204	588739.26	4807221.01	8.5%	49%	0.5%	52%	2.9%	47%	0.22%	88%	0.12%	0.12%	20%	27%	1.8%	14%	10.7%	13.6%	0.22%	1.5%	0.19%	11.2%	5.5%	5.5%	7.1%	7.1%	0.16%	24%	0.018%	76%	15.7%	171%	1.29%	294%
R205	588362.75	4807367.85	6.1%	46%	0.3%	52%	2.1%	47%	0.16%	88%	0.09%	0.09%	18%	26%	1.6%	13%	9.7%	12.5%	0.19%	1.5%	0.14%	11.2%	4.2%	4.2%	5.4%	5.4%	0.12%	24%	0.013%	76%	11.7%	167%	0.92%	293%
R206	588356.16	4807310.43	6.3%	46%	0.3%	52%	2.2%	47%	0.16%	88%	0.10%	0.10%	19%	26%	1.8%	14%	9.5%	12.4%	0.20%	1.5%	0.15%	11.2%	4.7%	4.7%	6.0%	6.0%	0.13%	24%	0.013%	76%	12.1%	167%	0.95%	293%
R207	588840.92	4807474.22	8.7%	49%	0.4%	52%	2.8%	47%	0.20%	88%	0.13%	0.13%	19%	26%	1.9%	14%	10.3%	13.2%	0.19%	1.5%	0.18%	11.2%	4.3%	4.3%	5.6%	5.6%	0.16%	24%	0.016%	76%	12.7%	168%	1.16%	294%
R208	588523.06	4807632.25	5.5%	46%	0.3%	52%	1.8%	46%	0.15%	88%	0.08%	0.08%	16%	23%	1.4%	13%	8.3%	11.2%	0.13%	1.4%	0.14%	11.2%	3.6%	3.6%	4.7%	4.7%	0.11%	24%	0.011%	76%	10.0%	165%	0.85%	293%
R209	588101.83	4807356.50	7.2%	47%	0.3%	52%	2.3%	47%	0.15%	88%	0.09%	0.09%	17%	25%	2.0%	14%	8.7%	11.6%	0.21%	1.5%	0.14%	11.1%	6.3%	6.3%	8.1%	8.1%	0.13%	24%	0.011%	76%	12.1%	167%	0.84%	293%
R210	587963.42	4807222.88	6.5%	47%	0.3%	52%	2.4%	47%	0.15%	88%	0.09%	0.09%	17%	24%	2.2%	14%	8.4%	11.3%	0.22%	1.5%	0.14%	11.2%	6.0%	6.0%	7.7%	7.7%	0.13%	24%	0.011%	76%	12.1%	167%	0.85%	293%
R211	588020.22	4807483.72	6.2%	46%	0.3%	52%	2.0%	47%	0.13%	88%	0.08%	0.08%	17%	24%	1.7%	13%	8.4%	11.3%	0.19%	1.5%	0.13%	11.1%	5.7%	5.7%	7.4%	7.4%	0.11%	24%	0.011%	76%	10.4%	165%	0.75%	293%
R212	587973.02	4807409.31	6.5%	47%	0.3%	52%	2.1%	47%	0.13%	88%	0.09%	0.09%	17%	24%	1.9%	14%	8.6%	11.5%	0.20%	1.5%	0.13%	11.1%	6.0%	6.0%	7.7%	7.7%	0.12%	24%	0.011%	76%	11.2%	166%	0.77%	293%
R213	587929.81	4807367.70	6.2%	46%	0.3%	52%	2.1%	47%	0.13%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.6%	11.5%	0.21%	1.5%	0.13%	11.1%	5.9%	5.9%	7.6%	7.6%	0.11%	24%	0.011%	76%	11.1%	166%	0.77%	293%
R214	587881.00	4807330.90	5.9%	46%	0.3%	52%	2.2%	47%	0.13%	88%	0.09%	0.09%	17%	25%	2.1%	14%	8.5%	11.4%	0.21%	1.5%	0.13%	11.1%	5.6%	5.6%	7.2%	7.2%	0.12%	24%	0.011%	76%	11.0%	166%	0.77%	293%
R215	587840.20	4807286.09	5.8%	46%	0.3%	52%	2.3%	47%	0.13%	88%	0.09%	0.09%	17%	24%	2.1%	14%	8.2%	11.1%	0.21%	1.5%	0.13%	11.1%	5.9%	5.9%	7.6%	7.6%	0.12%	24%	0.011%	76%	11.0%	166%	0.78%	293%
R216	587785.68	4807211.86	5.9%	46%	0.3%	52%	2.3%	47%	0.14%	88%	0.09%	0.09%	17%	24%	2.1%	14%	8.3%	11.1%	0.21%	1.5%	0.14%	11.1%	5.6%	5.6%	7.2%	7.2%	0.13%	24%	0.011%	76%	11.3%	166%	0.79%	293%
R217	587928.62	4807557.92	5.6%	46%	0.2%	52%	1.9%	46%	0.12%	88%	0.07%	0.07%	16%	23%	1.6%	13%	8.2%	11.0%	0.17%	1.5%	0.12%	11.1%	5.4%	5.4%	7.0%	7.0%	0.10%	24%	0.009%	76%	9.6%	165%	0.68%	293%
R218	587806.32	4807435.62	5.2%	45%	0.2%	52%	2.0%	47%	0.12%	88%	0.08%	0.08%	17%	24%	1.9%	14%	8.5%	11.3%	0.20%	1.5%	0.12%	11.1%	5.2%	5.2%	6.7%	6.7%	0.11%	24%	0.009%	76%	10.0%	165%	0.70%	293%
R219	587738.93	4807320.81	5.4%	46%	0.2%	52%	2.2%	47%	0.13%	88%	0.08%	0.08%	17%	24%	2.1%	14%	8.0%	10.9%	0.21%	1.5%	0.12%	11.1%	5.7%	5.7%	7.3%	7.3%	0.12%	24%	0.011%	76%	10.6%	166%	0.73%	293%
R220	587669.05	4807210.99	5.7%	46%	0.3%	52%	2.3%	47%	0.13%	88%	0.08%	0.08%	16%	23%	2.0%	14%	8.1%	11.0%	0.20%	1.5%	0.13%	11.1%	4.9%	4.9%	6.4%	6.4%	0.13%	24%	0.011%	76%	11.0%	166%	0.75%	293%
R221	587883.70	4807505.51	5.6%	46%	0.2%	52%	1.9%	46%	0.12%	88%	0.07%	0.07%	16%	24%	1.8%	14%	8.4%	11.3%	0.19%	1.5%	0.12%	11.1%	5.4%	5.4%	6.9%	6.9%	0.10%	24%	0.009%	76%	9.9%	165%	0.69%	293%
R222	591562.72	4806745.44	20.8%	61%	3.3%	55%	7.2%	52%	1.57%	89%	0.28%	0.28%	33%	40%	5.0%	17%	17.1%	19.9%	0.53%	1.8%	1.44%	12.5%	3.9%	3.9%	5.1%	5.1%	0.43%	24%	0.120%	76%	38.1%	193%	9.14%	302%
R223	591488.72	4806824.64	21.4%	61%	3.5%	55%	7.0%	52%	1.65%	90%	0.31%	0.31%	36%	43%	5.2%	17%	18.4%	21.3%	0.50%	1.8%	1.50%	12.5%	4.0%	4.0%	5.2%	5.2%	0.41%	24%	0.129%	76%	37.3%	192%	9.67%	302%
R224	591458.08	4806872.05	21.4%	62%	3.5%	55%	6.6%	51%	1.66%	90%	0.32%	0.32%	36%	43%	5.4%	17%	18.7%	21.5%	0.48%	1.8%	1.50%	12.5%	4.0%	4.0%	5.1%	5.1%	0.38%	24%	0.131%	76%	35.8%	191%	9.76%	302%
R225	591234.74	4806903.98	24.3%	64%	4.2%	56%	6.7%	51%	1.95%	90%	0.40%	0.40%	35%	42%	6.0%	18%	19.0%	21.8%	0.55%	1.8%	1.70%	12.7%	4.0%	4.0%	5.1%	5.1%	0.38%	24%	0.158%	76%	35.5%	191%	11.65%	304%
R226	591148.34	4807068.03	22.5%	63%	4.0%	56%	6.9%	52%	1.83%	90%	0.36%	0.36%	28%	35%	5.6%	17%	16.6%	19.5%	0.53%	1.8%	1.59%	12.6%	3.8%	3.8%	4.9%	4.9%	0.39%	24%	0.153%	76%	34.8%	190%	10.79%	303%
R227	591097.65	4807084.65	22.9%	63%	4.0%	56%	7.0%	52%	1.86%	90%	0.35%	0.35%	27%	35%	5.2%	17%	16.2%	19.1%	0.52%	1.8%	1.61%	12.6%	3.8%	3.8%	4.9%	4.9%	0.40%	24%	0.156%	76%	35.1%	190%	10.90%	303%
R228	591077.93	4807117.98	22.6%	63%	3.9%	56%	6.9%	52%	1.82%	90%	0.34%	0.34%	26%	34%	4.9%	17%	15.7%	18.6%	0.49%	1.8%	1.59%	12.6%	3.8%	3.8%	4.9%	4.9%	0.39%	24%	0.153%	76%	34.3%	189%	10.65%	303%
R229	590831.76	4807776.37	16.4%	57%	2.0%	54%	5.7%	50%	0.96%	89%	0.21%	0.21%	22%	29%	3.3%	15%	13.2%	16.0%	0.38%	1.7%	0.89%	11.9%	3.3%	3.3%	4.2%	4.2%	0.35%	24%	0.082%	76%	27.7%	183%	5.48%	298%
R230	590778.59	4807689.25	17.5%	58%	2.2%	54%	6.0%	51%	1.05%	89%	0.23%	0.23%	22%	29%	3.6%	15%	13.5%	16.4%	0.41%	1.7%	0.97%	12.0%	3.3%	3.3%	4.3%	4.3%	0.36%	24%	0.089%	76%	29.6%	185%	6.00%	298%
R231	591027.31	4806131.86	32.8%	73%	4.8%	56%	10.5%	55%	2.26%	90%	0.46%	0.46%	29%	36%	6.9%	19%	16.2%	19.1%	0.75%	2.0%	2.05%	13.1%	5.4%	5.4%	7.0%	7.0%	0.57%	24%	0.169%	76%	54.6%	210%	13.29%	306%
R232	591030.81	4806097.45	31.6%	72%	4.6%	56%	10.0%	55%	2.16%	90%	0.44%	0.44%	28%	35%	6.7%	19%	15.6%	18.5%	0.69%	2.0%	1.96%	13.0%	5.4%	5.4%	7.0%	7.0%	0.54%	24%	0.160%	76%	52.1%	207%	12.65%	305%
R233	591067.56	4806148.19	32.2%	72%	4.6%	56%	10.3%	55%	2.17%	90%	0.45%	0.45%	28%	35%	6.7%	19%	15.7%	18.6%	0.73%	2.0%	1.96%	13.0%	5.4%	5.4%	6.9%	6.9%	0.56%	24%	0.162%	76%	53.7%	209%	12.75%	305%
R234	591086.80	4806172.68	32.2%	72%	4.6%	56%	10.4%	55%	2.17%	90%	0.45%	0.45%	29%	36%	6.9%	19%	16.0%	18.8%	0.75%	2.0%	1.95%	13.0%	5.3%	5.3%	6.8%	6.8%	0.57%	24%	0.162%	76%	53.9%	209%	12.74%	305%
R235	591114.01	4806201.78	31.9%	72%	4.6%	56%	10.3%	55%	2.15%	90%	0.45%	0.45%	30%	37%	7.0%	19%	16.1%	18.9%	0.75%	2.0%	1.92%	12.9%	5.2%	5.2%	6.7%	6.7%	0.57%	24%	0.162%	76%	53.6%	209%	12.65%	305%
R236	591141.40	4806172.91	30.5%	71%	4.3%	56%	9.9%	54%	2.00%	90%	0.43%	0.43%	28%	35%	6.6%	18%	15.6%	18.5%	0.71%	2.0%	1.80%	12.8%	5.2%	5.2%	6.7%	6.7%	0.54%	24%	0.151%	76%	50.9%	206%	11.74%	304%
R237	591157.63	4806158.16	29.7%	70%	4.1%	56%	9.6%	54%	1.93%	90%	0.41%	0.41%	27%	35%	6.3%	18%	15.4%	18.2%	0.69%	2.0%	1.74%	12.7%	5.2%	5.2%	6.6%	6.6%	0.53%	24%	0.144%	76%	49.3%	204%	11.27%	304%
R238	591128.13	4806114.76	29.6%	70%	4.1%	56%	9.4%	54%	1.92%	90%	0.41%	0.41%	27%	34%	6.0%	18%	15.0%	17.8%	0.65%	1.9%	1.74%	12.7%	5.2%	5.2%	6.7%	6.7%	0.52%	24%	0.144%	76%	48.5%	204%	11.16%	304%
R239	591082.85	4806229.12	33.5%	74%	5.0%	57%	10.9%	55%	2.32%	90%	0.47%	0.47%	29%	36%	7.3%	19%	16.3%	19.2%	0.79%	2.1%	2.08%	13.1%	5.2%	5.2%	6.7%	6.7%	0.60%	24%	0.176%	76%	56.7%	212%	13.77%	306%
R240	591226.62	4806240.49	29.5%	70%	4.1%	56%	9.7%	54%	1.90%	90%	0.41%	0.41%	30%	37%	6.7%	18%	15.8%	18.6%	0.71%	2.0%	1.70%	12.7%	5.0%	5.0%	6.4%	6.4%	0.53%	24%	0.144%	76%	49.8%	205%	11.17%	304%
R241	591288.65	4806809.41	24.5%	65%	4.3%	56%	7.8%	52%	1.98%	90%	0.40%	0.40%	37%	45%	6.2%	18%	19.8%	22.6%	0.56%	1.8%	1.76%	12.8%	4.2%	4.2%	5.4%	5.4%	0.46%	24%	0.156%	76%	42.5%	198%	11.80%	304%
R242	591139.67	4806634.66	27.9%	68%	5.3%	57%	10.0%	55%	2.46%	90%	0.45%	0.45%	46%	53%	7.3%	19%	22.4%	25.3%	0.70%	2.0%	2.21%	13.2%	4.2%	4.2%	5.4%	5.4%	0.61%	24%	0.191%	76%	51.2%	206%	14.72%	307%
R243	591293.92	4806466.25	29.9%	70%	4.4%	56%	9.6%	54%	2.06%	90%	0.42%	0.42%	35%	42%	6.0%	18%	17.4%	20.3%	0.69%	2.0%	1.85%	12.9%	4.4%	4.4%	5.6%	5.6%	0.53%	24%	0.158%	76%	51.4%	206%	12.21%	305%
R244	589444.27	4806626.99	25.1%	65%	2.3%	54%	8.3%	53%	1.00%	89%	0.37%	0.37%	28%	35%	4.4%	16%	15.5%	18.4%	0.58%	1.9%	0.77%	11.8%	6.4%	6.4%	8.2%	8.2%	0.47%	24%	0.089%	76%	45.5%	201%	6.19%	299%
R245	589367.00	4806705.19	20.9%	61%	1.6%	53%	7.0%	52%	0.72%	89%	0.31%	0.31%	27%	34%	3.9%	16%	15.0%	17.9%	0.50%	1.8%	0.59%	11.6%	6.5%	6.5%	8.3%	8.3%	0.40%	24%	0.064%	76%	38.2%	193%	4.41%	297%
R246	588976.44	4806919.73	12.1%	52%	0.7%	52%	4.2%	49%	0.34%	88%	0.18%	0.18%	24%	31%	2.7%	14%	14.2%	17.0%	0.33%	1.6%	0.30%	11.3%	6.6%	6.6%	8.6%	8.6%	0.23%	24%	0.029%	76%	23.0%	178%	2.01%	295%
R247	588915.70	4806868.25	12.4%	53%	0.7%	52%	4.2%	49%	0.33%	88%	0.18%	0.18%	21%	28%	2.8%	15%	12.7%	15.5%	0.32%	1.6%	0.29%	11.3%	6.7%	6.7%	8.7%	8.7%	0.24%	24%	0.029%	76%	23.1%	178%	1.98%	294%
R248	588997.02	4807016.50	11.3%	51%	0.7%	52%	3.7%	48%	0.31%	88%	0.17%	0.17%	22%	29%	2.2%	14%	12.4%	15.3%	0.28%	1.6%	0.27%	11.3%	5.7%	5.7%	7.4%	7.4%	0.21%	24%	0.027%	76%	21.0%	176%	1.87%	294%
R249	591337.39	4806901.37	22.7%	63%	3.9%	55%	6.5%	51%	1.81%	90%	0.37%	0.37%	35%	42%	5.8%	18%	18.8%	21.6%	0.51%	1.8%	1.60%	12.6%	4.0%	4.0%	5.1%	5.1%	0.38%	24%	0.144%	76%	35.6%	191%	10.72%	303%
R250	591086.06	4807216.91	20.8%	61%	3.5%	55%	6.5%	51%	1.65%	90%	0.31%	0.31%	26%	33%	4.5%	16%	14.8%	17.7%	0.46%	1.7%	1.47%	12.5%	3.7%	3.7%	4.7%	4.7%	0.37%	24%	0.140%	76%	31.1%	186%	9.52%	302%

Percentages of Criteria at Sensitive Receptors (Scenario C)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			54.6%	94.7%	10.6%	62.2%	16.6%	61.2%	4.7%	92.6%	0.8%	0.8%	47.4%	54.6%	11.5%	23.3%	29.3%	32.2%	1.1%	2.4%	4.0%	15.0%	26.8%	26.8%	34.5%	34.5%	0.9%	24.8%	0.4%	76.4%	92.3%	247.3%	29.5%	321.9%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R251	590926.50	4807386.35	18.6%	59%	3.0%	55%	5.9%	51%	1.45%	89%	0.28%	0.28%	23%	30%	3.8%	16%	13.5%	16.3%	0.42%	1.7%	1.33%	12.3%	3.4%	3.4%	4.4%	4.4%	0.37%	24%	0.124%	76%	28.7%	184%	8.31%	301%
R252	590969.19	4806836.93	27.0%	67%	5.5%	57%	8.4%	53%	2.50%	90%	0.44%	0.44%	37%	45%	7.0%	19%	20.1%	23.0%	0.64%	1.9%	2.12%	13.1%	4.1%	4.1%	5.2%	5.2%	0.49%	24%	0.207%	76%	45.1%	200%	15.08%	308%
R253	590905.98	4807178.59	22.3%	62%	4.0%	56%	6.8%	51%	1.87%	90%	0.34%	0.34%	24%	31%	4.4%	16%	14.8%	17.7%	0.47%	1.8%	1.67%	12.7%	3.7%	3.7%	4.7%	4.7%	0.41%	24%	0.160%	76%	34.1%	189%	10.84%	303%
R254	590899.10	4807138.17	23.0%	63%	4.2%	56%	7.0%	52%	1.96%	90%	0.35%	0.35%	25%	32%	4.5%	16%	15.3%	18.1%	0.49%	1.8%	1.74%	12.7%	3.8%	3.8%	4.9%	4.9%	0.42%	24%	0.169%	76%	35.3%	190%	11.37%	304%
R255	590956.66	4807071.56	23.8%	64%	4.3%	56%	7.2%	52%	2.02%	90%	0.36%	0.36%	29%	37%	5.1%	17%	16.1%	19.0%	0.52%	1.8%	1.75%	12.8%	3.8%	3.8%	5.0%	5.0%	0.42%	24%	0.173%	76%	35.4%	190%	11.76%	304%
R256	590997.27	4807177.52	22.0%	62%	3.8%	55%	6.7%	51%	1.79%	90%	0.33%	0.33%	24%	32%	4.5%	16%	14.8%	17.7%	0.48%	1.8%	1.59%	12.6%	3.6%	3.6%	4.6%	4.6%	0.39%	24%	0.153%	76%	33.0%	188%	10.41%	303%
R257	590917.52	4807307.02	19.9%	60%	3.4%	55%	6.2%	51%	1.60%	90%	0.30%	0.30%	23%	30%	3.9%	16%	14.0%	16.8%	0.43%	1.7%	1.46%	12.5%	3.4%	3.4%	4.4%	4.4%	0.38%	24%	0.138%	76%	30.2%	185%	9.19%	302%
R258	590878.48	4807357.84	19.1%	59%	3.2%	55%	6.1%	51%	1.52%	89%	0.29%	0.29%	24%	31%	3.9%	16%	13.6%	16.5%	0.42%	1.7%	1.39%	12.4%	3.5%	3.5%	4.5%	4.5%	0.38%	24%	0.129%	76%	30.3%	185%	8.72%	301%
R259	590956.33	4807370.47	18.8%	59%	3.1%	55%	5.9%	51%	1.47%	89%	0.28%	0.28%	23%	30%	3.7%	15%	13.6%	16.5%	0.42%	1.7%	1.34%	12.4%	3.4%	3.4%	4.4%	4.4%	0.36%	24%	0.124%	76%	28.3%	183%	8.39%	301%
R260	591082.58	4807189.52	21.3%	61%	3.6%	55%	6.6%	51%	1.70%	90%	0.32%	0.32%	26%	33%	4.7%	16%	15.1%	18.0%	0.47%	1.8%	1.51%	12.5%	3.7%	3.7%	4.8%	4.8%	0.37%	24%	0.144%	76%	32.1%	187%	9.83%	302%
R261	591071.70	4806646.35	30.9%	71%	5.8%	57%	10.4%	55%	2.67%	91%	0.51%	0.51%	46%	53%	7.8%	20%	22.8%	25.6%	0.72%	2.0%	2.36%	13.4%	4.3%	4.3%	5.5%	5.5%	0.63%	25%	0.209%	76%	53.9%	209%	16.09%	309%
R262	591035.97	4806582.50	34.3%	74%	6.5%	58%	11.6%	56%	2.96%	91%	0.56%	0.56%	45%	52%	8.1%	20%	23.2%	26.0%	0.77%	2.1%	2.58%	13.6%	4.5%	4.5%	5.8%	5.8%	0.69%	25%	0.231%	76%	62.8%	218%	18.04%	311%
R263	591117.31	4806692.72	28.2%	68%	5.2%	57%	9.4%	54%	2.44%	90%	0.46%	0.46%	46%	53%	7.4%	19%	22.3%	25.1%	0.67%	2.0%	2.17%	13.2%	4.1%	4.1%	5.3%	5.3%	0.58%	24%	0.191%	76%	48.0%	203%	14.56%	307%
R264	591236.66	4806622.03	28.0%	68%	4.8%	56%	9.8%	54%	2.24%	90%	0.40%	0.40%	42%	50%	6.5%	18%	20.8%	23.6%	0.68%	2.0%	2.02%	13.0%	4.2%	4.2%	5.5%	5.5%	0.59%	24%	0.171%	76%	51.2%	206%	13.34%	306%
R265	591210.05	4806550.57	29.9%	70%	5.0%	57%	10.2%	55%	2.35%	90%	0.42%	0.42%	42%	49%	6.6%	18%	20.7%	23.6%	0.69%	2.0%	2.12%	13.1%	4.3%	4.3%	5.5%	5.5%	0.60%	24%	0.180%	76%	54.5%	210%	14.02%	307%
R266	591169.76	4806533.85	32.0%	72%	5.4%	57%	10.7%	55%	2.50%	90%	0.45%	0.45%	41%	48%	6.7%	18%	20.8%	23.7%	0.71%	2.0%	2.24%	13.2%	4.4%	4.4%	5.7%	5.7%	0.62%	24%	0.191%	76%	58.3%	213%	15.03%	308%
R267	591055.32	4806496.37	38.0%	78%	6.7%	58%	12.3%	57%	3.02%	91%	0.54%	0.54%	43%	50%	7.7%	19%	22.0%	24.9%	0.79%	2.1%	2.64%	13.7%	4.6%	4.6%	6.0%	6.0%	0.70%	25%	0.233%	76%	68.4%	223%	18.47%	311%
R268	590945.40	4806605.50	37.1%	77%	7.3%	59%	12.3%	57%	3.28%	91%	0.61%	0.61%	44%	51%	8.8%	21%	23.2%	26.1%	0.86%	2.2%	2.80%	13.8%	4.5%	4.5%	5.8%	5.8%	0.72%	25%	0.260%	76%	65.9%	221%	20.16%	313%
R269	591153.86	4805932.23	22.8%	63%	3.1%	55%	7.6%	52%	1.47%	89%	0.33%	0.33%	27%	34%	5.9%	18%	14.1%	16.9%	0.60%	1.9%	1.36%	12.4%	5.8%	5.8%	7.4%	7.4%	0.41%	24%	0.109%	76%	37.3%	192%	8.45%	301%
R270	591173.01	4806086.35	27.5%	68%	3.7%	55%	8.7%	53%	1.74%	90%	0.38%	0.38%	26%	34%	5.7%	17%	14.7%	17.5%	0.61%	1.9%	1.59%	12.6%	5.5%	5.5%	7.0%	7.0%	0.48%	24%	0.131%	76%	44.6%	200%	10.10%	303%
R271	590883.45	4806059.73	34.7%	75%	5.5%	57%	10.8%	55%	2.61%	91%	0.49%	0.49%	29%	37%	8.1%	20%	16.7%	19.6%	0.75%	2.0%	2.39%	13.4%	5.8%	5.8%	7.5%	7.5%	0.59%	24%	0.191%	76%	57.4%	212%	15.40%	308%
R272	591084.23	4806254.79	34.0%	74%	5.1%	57%	11.1%	56%	2.39%	90%	0.48%	0.48%	30%	37%	7.4%	19%	16.2%	19.1%	0.81%	2.1%	2.13%	13.1%	5.1%	5.1%	6.6%	6.6%	0.61%	24%	0.180%	76%	57.9%	213%	14.22%	307%
R273	591110.44	4806235.73	32.7%	73%	4.8%	56%	10.6%	55%	2.24%	90%	0.46%	0.46%	29%	36%	7.1%	19%	16.1%	19.0%	0.78%	2.1%	2.00%	13.0%	5.1%	5.1%	6.6%	6.6%	0.58%	24%	0.169%	76%	55.4%	210%	13.29%	306%
R274	591154.50	4806189.68	30.4%	71%	4.3%	56%	9.9%	54%	2.00%	90%	0.42%	0.42%	29%	36%	6.7%	18%	15.7%	18.6%	0.72%	2.0%	1.80%	12.8%	5.2%	5.2%	6.6%	6.6%	0.54%	24%	0.151%	76%	50.9%	206%	11.74%	304%
R275	591271.28	4806254.56	28.8%	69%	3.9%	55%	9.4%	54%	1.81%	90%	0.40%	0.40%	30%	37%	6.5%	18%	15.7%	18.6%	0.70%	2.0%	1.62%	12.6%	4.9%	4.9%	6.3%	6.3%	0.52%	24%	0.138%	76%	48.6%	204%	10.62%	303%
R276	591515.74	4806421.68	24.7%	65%	3.2%	55%	8.2%	53%	1.49%	89%	0.34%	0.34%	31%	38%	5.8%	18%	15.2%	18.1%	0.61%	1.9%	1.34%	12.3%	4.3%	4.3%	5.6%	5.6%	0.44%	24%	0.116%	76%	42.4%	197%	8.62%	301%
R277	591462.49	4806297.83	25.3%	65%	3.1%	55%	8.3%	53%	1.47%	89%	0.35%	0.35%	31%	38%	6.0%	18%	15.5%	18.3%	0.62%	1.9%	1.31%	12.3%	4.5%	4.5%	5.7%	5.7%	0.45%	24%	0.113%	76%	42.6%	198%	8.47%	301%
R278	591626.91	4806044.49	17.7%	58%	2.0%	54%	6.2%	51%	1.00%	89%	0.26%	0.26%	33%	40%	4.9%	17%	15.2%	18.0%	0.48%	1.8%	0.94%	12.0%	4.4%	4.4%	5.6%	5.6%	0.35%	24%	0.076%	76%	29.0%	184%	5.69%	298%
R279	591566.46	4805968.10	18.1%	58%	2.0%	54%	6.3%	51%	1.00%	89%	0.26%	0.26%	28%	36%	4.8%	17%	13.6%	16.4%	0.49%	1.8%	0.93%	11.9%	4.7%	4.7%	6.1%	6.1%	0.35%	24%	0.076%	76%	29.5%	185%	5.68%	298%
R280	591514.80	4806050.53	19.3%	59%	2.3%	54%	6.6%	51%	1.14%	89%	0.28%	0.28%	29%	36%	5.0%	17%	14.3%	17.2%	0.51%	1.8%	1.06%	12.1%	4.9%	4.9%	6.3%	6.3%	0.36%	24%	0.087%	76%	31.7%	187%	6.49%	299%
R281	591496.67	4806080.21	20.0%	60%	2.5%	54%	6.6%	51%	1.19%	89%	0.28%	0.28%	29%	36%	4.9%	17%	14.6%	17.5%	0.51%	1.8%	1.10%	12.1%	5.0%	5.0%	6.5%	6.5%	0.37%	24%	0.089%	76%	32.2%	187%	6.79%	299%
R282	591515.90	4805960.41	18.7%	59%	2.1%	54%	6.4%	51%	1.04%	89%	0.27%	0.27%	27%	34%	4.9%	17%	13.4%	16.3%	0.50%	1.8%	0.97%	12.0%	4.8%	4.8%	6.2%	6.2%	0.36%	24%	0.078%	76%	30.3%	185%	5.93%	298%
R283	591574.70	4805918.10	17.5%	58%	1.9%	54%	6.0%	51%	0.94%	89%	0.25%	0.25%	29%	36%	4.5%	16%	13.7%	16.6%	0.47%	1.8%	0.88%	11.9%	4.8%	4.8%	6.2%	6.2%	0.34%	24%	0.071%	76%	28.3%	183%	5.38%	298%
R284	591633.50	4805907.11	16.9%	57%	1.8%	53%	5.8%	50%	0.89%	89%	0.25%	0.25%	28%	35%	4.3%	16%	13.3%	16.2%	0.45%	1.7%	0.84%	11.8%	4.8%	4.8%	6.2%	6.2%	0.33%	24%	0.067%	76%	27.3%	182%	5.07%	298%
R285	591700.55	4805960.96	17.0%	57%	1.8%	53%	5.8%	50%	0.88%	89%	0.25%	0.25%	27%	34%	4.4%	16%	12.8%	15.7%	0.45%	1.7%	0.83%	11.8%	4.6%	4.6%	5.9%	5.9%	0.33%	24%	0.067%	76%	27.5%	183%	5.03%	298%
R286	591754.40	4805913.15	16.2%	56%	1.7%	53%	5.5%	50%	0.82%	89%	0.24%	0.24%	25%	32%	4.0%	16%	12.3%	15.1%	0.42%	1.7%	0.77%	11.8%	4.6%	4.6%	6.0%	6.0%	0.31%	24%	0.062%	76%	26.1%	181%	4.65%	297%
R287	591656.03	4806002.72	17.3%	57%	1.9%	53%	6.0%	51%	0.94%	89%	0.25%	0.25%	32%	39%	4.8%	17%	14.7%	17.6%	0.47%	1.8%	0.89%	11.9%	4.5%	4.5%	5.8%	5.8%	0.34%	24%	0.071%	76%	28.2%	183%	5.34%	298%
R288	591807.92	4805987.25	16.1%	56%	1.7%	53%	5.5%	50%	0.83%	89%	0.23%	0.23%	24%	32%	4.2%	16%	12.3%	15.2%	0.43%	1.7%	0.78%	11.8%	4.5%	4.5%	5.8%	5.8%	0.31%	24%	0.062%	76%	26.2%	181%	4.71%	297%
R289	592160.67	4804305.92	6.3%	46%	0.5%	52%	2.3%	47%	0.24%	88%	0.08%	0.08%	17%	24%	1.9%	14%	8.6%	11.5%	0.20%	1.5%	0.23%	11.2%	4.1%	4.1%	5.3%	5.3%	0.13%	24%	0.020%	76%	11.6%	167%	1.27%	294%
R290	591994.34	4804188.62	6.2%	46%	0.5%	52%	2.3%	47%	0.24%	88%	0.08%	0.08%	17%	25%	2.1%	14%	9.4%	12.2%	0.21%	1.5%	0.23%	11.2%	4.5%	4.5%	5.8%	5.8%	0.12%	24%	0.018%	76%	11.6%	167%	1.25%	294%
R291	591920.81	4804129.09	6.1%	46%	0.5%	52%	2.3%	47%	0.23%	88%	0.08%	0.08%	19%	26%	2.1%	14%	10.0%	12.8%	0.21%	1.5%	0.22%	11.2%	4.2%	4.2%	5.4%	5.4%	0.12%	24%	0.018%	76%	11.3%	166%	1.23%	294%
R292	591854.27	4804059.05	6.3%	46%	0.4%	52%	2.3%	47%	0.23%	88%	0.08%	0.08%	20%	27%	2.0%	14%	10.2%	13.1%	0.20%	1.5%	0.21%	11.2%	5.2%	5.2%	6.7%	6.7%	0.13%	24%	0.018%	76%	11.4%	166%	1.21%	294%
R293	591767.05	4803967.41	7.2%	47%	0.4%	52%	2.4%	47%	0.23%	88%	0.10%	0.10%	17%	25%	1.8%	14%	9.2%	12.1%	0.19%	1.5%	0.22%	11.2%	4.4%	4.4%	5.6%	5.6%	0.13%	24%	0.018%	76%	12.0%	167%	1.21%	294%
R294	591339.02	4803835.11	5.8%	46%	0.5%	52%	1.9%	47%	0.23%	88%	0.08%	0.08%	18%	26%	1.9%	14%	9.5%	12.3%	0.19%	1.5%	0.21%	11.2%	5.3%	5.3%	6.9%	6.9%	0.11%	24%	0.018%	76%	10.2%	165%	1.24%	294%
R295	590844.25	4803738.73	7.9%	48%	0.5%	52%	2.6%	47%	0.23%	88%	0.11%	0.11%	18%	26%	2.1%	14%	9.5%	12.4%	0.21%	1.5%	0.20%	11.2%	6.1%	6.1%	7.8%	7.8%	0.15%	24%	0.018%	76%	11.0%	166%	1.20%	294%
R296	590246.67	4803815.84	7.5%	48%	0.5%	52%	2.6%	47%	0.26%	88%	0.13%	0.13%	18%	26%	2.9%	15%	10.1%	12.9%	0.23%	1.5%	0.22%	11.2%	7.7%	7.7%	10.0%	10.0%	0.14%	24%	0.020%	76%	12.6%	168%	1.30%	294%
R297	589925.40	4804008.60	9.8%	50%	0.7%	52%	2.7%	47%	0.31%	88%	0.18%	0.18%	20%	27%	2.6%	14%	10.6%	13.5%	0.24%	1.5%	0.27%	11.3%	9.7%	9.7%	12.5%	12.5%	0.15%	24%	0.024%	76%	12.5%	168%	1.58%	294%
R298	590548.68	4803764.43	8.8%	49%	0.5%	52%	2.8%	47%	0.24%	88%	0.12%	0.12%	19%	26%	2.2%	14%	10.3%	13.2%	0.18%	1.5%	0.21%	11.2%	7.4%	7.4%	9.5%	9.5%	0.16%	24%	0.018%	76%	12.2%	167%	1.23%	294%
R299	591101.27	4803770.86	6.3%	46%	0.4%	52%	2.1%	47%	0.22%	88%	0.08%	0.08%	18%	26%	2.1%	14%	9.4%	12.3%	0.19%	1.5%	0.20%	11.2%	5.7%	5.7%	7.4%	7.4%	0.12%	24%	0.018%	76%	10.0%	165%	1.18%	294%
R300	591551.06	4803860.81	6.4%	47%	0.5%	52%	2.1%	47%	0.23%	88%	0.09%	0.09%	18%	26%	2.1%	14%	9.4%	12.3%	0.19%	1.5%	0.22%	11.2%	4.6%	4.6%	6.0%	6.0%	0.11%	24%	0.018%	76%	10.9%	166%	1.23%	294%
R301	586572.95	4805620.11	4.7%	45%	0.2%	52%	1.8%	46%	0.13%	88%	0.06%	0.06%	15%	22%	1.1%	13%	7.6%	10.5%	0.12%	1.4%	0.12%	11.1%	3.8%	3.8%	4.9%	4.9%	0.12%	24%	0.011%	76%	7.4%	162%	0.69%	293%
R302	588597.17	4808143.62	5.9%	46%	0.2%	52%	2.0%	47%	0.12%	88%	0.09%	0.09%	15%	22%	1.5%	13%	7.9%	10.8%	0.15%	1.4%	0.11%	11.1%	2.9%	2.9%	3.7%	3.7%	0.11%	24%	0.009%	76%	9.1%	164%	0.67%	293%
R303	588982.92	4808143.62	7.4%	48%	0.3%	52%	2.5%	47%	0.15%	88%	0.11%	0.11%	17%	24%	2.0%	14%	8.9%	11.8%	0.21%	1.5%	0.14%	11.1%	3.0%	3.0%	3.9%	3.9%	0.14%	24%	0.013%	76%	11.8%	167%	0.85%	293%
R304	589386.61	4808125.68	9.1%	49%	0.4%	52%	2.8%	47%	0.21%	88%	0.14%	0.14%	19%	26%	2.3%	14%	10.2%	13.1%	0.25%	1.5%	0.20%	11.2%	3.0%	3.0%	3.9%	3.9%	0.15%	24%	0.018%	76%	13.4%	168%	1.20%	294%
R305	589772.36	4808125.68	9.6%	50%	0.6%	52%	3.1%	48%	0.30%	88%	0.14%	0.14%	20%	28%	2.9%	15%	10.5%	13.4%	0.26%	1.5%	0.28%	11.3%	2.9%	2.9%	3.7%	3.7%	0.17%	24%	0.027%	76%	15.5%	171%	1.69%	294%
R306	590143.84	4808204.91	11.9%	52%	0.9%	52%	4.0%	49%	0.43%	88%	0.16%	0.16%	20%	27%	2.6%	14%	11.8%	14.6%	0.33%	1.6%	0.37%	11.4%	3.3%	3.3%	4.2%	4.2%	0.24%	24%	0.038%	76%	19.6%	175%	2.36%	295%
R307	590552.82	4808089.80	11.8%	52%	1.4%	53%	4.2%	49%	0.69%	89%	0.16%	0.16%	21%	28%	3.3%	15%	15.1%	18.0%	0.33%	1.6%	0.61%	11.6%	3.3%	3.3%	4.3%	4.3%	0.24%	24%	0.062%	76%	21.1%	176%	3.80%	296%
R308	590893.72	4808098.77	12.5%	53%	1.4%	53%	4.8%	49%	0.72%	89%	0.16%	0.16%	24%	31%	2.9%	15%	11.9%	14.7%	0.33%	1.6%	0.65%	11.7%	2.9%	2.9%	3.8%	3.8%	0.32%	24%	0.062%	76%	21.6%	177%	3.96%	296%
R309	591315.35	4808107.74	11.9%	52%	1.4%	53%	4.3%	49%	0.71%	89%	0.15%	0.15%	24%	31%	3.1%	15%	11.2%	14.1%	0.30%	1.6%	0.67%	11.7%	2.8%	2.8%	3.6%	3.6%	0.26%	24%	0.060%	76%	21.0%	176%	3.88%	296%
R310	588292.16	4808027.00	4.4%	45%	0.2%	52%	1.5%	46%	0.11%	88%	0.07%	0.07%	15%	22%	1.1%	13%	7.9%	10.7%	0.11%	1.4%	0.11%	11.1%	3.0%	3.0%	3.8%	3.8%	0.09%	24%	0.009%	76%	7.8%	163%	0.64%	293%
R311	587448.90	4807829.64	3.0%	43%	0.1%	52%	1.2%	46%	0.07%	88%	0.05%	0.05%	12%	20%	1.1%	13%	6.3%	9.2%	0.12%	1.4%	0.07%	11.1%	3.3%	3.3%	4.2%	4.2%	0.06%	24%	0.007%	76%	5.9%	161%	0.41%	293%
R312	587054.18	4807578.46	4.0%	44%	0.1%	52%	1.6%	46%	0.08%	88%	0.05%	0.05%	12%	20%	1.4%	13%	6.5%	9.3%	0.14%	1.4%	0.08%	11.1%	3.7%	3.7%	4.8%	4.8%	0.09%	24%	0.007%	76%	7.7%	163%	0.44%	293%
R313	586874.76	4807085.06	4.2%	44%	0.2%	52%	1.7%	46%	0.10%	88%	0.06%	0.06%	13%	20%	1.3%	13%	6.7%	9.6%	0.13%	1.4%	0.10%	11.1%	3.9%	3.9%	5.0%	5.0%	0.10%	24%	0.009%	76%	7.6%	163%	0.57%	293%
R314	588417.75	4803810.68	8.9%	49%	0.8%	52%	2.7%	47%	0.39%	88%	0.13%	0.13%	22%	29%	1.9%	14%	12.6%	15.4%	0.19%	1.5%	0.34%	11.4%	4.5%	4.5%	5.8%	5.8%	0.16%	24%	0.031%	76%	12.1%	167%	1.88%	294%
R315	589027.77	4803801.71	8.7%	49%	0.7%	52%	2.8%	47%	0.33%	88%	0.12%	0.12%	18%	25%	2.3%	14%	11.3%	14.1%	0.20%	1.5%	0.31%	11.3%	5.5%	5.5%	7.0%	7.0%	0.16%	24%	0.024%	76%	12.4%	167%	1.67%	294%
R316	589467.35	4803774.80	9.0%	49%	0.5%	52%	2.5%	47%	0.25%	88%	0.13%	0.13%	16%	23%	1.8%	14%	8.9%	11.7%	0.20%	1.5%	0.23%	11.2%	6.7%	6.7%	8.6%	8.6%	0.14%	24%	0.020%	76%	12.9%	168%	1.31%	294%
R317	587852.59	4804052.90	8.1%	48%	0.7%	52%	2.7%	47%	0.34%	88%	0.11%	0.11%	22%	29%	2.3%	14%	10.5%	13.4%	0.20%	1.5%	0.30%	11.3%	3.6%	3.6%	4.6%	4.6%	0.15%	24%	0.029%	76%	12.2%	167%	1.61%	294%
R318	591979.19	4808062.88	9.1%	49%	1.2%	53%	3.0%	48%	0.59%	89%	0.14%	0.14%	17%	25%	2.5%	14%	9.0%	11.9%	0.24%	1.5%	0.57%	11.6%	2.2%	2.2%	2.8%	2.8%	0.16%	24%	0.049%	76%	13.4%	168%	3.23%	296%
R319	592965.99	4804689.83	4.5%	45%	0.4%	52%	1.7%	46%	0.21%	88%	0.06%	0.06%	13%	20%	1.5%	13%	6.5%	9.3%	0.14%	1.4%	0.20%	11.2%	2.3%	2.3%	2.9%	2.9%	0.09%	24%	0.016%	76%	6.5%	162%	1.08%	294%
R320	592903.19	4804447.62	3.8%	44%	0.4%	52%	1.4%	46%	0.19%	88%	0.05%	0.05%	13%	20%	1.5%	13%	6.5%	9.3%	0.13%	1.4%	0.18%	11.2%	2.3%	2.3%	2.9%	2.9%	0.08%	24%	0.016%	76%	5.9%	161%	0.97%	293%
R321	589917.34	4807771.52	14.0%	54%	1.1%	53%	4.6%	49%	0.50%	88%	0.20%	0.20%	22%	29%	3.4%	15%	13.3%	16.2%	0.36%	1.6%	0.42%	11.4%	4.3%	4.3%	5.5%	5.5%	0.28%	24%	0.044%	76%	23.1%	178%	2.84%	295%
R322	589928.61	4808104.27	11.5%	52%	0.8%	52%	3.7%	48%	0.37%	88%	0.16%	0.16%	20%	28%	3.0%	15%	11.5%	14.3%	0.29%	1.6%	0.33%	11.3%	3.7%	3.7%	4.7%	4.7%	0.21%	24%	0.031%	76%	18.1%	173%	2.04%	295%
R323	590196.67	4807870.35	16.1%	56%	1.4%	53%	5.5%	50%	0.65%	89%	0.22%	0.22%	20%	27%	3.5%	15%	15.4%	18.3%	0.41%	1.7%	0.57%	11.6%	3.6%	3.6%	4.7%	4.7%	0.32%	24%	0.058%	76%	27.1%	182%	3.66%	296%

Percentages of Criteria at Sensitive Receptors (Scenario D)

			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			55.6%	95.7%	10.1%	61.7%	16.9%	61.5%	4.5%	92.5%	0.8%	0.8%	44.3%	51.5%	12.0%	23.8%	29.3%	32.1%	1.1%	2.4%	3.9%	14.9%	19.6%	19.6%	25.2%	25.2%	1.0%	24.8%	0.3%	76.3%	92.5%	247.5%	28.9%	321.4%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R1	590428.52	4805587.50	25.7%	66%	4.0%	56%	8.5%	53%	1.74%	90%	0.42%	0.42%	33%	40%	12.0%	24%	18.3%	21.2%	0.63%	1.9%	1.35%	12.4%	8.0%	8.0%	10.3%	10.3%	0.46%	24%	0.138%	76%	46.8%	202%	10.76%	303%
R2	590715.91	4805728.09	23.5%	64%	3.5%	55%	7.2%	52%	1.69%	90%	0.37%	0.37%	32%	40%	8.9%	21%	15.6%	18.4%	0.67%	2.0%	1.56%	12.6%	7.3%	7.3%	9.4%	9.4%	0.39%	24%	0.122%	76%	37.9%	193%	10.20%	303%
R3	590357.58	4805478.22	25.5%	66%	3.4%	55%	8.2%	53%	1.46%	89%	0.36%	0.36%	29%	36%	10.3%	22%	16.6%	19.5%	0.56%	1.8%	1.12%	12.1%	7.7%	7.7%	9.9%	9.9%	0.46%	24%	0.116%	76%	45.5%	201%	8.99%	301%
R4	590307.77	4805411.02	25.7%	66%	3.1%	55%	8.1%	53%	1.33%	89%	0.37%	0.37%	26%	33%	10.0%	22%	15.8%	18.7%	0.60%	1.9%	1.01%	12.0%	7.4%	7.4%	9.5%	9.5%	0.47%	24%	0.104%	76%	45.5%	200%	8.13%	301%
R5	590307.86	4805232.30	22.2%	62%	2.1%	54%	7.0%	52%	0.95%	89%	0.32%	0.32%	22%	29%	8.1%	20%	14.9%	17.7%	0.50%	1.8%	0.74%	11.8%	6.3%	6.3%	8.1%	8.1%	0.40%	24%	0.076%	76%	39.2%	194%	5.71%	298%
R6	590268.71	4805171.18	21.3%	61%	2.0%	54%	6.7%	51%	0.89%	89%	0.31%	0.31%	21%	28%	7.5%	19%	14.9%	17.7%	0.50%	1.8%	0.69%	11.7%	6.1%	6.1%	7.9%	7.9%	0.38%	24%	0.069%	76%	37.4%	192%	5.32%	298%
R7	590101.81	4805169.13	23.9%	64%	2.3%	54%	7.4%	52%	1.03%	89%	0.38%	0.38%	22%	29%	5.9%	18%	17.3%	20.1%	0.47%	1.8%	0.79%	11.8%	6.5%	6.5%	8.3%	8.3%	0.42%	24%	0.082%	76%	41.4%	196%	6.22%	299%
R8	590039.80	4805108.86	20.7%	61%	2.2%	54%	6.1%	51%	0.97%	89%	0.39%	0.39%	23%	30%	4.7%	16%	17.9%	20.8%	0.46%	1.7%	0.75%	11.8%	6.3%	6.3%	8.1%	8.1%	0.35%	24%	0.076%	76%	34.0%	189%	5.82%	298%
R9	590051.99	4805042.66	19.1%	59%	1.9%	53%	5.2%	50%	0.84%	89%	0.36%	0.36%	22%	29%	4.8%	17%	16.9%	19.7%	0.42%	1.7%	0.66%	11.7%	6.0%	6.0%	7.7%	7.7%	0.29%	24%	0.067%	76%	28.6%	184%	5.02%	298%
R10	589949.68	4804950.27	17.9%	58%	1.6%	53%	4.9%	49%	0.73%	89%	0.33%	0.33%	21%	28%	3.6%	15%	16.2%	19.1%	0.37%	1.7%	0.60%	11.6%	5.8%	5.8%	7.5%	7.5%	0.28%	24%	0.056%	76%	24.2%	179%	4.28%	297%
R12	589649.06	4804788.02	12.2%	52%	1.4%	53%	4.0%	49%	0.66%	89%	0.23%	0.23%	21%	28%	4.2%	16%	12.3%	15.1%	0.33%	1.6%	0.59%	11.6%	6.5%	6.5%	8.4%	8.4%	0.23%	24%	0.047%	76%	19.6%	175%	3.67%	296%
R13	589565.47	4804836.84	14.3%	54%	1.5%	53%	4.3%	49%	0.74%	89%	0.27%	0.27%	21%	28%	5.0%	17%	12.8%	15.6%	0.35%	1.6%	0.67%	11.7%	7.1%	7.1%	9.2%	9.2%	0.23%	24%	0.053%	76%	20.0%	175%	4.08%	297%
R14	589552.40	4804850.98	14.6%	55%	1.6%	53%	4.4%	49%	0.76%	89%	0.28%	0.28%	21%	28%	5.1%	17%	12.8%	15.6%	0.35%	1.6%	0.68%	11.7%	7.2%	7.2%	9.3%	9.3%	0.22%	24%	0.053%	76%	20.3%	175%	4.18%	297%
R15	589487.71	4804854.82	15.2%	55%	1.6%	53%	4.5%	49%	0.78%	89%	0.29%	0.29%	21%	28%	5.2%	17%	12.9%	15.8%	0.34%	1.6%	0.70%	11.7%	7.6%	7.6%	9.8%	9.8%	0.23%	24%	0.056%	76%	20.8%	176%	4.26%	297%
R16	589391.42	4804818.71	14.9%	55%	1.5%	53%	4.4%	49%	0.76%	89%	0.29%	0.29%	20%	28%	5.1%	17%	12.4%	15.3%	0.31%	1.6%	0.68%	11.7%	8.4%	8.4%	10.8%	10.8%	0.23%	24%	0.053%	76%	20.1%	175%	4.08%	297%
R17	589341.30	4804854.89	15.6%	56%	1.6%	53%	4.6%	49%	0.80%	89%	0.30%	0.30%	20%	27%	4.9%	17%	11.9%	14.8%	0.30%	1.6%	0.71%	11.7%	9.1%	9.1%	11.7%	11.7%	0.24%	24%	0.056%	76%	20.9%	176%	4.26%	297%
R18	589237.00	4804804.05	15.6%	56%	1.5%	53%	4.6%	49%	0.74%	89%	0.30%	0.30%	20%	28%	4.4%	16%	11.2%	14.1%	0.29%	1.6%	0.66%	11.7%	10.3%	10.3%	13.3%	13.3%	0.24%	24%	0.053%	76%	20.7%	176%	3.96%	296%
R19	589214.42	4804827.86	15.7%	56%	1.6%	53%	4.6%	49%	0.76%	89%	0.31%	0.31%	21%	28%	4.2%	16%	11.0%	13.8%	0.28%	1.6%	0.67%	11.7%	10.8%	10.8%	13.9%	13.9%	0.25%	24%	0.056%	76%	20.8%	176%	4.05%	297%
R20	589161.88	4804859.47	15.2%	55%	1.6%	53%	4.4%	49%	0.79%	89%	0.30%	0.30%	20%	27%	3.7%	15%	10.7%	13.5%	0.27%	1.6%	0.69%	11.7%	12.0%	12.0%	15.4%	15.4%	0.24%	24%	0.058%	76%	20.1%	175%	4.14%	297%
R21	589148.36	4804897.75	15.7%	56%	1.7%	53%	4.5%	49%	0.84%	89%	0.31%	0.31%	21%	28%	3.5%	15%	10.9%	13.7%	0.29%	1.6%	0.72%	11.7%	12.5%	12.5%	16.2%	16.2%	0.25%	24%	0.060%	76%	20.7%	176%	4.31%	297%
R22	589087.10	4804971.33	15.7%	56%	1.9%	54%	4.9%	49%	0.93%	89%	0.30%	0.30%	25%	33%	3.3%	15%	12.4%	15.3%	0.31%	1.6%	0.76%	11.8%	15.3%	15.3%	19.7%	19.7%	0.25%	24%	0.069%	76%	22.4%	177%	4.62%	297%
R23	589148.96	4805035.30	19.0%	59%	2.2%	54%	5.6%	50%	1.04%	89%	0.37%	0.37%	23%	30%	3.6%	15%	12.0%	14.9%	0.35%	1.6%	0.84%	11.8%	14.1%	14.1%	18.1%	18.1%	0.30%	24%	0.078%	76%	25.2%	180%	5.13%	298%
R24	589128.67	4805086.01	20.3%	60%	2.5%	54%	6.1%	51%	1.15%	89%	0.39%	0.39%	25%	33%	3.7%	15%	12.5%	15.3%	0.38%	1.7%	0.89%	11.9%	15.3%	15.3%	19.8%	19.8%	0.32%	24%	0.087%	76%	27.4%	182%	5.49%	298%
R25	589105.01	4805060.41	19.4%	60%	2.3%	54%	5.8%	50%	1.09%	89%	0.38%	0.38%	27%	34%	3.6%	15%	13.2%	16.0%	0.36%	1.7%	0.86%	11.9%	16.2%	16.2%	20.9%	20.9%	0.31%	24%	0.082%	76%	26.4%	181%	5.25%	298%
R26	589133.34	4805172.65	23.8%	64%	3.0%	55%	7.1%	52%	1.39%	89%	0.46%	0.46%	28%	35%	3.8%	16%	13.6%	16.5%	0.42%	1.7%	1.01%	12.0%	16.8%	16.8%	21.6%	21.6%	0.39%	24%	0.104%	76%	31.4%	186%	6.29%	299%
R27	588993.00	4805046.07	15.4%	56%	2.2%	54%	4.7%	49%	1.04%	89%	0.27%	0.27%	30%	37%	3.9%	16%	14.8%	17.7%	0.34%	1.6%	0.81%	11.8%	18.3%	18.3%	23.6%	23.6%	0.25%	24%	0.080%	76%	23.4%	178%	4.91%	297%
R28	588933.88	4805108.89	20.0%	60%	2.5%	54%	5.5%	50%	1.17%	89%	0.35%	0.35%	33%	40%	4.2%	16%	19.8%	22.7%	0.38%	1.7%	0.86%	11.9%	18.3%	18.3%	23.6%	23.6%	0.29%	24%	0.091%	76%	25.6%	181%	5.23%	298%
R29	589053.75	4804987.00	14.9%	55%	2.0%	54%	4.8%	49%	0.94%	89%	0.28%	0.28%	26%	34%	3.3%	15%	12.9%	15.8%	0.32%	1.6%	0.77%	11.8%	16.0%	16.0%	20.6%	20.6%	0.25%	24%	0.071%	76%	22.2%	177%	4.66%	297%
R30	589022.84	4805021.77	15.7%	56%	2.1%	54%	4.9%	49%	1.00%	89%	0.27%	0.27%	29%	36%	3.6%	15%	14.3%	17.2%	0.33%	1.6%	0.79%	11.8%	17.7%	17.7%	22.8%	22.8%	0.25%	24%	0.076%	76%	22.3%	177%	4.81%	297%
R31	588909.44	4805151.99	21.9%	62%	2.8%	54%	6.0%	51%	1.28%	89%	0.38%	0.38%	40%	47%	4.2%	16%	23.7%	26.6%	0.41%	1.7%	0.90%	11.9%	18.8%	18.8%	24.2%	24.2%	0.33%	24%	0.100%	76%	28.5%	183%	5.52%	298%
R32	588882.16	4805178.52	21.4%	62%	3.0%	55%	6.2%	51%	1.34%	89%	0.37%	0.37%	41%	49%	4.0%	16%	24.2%	27.1%	0.43%	1.7%	0.92%	11.9%	17.8%	17.8%	22.9%	22.9%	0.36%	24%	0.104%	76%	30.6%	186%	5.62%	298%
R33	588837.60	4805190.59	20.1%	60%	2.9%	55%	6.6%	51%	1.32%	89%	0.34%	0.34%	38%	46%	3.7%	15%	22.0%	24.8%	0.45%	1.7%	0.90%	11.9%	17.2%	17.2%	22.1%	22.1%	0.37%	24%	0.102%	76%	32.3%	187%	5.49%	298%
R34	588906.04	4805227.93	23.8%	64%	3.5%	55%	6.9%	52%	1.54%	89%	0.42%	0.42%	44%	51%	4.3%	16%	25.5%	28.4%	0.46%	1.7%	1.02%	12.0%	19.6%	19.6%	25.2%	25.2%	0.39%	24%	0.120%	76%	33.8%	189%	6.25%	299%
R35	588863.99	4805271.68	26.4%	66%	3.7%	55%	8.7%	53%	1.62%	90%	0.43%	0.43%	41%	48%	4.0%	16%	23.0%	25.8%	0.54%	1.8%	1.04%	12.0%	19.3%	19.3%	24.9%	24.9%	0.47%	24%	0.127%	76%	40.9%	196%	6.39%	299%
R36	588774.77	4805264.86	26.9%	67%	3.1%	55%	8.8%	53%	1.39%	89%	0.44%	0.44%	37%	44%	3.7%	15%	21.5%	24.4%	0.54%	1.8%	0.91%	11.9%	15.9%	15.9%	20.5%	20.5%	0.48%	24%	0.109%	76%	41.3%	196%	5.58%	298%
R37	588767.37	4805274.62	27.6%	68%	3.1%	55%	9.1%	54%	1.39%	89%	0.45%	0.45%	37%	44%	3.7%	15%	21.6%	24.4%	0.55%	1.8%	0.91%	11.9%	15.3%	15.3%	19.7%	19.7%	0.49%	24%	0.111%	76%	42.2%	197%	5.57%	298%
R38	588739.80	4805301.49	29.0%	69%	3.1%	55%	9.5%	54%	1.37%	89%	0.48%	0.48%	38%	45%	3.6%	15%	21.4%	24.3%	0.57%	1.9%	0.89%	11.9%	14.3%	14.3%	18.4%	18.4%	0.51%	24%	0.109%	76%	43.9%	199%	5.45%	298%
R39	588701.19	4805324.41	28.9%	69%	2.9%	54%	9.6%	54%	1.28%	89%	0.48%	0.48%	38%	45%	3.5%	15%	21.1%	23.9%	0.57%	1.9%	0.84%	11.9%	14.1%	14.1%	18.1%	18.1%	0.52%	24%	0.102%	76%	44.0%	199%	5.15%	298%
R40	588676.08	4805360.64	29.0%	69%	2.8%	54%	9.9%	54%	1.25%	89%	0.50%	0.50%	39%	47%	3.6%	15%	21.3%	24.2%	0.59%	1.9%	0.82%	11.8%	14.8%	14.8%	19.0%	19.0%	0.53%	24%	0.100%	76%	45.2%	200%	5.03%	298%
R41	588628.93	4805409.57	27.2%	67%	2.5%	54%	9.4%	54%	1.14%	89%	0.47%	0.47%	39%	46%	3.5%	15%	20.6%	23.4%	0.57%	1.9%	0.76%	11.8%	14.4%	14.4%	18.6%	18.6%	0.51%	24%	0.093%	76%	43.3%	198%	4.65%	297%
R42	588586.22	4805444.06	23.4%	64%	2.2%	54%	8.1%	53%	1.02%	89%	0.40%	0.40%	40%	47%	3.4%	15%	20.5%	23.4%	0.51%	1.8%	0.69%	11.7%	14.0%	14.0%	18.1%	18.1%	0.44%	24%	0.084%	76%	38.4%	193%	4.28%	297%
R43	588557.06	4805464.32	21.7%	62%	2.0%	54%	7.5%	52%	0.94%	89%	0.39%	0.39%	38%	45%	3.4%	15%	19.7%	22.5%	0.47%	1.8%	0.65%	11.7%	13.7%	13.7%	17.6%	17.6%	0.40%	24%	0.078%	76%	35.0%	190%	4.03%	297%
R44	588670.10	4805576.40	30.6%	71%	2.6%	54%	10.6%	55%	1.21%	89%	0.56%	0.56%	40%	47%	4.3%	16%	20.3%	23.2%	0.61%	1.9%	0.79%	11.8%	16.2%	16.2%	20.9%	20.9%	0.56%	24%	0.100%	76%	46.8%	202%	5.01%	298%
R45	588670.28	4805615.19	28.7%	69%	2.4%	54%	10.0%	55%	1.12%	89%	0.52%	0.52%	36%	43%	4.2%	16%	18.3%	21.2%	0.58%	1.9%	0.75%	11.8%	15.5%	15.5%	19.9%	19.9%	0.53%	24%	0.093%	76%	45.0%	200%	4.80%	297%
R46	589003.59	4805937.72	29.3%	69%	4.0%	56%	9.7%	54%	1.79%	90%	0.49%	0.49%	27%	34%	5.2%	17%	15.0%	17.8%	0.62%	1.9%	1.14%	12.1%	16.1%	16.1%	20.7%	20.7%	0.55%	24%	0.153%	76%	55.0%	210%	8.20%	301%
R47	589041.99	4805974.72	30.0%	70%	4.3%	56%	9.9%	55%	1.91%	90%	0.51%	0.51%	28%	35%	5.5%	17%	15.4%	18.2%	0.64%	1.9%	1.20%	12.2%	17.0%	17.0%	21.9%	21.9%	0.57%	24%	0.162%	76%	57.1%	212%	8.78%	301%
R48	589293.19	4806505.50	22.5%	63%	2.3%	54%	7.4%	52%	1.02%	89%	0.32%	0.32%	25%	33%	5.8%	18%	13.9%	16.7%	0.53%	1.8%	0.76%	11.8%	11.5%	11.5%	14.8%	14.8%	0.42%	24%	0.087%	76%	41.6%	197%	5.60%	298%
R49	589219.60	4806515.59	20.5%	61%	1.9%	53%	6.7%	51%	0.85%	89%	0.30%	0.30%	24%	31%	5.5%	17%	13.7%	16.5%	0.50%	1.8%	0.64%	11.6%	11.8%	11.8%	15.2%	15.2%	0.39%	24%	0.073%	76%	38.1%	193%	4.69%	297%
R50	589338.17	4806485.88	25.3%	65%	2.7%	54%	8.3%	53%	1.18%	89%	0.37%	0.37%	26%	33%	6.0%	18%	14.4%	17.2%	0.59%	1.9%	0.87%	11.9%	11.3%	11.3%	14.5%	14.5%	0.47%	24%	0.102%	76%	46.1%	201%	6.51%	299%
R51	589518.84	4806584.75	31.1%	71%	3.6%	55%	10.4%	55%	1.52%	89%	0.46%	0.46%	29%	36%	6.1%	18%	16.3%	19.1%	0.68%	2.0%	1.11%	12.1%	9.6%	9.6%	12.3%	12.3%	0.59%	24%	0.131%	76%	57.0%	212%	9.07%	302%
R52	589557.86	4806649.65	30.6%	71%	3.4%	55%	10.2%	55%	1.45%	89%	0.45%	0.45%	27%	34%	6.6%	18%	15.8%	18.6%	0.67%	2.0%	1.06%	12.1%	9.2%	9.2%	11.8%	11.8%	0.58%	24%	0.127%	76%	56.0%	211%	8.70%	301%
R53	589474.48	4806602.41	28.2%	68%	3.0%	55%	9.5%	54%	1.28%	89%	0.42%	0.42%	29%	36%	5.7%	18%	16.3%	19.2%	0.64%	1.9%	0.93%	11.9%	9.8%	9.8%	12.7%	12.7%	0.53%	24%	0.111%	76%	51.6%	207%	7.44%	300%
R54	589897.77	4807374.19	18.9%	59%	1.8%	53%	6.3%	51%	0.81%	89%	0.31%	0.31%	24%	31%	8.0%	20%	16.2%	19.1%	0.43%	1.7%	0.65%	11.7%	6.1%	6.1%	7.9%	7.9%	0.38%	24%	0.071%	76%	31.9%	187%	4.76%	297%
R55	590214.06	4807506.19	19.6%	60%	2.2%	54%	6.8%	51%	1.04%	89%	0.27%	0.27%	22%	30%	5.9%	18%	17.1%	20.0%	0.51%	1.8%	0.91%	11.9%	5.1%	5.1%	6.6%	6.6%	0.39%	24%	0.093%	76%	35.3%	190%	6.00%	298%
R56	590337.28	4807588.62	16.8%	57%	2.1%	54%	5.8%	50%	1.00%	89%	0.24%	0.24%	21%	29%	5.4%	17%	15.6%	18.5%	0.43%	1.7%	0.88%	11.9%	4.5%	4.5%	5.7%	5.7%	0.35%	24%	0.089%	76%	30.6%	186%	5.75%	298%
R57	590735.46	4807580.37	16.4%	57%	2.4%	54%	5.7%	50%	1.15%	89%	0.23%	0.23%	22%	29%	3.6%	15%	15.8%	18.7%	0.42%	1.7%	1.06%	12.1%	4.6%	4.6%	6.0%	6.0%	0.37%	24%	0.098%	76%	29.9%	185%	6.67%	299%
R58	590836.21	4807430.87	18.0%	58%	2.8%	54%	5.9%	51%	1.38%	89%	0.29%	0.29%	25%	32%	3.5%	15%	16.9%	19.7%	0.40%	1.7%	1.27%	12.3%	5.2%	5.2%	6.8%	6.8%	0.37%	24%	0.116%	76%	28.9%	184%	7.95%	300%
R59	590841.35	4807247.63	21.4%	62%	3.6%	55%	6.6%	51%	1.73%	90%	0.34%	0.34%	25%	33%	4.1%	16%	16.8%	19.6%	0.44%	1.7%	1.57%	12.6%	5.5%	5.5%	7.0%	7.0%	0.40%	24%	0.147%	76%	31.7%	187%	10.06%	303%
R60	590953.11	4807285.94	20.0%	60%	3.3%	55%	6.3%	51%	1.59%	90%	0.32%	0.32%	24%	31%	4.3%	16%	15.9%	18.8%	0.42%	1.7%	1.44%	12.5%	5.3%	5.3%	6.8%	6.8%	0.37%	24%	0.136%	76%	30.0%	185%	9.17%	302%
R61	590858.15	4807196.55	22.0%	62%	3.8%	55%	6.8%	51%	1.83%	90%	0.35%	0.35%	25%	32%	4.3%	16%	16.6%	19.5%	0.45%	1.7%	1.65%	12.7%	5.3%	5.3%	6.8%	6.8%	0.41%	24%	0.156%	76%	33.7%	189%	10.69%	303%
R62	590899.99	4807147.81	22.0%	62%	4.0%	56%	6.8%	51%	1.90%	90%	0.35%	0.35%	26%	33%	4.7%	17%	16.7%	19.6%	0.46%	1.8%	1.69%	12.7%	5.7%	5.7%	7.4%	7.4%	0.41%	24%	0.162%	76%	34.8%	190%	11.07%	304%
R63	590908.06	4807085.06	22.1%	62%	4.2%	56%	7.1%	52%	2.00%	90%	0.36%	0.36%	26%	33%	5.2%	17%	17.0%	19.9%	0.49%	1.8%	1.76%	12.8%	5.8%	5.8%	7.5%	7.5%	0.44%	24%	0.171%	76%	35.8%	191%	11.73%	304%
R64	590967.33	4807021.48	21.6%	62%	4.3%	56%	7.4%	52%	2.04%	90%	0.37%	0.37%	30%	37%	4.9%	17%	17.2%	20.1%	0.50%	1.8%	1.76%	12.8%	6.0%	6.0%	7.7%	7.7%	0.44%	24%	0.171%	76%	37.5%	192%	12.04%	305%
R65	590865.33	4806894.56	24.6%	65%	5.5%	57%	8.2%	53%	2.51%	90%	0.43%	0.43%	29%	37%	5.6%	17%	18.5%	21.3%	0.55%	1.8%	2.09%	13.1%	6.4%	6.4%	8.2%	8.2%	0.53%	24%	0.209%	76%	42.6%	198%	15.20%	308%
R66	590875.79	4806848.38	25.9%	66%	5.8%	57%	8.3%	53%	2.61%	91%	0.45%	0.45%	31%	38%	5.4%	17%	18.6%	21.5%	0.60%	1.9%	2.18%	13.2%	6.4%	6.4%	8.2%	8.2%	0.50%	24%	0.216%	76%	45.7%	201%	15.94%	308%
R67	590920.31	4806789.89	27.2%	67%	5.9%	57%	9.0%	54%	2.67%	91%	0.47%	0.47%	31%	39%	5.2%	17%	18.7%	21.6%	0.67%	2.0%	2.26%	13.3%	6.2%	6.2%	8.0%	8.0%	0.51%	24%	0.218%	76%	49.3%	204%	16.36%	309%
R68	590961.66	4806888.64	24.3%	64%	5.0%	57%	7.8%	52%	2.32%	90%	0.43%	0.43%	31%	38%	4.6%	16%	17.7%	20.6%	0.56%	1.8%	1.97%	13.0%	6.0%	6.0%	7.8%	7.8%	0.46%	24%	0.191%	76%	40.9%	196%	14.04%	307%
R69	590903.03	4806672.93	34.1%	74%	6.9%	59%	11.4%	56%	3.13%	91%	0.55%	0.55%	35%	42%	7.3%	19%	20.1%	23.0%	0.84%	2.1%	2.64%	13.7%	6.5%	6.5%	8.4%	8.4%	0.65%	25%	0.249%	76%	62.6%	218%	19.36%	312%
R70	590963.12	4806680.26	31.5%	72%	6.4%	58%	10.6%	55%	2.91%	91%	0.53%	0.53%	35%	42%	8.0%	20%	20.1%	22.9%	0.78%	2.1%	2.49%	13.5%	6.3%	6.3%	8.2%	8.2%	0.63%	24%	0.229%	76%	57.9%	213%	17.90%	310%
R71	591025.30	4806745.59	27.6%	68%	5.6%	57%	9.0%	54%	2.56%	90%	0.48%	0.48%	34%	41%	7.4%	19%	18.8%	21.6%	0.67%	2.0%	2.22%	13.2%	6.2%	6.2%	7.9%	7.9%	0.53%	24%	0.202%	76%	49.4%	204%	15.65%	308%
R72	591093.90	4806613.91	28.7%	69%	5.4%	57%	10.3%	55%	2.55%	90%	0.46%	0.46%	41%	48%	8.0%	20%	21.7%	24.6%	0.70%	2.0%	2.29%	13.3%	6.2%	6.2%	8.0%	8.0%	0.63%	24%	0.196%	76%	53.6%	209%	15.48%	308%
R73	591080.34	4806562.13	32.9%	73%	5.8%	57%	11.2%	56%	2.72%	91%	0.49%	0.49%	42%	49%	7.1%	19%	23.2%	26.1%	0.74%	2.0%	2.42%	13.4%	6.3%	6.3%	8.2%	8.2%	0.66%	25%	0.207%	76%	61.4%	216%	16.71%	309%
R74	590955.72	4806489.27	43.1%	83%	7.7%	59%	13.5%	58%	3.51%	91%	0.63%	0.63%	42%	49%	8.4%	20%	24.9%	27.7%	0.85%	2.1%	3.00%	14.0%	6.7%	6.7%	8.6%	8.6%	0.77%	25%	0.269%	76%	77.2%	232%	22.02%	315%
R75	591005.07	4806448.29	43.8%	84%	7.0%	59%	13.4%	58%	3.21%	91%	0.64%	0.64%	42%	49%	6.8%	19%	23.9%	26.7%	0.86%	2.1%	2.80%	13.8%	6.2%	6.2%	8.0%	8.0%	0.75%	25%	0.244%	76%	74.5%	230%	20.09%	313%
R76	590884.05	4806449.67	50.0%	90%	9.3%	61%	15.2%	60%	4.12%	92%	0.74%	0.74%	43%	50%	9.5%	21%	26.1%	28.9%	0.94%	2.2%	3.45%	14.5%	6.9%	6.9%	8.9%	8.9%	0.87%	25%	0.318%	76%	87.5%	242%	26.20%	319%
R77	590883.54	4806430.39	51.5%	92%	9.3%	61%	15.5%	60%	4.13%	92%	0.76%	0.76%	43%	50%	9.3%	21%	26.2%	29.1%	0.97%	2.3%	3.47%	14.5%	6.7%	6.7%	8.6%	8.6%	0.88%	25%	0.318%	76%	89.2%	244%	26.29%	319%
R78	590891.65	4806348.55	49.8%	90%	8.1%	60%	15.2%	60%	3.72%	92%	0.73%	0.73%	41%	48%	7.7%	20%	25.6%	28.4%	0.97%	2.3%	3.25%	14.3%	7.0%	7.0%	9.0%	9.0%	0.86%	25%	0.280%	76%	83.1%	238%	23.45%	316%
R79	590869.78	4806365.29	52.2%	92%	8.9%	60%	15.9%	60%	4.02%	92%	0.77%	0.77%	41%	48%	8.3%	20%	26.2%	29.1%	1.01%	2.3%	3.45%	14.5%	6.4%	6.4%	8.2%	8.2%	0.90%	25%	0.304%	76%	87.0%	242%	25.45%	318%
R80	590867.26	4806331.34	50.7%	91%	8.4%	60%	15.5%	60%	3.84%	92%	0.75%	0.75%	42%	49%	8.1%	20%	25.9%	28.7%	0.99%	2.3%	3.36%	14.4%	7.2%	7.2%	9.3%	9.3%	0.88%	25%	0.287%	76%	84.4%	239%	24.19%	317%
R81	590803.61	4806333.49	55.6%	96%	10.1%	62%	16.9%	62%	4.55%	92%	0.82%	0.82%	43%	50%	9.5%	21%	27.5%	30.4%	1.07%	2.4%	3.89%	14.9%	6.7%	6.7%	8.6%	8.6%	0.96%	25%	0.342%	76%	92.5%	248%	28.92%	321%
R82	590868.28	4806278.10	47.6%	88%	7.5%	59%	14.8%	59%	3.53%	91%	0.70%	0.70%	43%	50%	8.1%	20%	25.1%	28.0%	0.97%	2.3%	3.18%	14.2%	7.7%	7.7%	10.0%	10.0%	0.83%	25%	0.260%	76%	79.7%	235%	22.07%	315%
R83	590864.42	4806258.79	46.6%	87%	7.3%	59%	14.6%	59%	3.45%	91%	0.69%	0.69%	43%	50%	8.3%	20%	24.9%	27.7%	0.97%	2.3%	3.14%	14.1%	7.7%	7.7%	9.9%	9.9%	0.81%	25%	0.251%	76%	78.4%	233%	21.56%	314%
R84	590831.33	4806209.69	45.6%	86%	7.2%	59%	14.3%	59%	3.44%	91%	0.67%	0.67%	44%	51%	8.7%	20%	24.7%	27.6%	0.97%	2.3%	3.18%	14.2%	7.6%	7.6%	9.8%	9.8%	0.78%	25%	0.249%	76%	77.0%	232%	21.41%	314%

Percentages of Criteria at Sensitive Receptors (Scenario D)

			TSP				PM$_{2.5}$				RCS		NO$_2$				SO$_2$						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			55.6%	95.7%	10.1%	61.7%	16.9%	61.5%	4.5%	92.5%	0.8%	0.8%	44.3%	51.5%	12.0%	23.8%	29.3%	32.1%	1.1%	2.4%	3.9%	14.9%	19.6%	19.6%	25.2%	25.2%	1.0%	24.8%	0.3%	76.3%	92.5%	247.5%	28.9%	321.4%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R85	**590817.26**	**4806242.44**	48.6%	89%	8.0%	60%	15.1%	60%	3.76%	92%	0.72%	0.72%	44%	51%	8.8%	21%	25.7%	28.6%	1.00%	2.3%	3.43%	14.4%	7.9%	7.9%	10.1%	10.1%	0.84%	25%	0.273%	76%	81.6%	237%	23.52%	316%
R86	**590874.92**	**4806136.21**	38.7%	79%	5.7%	57%	12.3%	57%	2.75%	91%	0.57%	0.57%	37%	44%	8.0%	20%	20.1%	23.0%	0.85%	2.1%	2.57%	13.6%	6.7%	6.7%	8.6%	8.6%	0.66%	25%	0.198%	76%	65.8%	221%	17.02%	310%
R87	**591051.40**	**4806231.39**	35.0%	75%	4.8%	56%	11.4%	56%	2.28%	90%	0.51%	0.51%	38%	46%	6.4%	18%	20.1%	23.0%	0.82%	2.1%	2.10%	13.1%	6.4%	6.4%	8.2%	8.2%	0.62%	24%	0.167%	76%	59.9%	215%	14.03%	307%
R88	**590857.90**	**4806098.80**	37.5%	78%	5.5%	57%	11.9%	57%	2.67%	91%	0.56%	0.56%	33%	40%	8.4%	20%	18.5%	21.3%	0.83%	2.1%	2.52%	13.5%	6.9%	6.9%	8.9%	8.9%	0.64%	25%	0.191%	76%	63.7%	219%	16.52%	309%
R89	**590831.13**	**4806085.17**	38.0%	78%	5.7%	57%	12.1%	57%	2.75%	91%	0.56%	0.56%	33%	41%	8.6%	20%	18.6%	21.5%	0.84%	2.1%	2.60%	13.6%	7.0%	7.0%	9.0%	9.0%	0.65%	25%	0.196%	76%	64.5%	220%	17.04%	310%
R90	**590794.58**	**4805959.59**	33.2%	73%	4.8%	56%	10.6%	55%	2.35%	90%	0.50%	0.50%	30%	37%	8.7%	20%	16.6%	19.4%	0.76%	2.0%	2.25%	13.3%	6.9%	6.9%	8.9%	8.9%	0.57%	24%	0.167%	76%	55.8%	211%	14.46%	307%
R91	**590797.37**	**4805895.64**	29.6%	70%	4.2%	56%	9.5%	54%	2.07%	90%	0.45%	0.45%	26%	34%	8.5%	20%	14.0%	16.9%	0.72%	2.0%	1.96%	13.0%	6.9%	6.9%	8.9%	8.9%	0.50%	24%	0.147%	76%	49.6%	205%	12.64%	305%
R92	**591122.86**	**4805917.21**	21.8%	62%	2.7%	54%	7.3%	52%	1.37%	89%	0.34%	0.34%	26%	33%	5.9%	18%	13.9%	16.7%	0.58%	1.9%	1.31%	12.3%	6.1%	6.1%	7.9%	7.9%	0.39%	24%	0.100%	76%	36.7%	192%	8.20%	301%
R93	**591390.75**	**4805924.41**	18.2%	58%	2.1%	54%	6.3%	51%	1.05%	89%	0.28%	0.28%	28%	35%	5.4%	17%	13.8%	16.7%	0.50%	1.8%	1.00%	12.0%	5.7%	5.7%	7.3%	7.3%	0.35%	24%	0.078%	76%	30.7%	186%	6.16%	299%
R94	**591469.94**	**4806107.41**	19.9%	60%	2.3%	54%	6.8%	51%	1.15%	89%	0.30%	0.30%	29%	36%	6.0%	18%	14.6%	17.5%	0.51%	1.8%	1.10%	12.1%	5.3%	5.3%	6.8%	6.8%	0.38%	24%	0.084%	76%	34.0%	189%	6.85%	299%
R95	**591624.05**	**4806094.57**	17.0%	57%	1.9%	53%	5.9%	51%	0.97%	89%	0.25%	0.25%	32%	39%	6.2%	18%	15.1%	17.9%	0.46%	1.7%	0.94%	11.9%	5.1%	5.1%	6.6%	6.6%	0.33%	24%	0.071%	76%	29.1%	184%	5.71%	298%
R96	**591554.49**	**4806013.23**	17.3%	57%	1.9%	53%	6.1%	51%	0.98%	89%	0.26%	0.26%	31%	38%	6.6%	18%	14.8%	17.6%	0.49%	1.8%	0.94%	12.0%	5.2%	5.2%	6.7%	6.7%	0.34%	24%	0.071%	76%	29.4%	184%	5.74%	298%
R97	**591668.99**	**4806053.90**	16.0%	56%	1.8%	53%	5.7%	50%	0.90%	89%	0.24%	0.24%	32%	39%	6.5%	18%	14.9%	17.7%	0.45%	1.7%	0.87%	11.9%	4.8%	4.8%	6.2%	6.2%	0.32%	24%	0.067%	76%	27.3%	182%	5.29%	298%
R98	**591610.13**	**4805965.08**	16.3%	56%	1.7%	53%	5.7%	50%	0.89%	89%	0.24%	0.24%	29%	37%	6.1%	18%	13.7%	16.6%	0.46%	1.7%	0.86%	11.9%	5.3%	5.3%	6.8%	6.8%	0.32%	24%	0.067%	76%	27.5%	183%	5.22%	298%
R99	**591719.29**	**4806025.01**	15.4%	56%	1.7%	53%	5.5%	50%	0.85%	89%	0.23%	0.23%	31%	39%	6.3%	18%	14.5%	17.4%	0.44%	1.7%	0.82%	11.8%	5.0%	5.0%	6.4%	6.4%	0.31%	24%	0.062%	76%	26.3%	181%	4.96%	297%
R100	**591749.26**	**4805984.34**	15.4%	56%	1.6%	53%	5.4%	50%	0.82%	89%	0.23%	0.23%	26%	33%	5.6%	17%	12.8%	15.7%	0.42%	1.7%	0.78%	11.8%	5.1%	5.1%	6.5%	6.5%	0.30%	24%	0.060%	76%	26.0%	181%	4.76%	297%
R101	**591698.96**	**4805855.92**	15.1%	55%	1.5%	53%	5.2%	50%	0.77%	89%	0.23%	0.23%	24%	31%	4.5%	16%	12.0%	14.8%	0.40%	1.7%	0.73%	11.7%	4.9%	4.9%	6.3%	6.3%	0.30%	24%	0.058%	76%	24.9%	180%	4.46%	297%
R102	**591824.17**	**4805930.83**	14.6%	55%	1.5%	53%	5.1%	50%	0.74%	89%	0.22%	0.22%	24%	31%	4.7%	17%	11.9%	14.8%	0.39%	1.7%	0.71%	11.7%	4.7%	4.7%	6.0%	6.0%	0.28%	24%	0.056%	76%	24.6%	180%	4.32%	297%
R103	**591805.98**	**4805838.80**	14.4%	55%	1.4%	53%	4.9%	50%	0.70%	89%	0.22%	0.22%	22%	30%	4.2%	16%	11.2%	14.0%	0.38%	1.7%	0.67%	11.7%	4.7%	4.7%	6.1%	6.1%	0.28%	24%	0.053%	76%	23.7%	179%	4.07%	297%
R104	**591746.05**	**4805766.02**	14.3%	54%	1.3%	53%	5.0%	50%	0.69%	89%	0.22%	0.22%	20%	28%	3.9%	16%	9.8%	12.7%	0.38%	1.7%	0.66%	11.7%	4.7%	4.7%	6.0%	6.0%	0.28%	24%	0.051%	76%	23.4%	178%	3.97%	296%
R105	**592064.72**	**4805863.19**	12.7%	53%	1.2%	53%	4.4%	49%	0.60%	89%	0.19%	0.19%	22%	30%	3.9%	16%	11.1%	14.0%	0.33%	1.6%	0.58%	11.6%	4.3%	4.3%	5.6%	5.6%	0.25%	24%	0.044%	76%	21.0%	176%	3.45%	296%
R106	**591457.80**	**4806263.06**	23.8%	64%	2.7%	54%	8.0%	53%	1.31%	89%	0.35%	0.35%	32%	40%	5.6%	17%	16.0%	18.9%	0.60%	1.9%	1.22%	12.2%	5.4%	5.4%	6.9%	6.9%	0.43%	24%	0.098%	76%	41.5%	196%	7.91%	300%
R107	**591300.05**	**4806336.50**	29.5%	70%	3.6%	55%	9.7%	54%	1.73%	90%	0.43%	0.43%	39%	46%	5.2%	17%	19.4%	22.2%	0.71%	2.0%	1.59%	12.6%	5.8%	5.8%	7.4%	7.4%	0.52%	24%	0.131%	76%	50.9%	206%	10.56%	303%
R108	**591252.74**	**4806220.96**	27.8%	68%	3.4%	55%	9.2%	54%	1.65%	90%	0.41%	0.41%	32%	39%	6.4%	18%	16.5%	19.3%	0.67%	2.0%	1.53%	12.5%	5.9%	5.9%	7.6%	7.6%	0.50%	24%	0.122%	76%	47.8%	203%	10.07%	303%
R109	**591205.44**	**4806270.09**	30.6%	71%	3.9%	55%	10.1%	55%	1.87%	90%	0.45%	0.45%	37%	45%	5.8%	18%	19.0%	21.9%	0.73%	2.0%	1.71%	12.7%	5.9%	5.9%	7.6%	7.6%	0.55%	24%	0.140%	76%	52.7%	208%	11.44%	304%
R110	**591252.74**	**4806340.13**	31.2%	71%	3.9%	55%	10.2%	55%	1.88%	90%	0.46%	0.46%	40%	47%	5.5%	17%	20.1%	23.0%	0.74%	2.0%	1.72%	12.7%	6.0%	6.0%	7.7%	7.7%	0.55%	24%	0.140%	76%	53.7%	209%	11.46%	304%
R111	**591139.92**	**4806297.13**	33.7%	74%	4.5%	56%	11.0%	56%	2.14%	90%	0.49%	0.49%	41%	48%	6.0%	18%	20.8%	23.7%	0.80%	2.1%	1.96%	13.0%	6.2%	6.2%	8.0%	8.0%	0.60%	24%	0.160%	76%	57.7%	213%	13.17%	306%
R112	**591122.35**	**4806325.63**	35.4%	76%	4.8%	56%	11.5%	56%	2.29%	90%	0.52%	0.52%	44%	51%	6.5%	18%	22.5%	25.3%	0.82%	2.1%	2.08%	13.1%	6.8%	6.8%	8.7%	8.7%	0.62%	24%	0.169%	76%	60.5%	215%	14.07%	307%
R113	**591089.88**	**4806341.73**	37.6%	78%	5.2%	57%	12.0%	57%	2.47%	90%	0.55%	0.55%	43%	50%	6.7%	18%	22.9%	25.8%	0.84%	2.1%	2.24%	13.3%	6.9%	6.9%	8.9%	8.9%	0.66%	25%	0.184%	76%	63.9%	219%	15.28%	308%
R114	**591068.77**	**4806395.97**	39.9%	80%	5.8%	57%	12.5%	57%	2.72%	91%	0.59%	0.59%	43%	50%	6.6%	18%	23.8%	26.7%	0.84%	2.1%	2.44%	13.5%	6.9%	6.9%	8.9%	8.9%	0.69%	25%	0.204%	76%	67.2%	222%	16.86%	309%
R115	**591097.40**	**4806450.01**	38.8%	79%	5.7%	57%	12.0%	57%	2.68%	91%	0.57%	0.57%	41%	48%	6.3%	18%	23.2%	26.1%	0.79%	2.1%	2.40%	13.4%	6.0%	6.0%	7.7%	7.7%	0.67%	25%	0.202%	76%	65.2%	220%	16.59%	309%
R116	**591085.71**	**4806416.77**	39.3%	79%	5.7%	57%	12.2%	57%	2.68%	91%	0.58%	0.58%	42%	50%	6.4%	18%	23.7%	26.5%	0.82%	2.1%	2.41%	13.4%	6.6%	6.6%	8.5%	8.5%	0.68%	25%	0.200%	76%	66.1%	221%	16.59%	309%
R117	**591079.53**	**4806430.99**	39.6%	80%	5.9%	57%	12.3%	57%	2.74%	91%	0.58%	0.58%	41%	49%	6.4%	18%	23.6%	26.4%	0.81%	2.1%	2.45%	13.5%	6.3%	6.3%	8.1%	8.1%	0.69%	25%	0.207%	76%	66.6%	222%	16.97%	309%
R118	**591150.65**	**4806443.64**	36.7%	77%	5.2%	57%	11.5%	56%	2.44%	90%	0.54%	0.54%	42%	49%	6.2%	18%	23.1%	26.0%	0.77%	2.1%	2.20%	13.2%	6.5%	6.5%	8.3%	8.3%	0.64%	25%	0.182%	76%	61.9%	217%	14.98%	307%
R119	**591471.93**	**4806336.37**	24.6%	65%	2.8%	54%	8.2%	53%	1.36%	89%	0.36%	0.36%	37%	44%	4.9%	17%	17.8%	20.7%	0.61%	1.9%	1.26%	12.3%	5.2%	5.2%	6.6%	6.6%	0.44%	24%	0.102%	76%	42.9%	198%	8.22%	301%
R120	**591492.86**	**4806392.79**	24.9%	65%	2.9%	54%	8.3%	53%	1.39%	89%	0.36%	0.36%	38%	45%	4.4%	16%	18.2%	21.1%	0.61%	1.9%	1.28%	12.3%	5.4%	5.4%	7.0%	7.0%	0.45%	24%	0.104%	76%	43.3%	198%	8.36%	301%
R121	**591535.63**	**4806441.92**	24.4%	65%	2.8%	54%	8.1%	53%	1.37%	89%	0.35%	0.35%	39%	46%	4.5%	16%	18.6%	21.5%	0.60%	1.9%	1.27%	12.3%	5.3%	5.3%	6.8%	6.8%	0.44%	24%	0.104%	76%	42.4%	197%	8.18%	301%
R122	**591579.31**	**4806526.55**	24.1%	64%	2.8%	54%	8.0%	53%	1.37%	89%	0.35%	0.35%	40%	47%	4.6%	16%	20.0%	22.9%	0.58%	1.9%	1.28%	12.3%	5.8%	5.8%	7.4%	7.4%	0.44%	24%	0.104%	76%	41.6%	197%	8.18%	301%
R123	**591646.64**	**4806484.69**	22.7%	63%	2.5%	54%	7.6%	52%	1.23%	89%	0.33%	0.33%	36%	43%	4.1%	16%	17.7%	20.6%	0.56%	1.8%	1.15%	12.2%	5.1%	5.1%	6.6%	6.6%	0.42%	24%	0.093%	76%	39.6%	195%	7.34%	300%
R124	**591773.92**	**4806328.52**	18.2%	58%	1.9%	54%	6.3%	51%	0.97%	89%	0.26%	0.26%	32%	40%	4.6%	16%	15.3%	18.1%	0.48%	1.8%	0.91%	11.9%	4.9%	4.9%	6.3%	6.3%	0.34%	24%	0.073%	76%	32.3%	187%	5.72%	298%
R125	**591926.32**	**4806358.75**	16.6%	57%	1.7%	53%	5.7%	50%	0.86%	89%	0.24%	0.24%	30%	37%	4.3%	16%	14.4%	17.3%	0.44%	1.7%	0.81%	11.8%	4.6%	4.6%	5.9%	5.9%	0.31%	24%	0.067%	76%	29.5%	185%	5.04%	298%
R126	**592036.41**	**4805335.50**	8.4%	49%	0.8%	52%	3.0%	48%	0.41%	88%	0.13%	0.13%	17%	24%	2.8%	15%	8.6%	11.4%	0.26%	1.5%	0.41%	11.4%	3.7%	3.7%	4.7%	4.7%	0.17%	24%	0.031%	76%	13.8%	169%	2.31%	295%
R127	**592165.42**	**4805344.21**	8.2%	48%	0.7%	52%	3.0%	48%	0.40%	88%	0.12%	0.12%	17%	25%	3.0%	15%	8.8%	11.7%	0.26%	1.5%	0.39%	11.4%	3.5%	3.5%	4.5%	4.5%	0.16%	24%	0.029%	76%	13.4%	168%	2.22%	295%
R128	**592088.71**	**4805265.77**	7.7%	48%	0.7%	52%	2.8%	47%	0.39%	88%	0.12%	0.12%	17%	24%	2.8%	15%	8.0%	10.9%	0.25%	1.5%	0.38%	11.4%	3.5%	3.5%	4.5%	4.5%	0.16%	24%	0.029%	76%	12.8%	168%	2.15%	295%
R129	**592104.40**	**4805032.16**	6.4%	47%	0.6%	52%	2.5%	47%	0.33%	88%	0.10%	0.10%	17%	24%	2.6%	14%	8.3%	11.1%	0.22%	1.5%	0.33%	11.3%	3.1%	3.1%	4.1%	4.1%	0.13%	24%	0.024%	76%	10.5%	166%	1.82%	294%
R130	**592121.65**	**4804904.95**	5.9%	46%	0.6%	52%	2.3%	47%	0.30%	88%	0.09%	0.09%	17%	24%	1.9%	14%	8.4%	11.2%	0.20%	1.5%	0.30%	11.3%	3.2%	3.2%	4.1%	4.1%	0.12%	24%	0.022%	76%	9.9%	165%	1.67%	294%
R131	**592733.56**	**4805621.46**	7.1%	47%	0.6%	52%	2.5%	47%	0.33%	88%	0.11%	0.11%	14%	21%	2.4%	14%	6.5%	9.3%	0.20%	1.5%	0.33%	11.3%	2.6%	2.6%	3.3%	3.3%	0.14%	24%	0.024%	76%	11.5%	166%	1.83%	294%
R132	**591880.73**	**4804726.91**	7.0%	47%	0.5%	52%	2.6%	47%	0.29%	88%	0.10%	0.10%	19%	26%	2.6%	14%	9.8%	12.7%	0.21%	1.5%	0.28%	11.3%	3.4%	3.4%	4.4%	4.4%	0.15%	24%	0.022%	76%	13.0%	168%	1.62%	294%
R133	**592084.55**	**4804243.52**	6.3%	46%	0.4%	52%	2.3%	47%	0.22%	88%	0.09%	0.09%	17%	24%	2.7%	15%	8.5%	11.4%	0.21%	1.5%	0.22%	11.2%	2.6%	2.6%	3.4%	3.4%	0.13%	24%	0.016%	76%	11.8%	167%	1.19%	294%
R134	**592142.24**	**4804838.49**	5.6%	46%	0.5%	52%	2.1%	47%	0.29%	88%	0.09%	0.09%	17%	24%	1.9%	14%	8.4%	11.3%	0.19%	1.5%	0.28%	11.3%	2.8%	2.8%	3.7%	3.7%	0.11%	24%	0.022%	76%	10.0%	165%	1.60%	294%
R135	**592152.71**	**4804725.17**	5.4%	45%	0.5%	52%	1.9%	47%	0.27%	88%	0.08%	0.08%	17%	24%	2.2%	14%	8.7%	11.6%	0.16%	1.4%	0.26%	11.3%	3.0%	3.0%	3.9%	3.9%	0.11%	24%	0.020%	76%	10.2%	165%	1.48%	294%
R136	**592229.41**	**4804808.85**	5.3%	45%	0.5%	52%	2.1%	47%	0.28%	88%	0.08%	0.08%	17%	24%	1.9%	14%	8.4%	11.2%	0.18%	1.5%	0.28%	11.3%	2.8%	2.8%	3.6%	3.6%	0.11%	24%	0.020%	76%	9.3%	164%	1.52%	294%
R137	**589317.83**	**4804722.44**	14.9%	55%	1.3%	53%	4.4%	49%	0.67%	89%	0.29%	0.29%	20%	27%	4.8%	17%	12.0%	14.9%	0.30%	1.6%	0.61%	11.6%	8.9%	8.9%	11.4%	11.4%	0.23%	24%	0.047%	76%	20.1%	175%	3.63%	296%
R138	**589495.01**	**4804396.18**	9.1%	49%	0.8%	52%	3.0%	48%	0.42%	88%	0.18%	0.18%	20%	27%	3.2%	15%	10.6%	13.5%	0.24%	1.5%	0.40%	11.4%	6.6%	6.6%	8.4%	8.4%	0.18%	24%	0.031%	76%	15.8%	171%	2.33%	295%
R139	**589125.91**	**4804733.79**	11.7%	52%	1.4%	53%	3.3%	48%	0.67%	89%	0.22%	0.22%	21%	28%	4.0%	16%	10.5%	13.4%	0.24%	1.5%	0.61%	11.6%	11.1%	11.1%	14.3%	14.3%	0.18%	24%	0.049%	76%	16.2%	171%	3.59%	296%
R140	**588444.94**	**4804827.67**	12.6%	53%	1.3%	53%	4.1%	49%	0.64%	89%	0.20%	0.20%	23%	30%	2.8%	15%	14.1%	16.9%	0.32%	1.6%	0.51%	11.5%	8.6%	8.6%	11.1%	11.1%	0.25%	24%	0.051%	76%	19.3%	174%	2.95%	295%
R141	**588542.38**	**4804754.86**	10.6%	51%	1.3%	53%	3.8%	48%	0.65%	89%	0.17%	0.17%	25%	32%	3.0%	15%	14.7%	17.5%	0.29%	1.6%	0.53%	11.5%	10.3%	10.3%	13.2%	13.2%	0.22%	24%	0.051%	76%	17.2%	172%	3.04%	296%
R142	**588090.16**	**4805534.02**	12.2%	52%	0.8%	52%	4.4%	49%	0.43%	88%	0.20%	0.20%	24%	31%	2.8%	15%	12.1%	14.9%	0.31%	1.6%	0.36%	11.4%	7.9%	7.9%	10.1%	10.1%	0.24%	24%	0.038%	76%	21.3%	176%	2.11%	295%
R143	**588850.56**	**4806928.34**	10.7%	51%	0.7%	52%	3.7%	48%	0.31%	88%	0.17%	0.17%	21%	28%	3.1%	15%	12.9%	15.8%	0.30%	1.6%	0.27%	11.3%	6.1%	6.1%	7.9%	7.9%	0.21%	24%	0.027%	76%	20.8%	176%	1.79%	294%
R144	**588954.41**	**4807073.96**	10.2%	50%	0.6%	52%	3.5%	48%	0.30%	88%	0.16%	0.16%	22%	29%	4.0%	16%	11.4%	14.3%	0.26%	1.5%	0.25%	11.3%	6.1%	6.1%	7.8%	7.8%	0.19%	24%	0.024%	76%	19.6%	175%	1.72%	294%
R145	**589453.28**	**4806793.60**	20.7%	61%	1.9%	53%	7.0%	52%	0.84%	89%	0.31%	0.31%	29%	36%	6.5%	18%	29.3%	32.1%	0.55%	1.8%	0.67%	11.7%	9.1%	9.1%	11.8%	11.8%	0.39%	24%	0.071%	76%	38.5%	193%	4.77%	297%
R146	**589336.96**	**4806802.19**	17.1%	57%	1.5%	53%	5.8%	50%	0.67%	89%	0.26%	0.26%	25%	32%	5.5%	17%	21.6%	24.4%	0.45%	1.7%	0.54%	11.5%	9.5%	9.5%	12.2%	12.2%	0.33%	24%	0.056%	76%	32.5%	188%	3.77%	296%
R147	**589112.04**	**4806966.65**	13.4%	53%	0.8%	52%	4.5%	49%	0.38%	88%	0.20%	0.20%	23%	30%	4.4%	16%	13.7%	16.6%	0.31%	1.6%	0.32%	11.3%	6.9%	6.9%	8.9%	8.9%	0.25%	24%	0.031%	76%	24.8%	180%	2.22%	295%
R148	**589817.35**	**4807475.92**	16.5%	57%	1.3%	53%	4.9%	50%	0.62%	89%	0.27%	0.27%	25%	32%	7.3%	19%	13.9%	16.8%	0.37%	1.7%	0.50%	11.5%	6.2%	6.2%	8.0%	8.0%	0.30%	24%	0.053%	76%	24.5%	179%	3.53%	296%
R149	**589212.29**	**4807135.17**	11.2%	51%	0.8%	52%	3.8%	48%	0.36%	88%	0.18%	0.18%	23%	30%	5.0%	17%	14.5%	17.4%	0.30%	1.6%	0.29%	11.3%	6.3%	6.3%	8.1%	8.1%	0.22%	24%	0.031%	76%	20.3%	175%	2.07%	295%
R150	**589187.15**	**4807059.80**	12.3%	52%	0.8%	52%	4.2%	49%	0.38%	88%	0.18%	0.18%	22%	29%	4.9%	17%	13.2%	16.1%	0.30%	1.6%	0.30%	11.3%	6.5%	6.5%	8.3%	8.3%	0.24%	24%	0.031%	76%	22.6%	178%	2.19%	295%
R151	**589216.89**	**4807005.39**	13.1%	53%	0.9%	52%	4.4%	49%	0.42%	88%	0.19%	0.19%	22%	29%	5.0%	17%	13.1%	15.9%	0.30%	1.6%	0.33%	11.3%	6.8%	6.8%	8.7%	8.7%	0.25%	24%	0.036%	76%	24.2%	179%	2.42%	295%
R152	**590965.47**	**4807254.22**	20.3%	60%	3.4%	55%	6.3%	51%	1.64%	90%	0.33%	0.33%	24%	32%	4.2%	16%	16.0%	18.9%	0.42%	1.7%	1.48%	12.5%	5.3%	5.3%	6.8%	6.8%	0.37%	24%	0.138%	76%	31.0%	186%	9.51%	302%
R153	**590992.57**	**4807219.38**	20.3%	60%	3.5%	55%	6.3%	51%	1.68%	90%	0.33%	0.33%	24%	32%	4.1%	16%	15.9%	18.8%	0.44%	1.7%	1.51%	12.5%	5.2%	5.2%	6.8%	6.8%	0.37%	24%	0.142%	76%	31.7%	187%	9.79%	302%
R154	**591025.08**	**4807154.35**	20.2%	60%	3.7%	55%	6.6%	51%	1.76%	90%	0.33%	0.33%	26%	33%	4.0%	16%	16.8%	19.6%	0.46%	1.7%	1.56%	12.6%	5.4%	5.4%	7.0%	7.0%	0.39%	24%	0.149%	76%	34.2%	189%	10.34%	303%
R155	**591085.58**	**4807264.22**	18.7%	59%	3.2%	55%	6.0%	51%	1.53%	89%	0.30%	0.30%	23%	31%	3.8%	16%	15.3%	18.2%	0.42%	1.7%	1.39%	12.4%	5.3%	5.3%	6.9%	6.9%	0.35%	24%	0.129%	76%	30.4%	185%	8.87%	301%
R156	**591178.47**	**4807320.73**	17.4%	58%	2.9%	54%	5.7%	50%	1.40%	89%	0.28%	0.28%	23%	30%	3.3%	15%	15.0%	17.9%	0.40%	1.7%	1.28%	12.3%	5.1%	5.1%	6.5%	6.5%	0.33%	24%	0.118%	76%	29.1%	184%	8.08%	301%
R157	**591128.15**	**4807474.79**	17.0%	57%	2.5%	54%	5.4%	50%	1.23%	89%	0.27%	0.27%	22%	30%	3.7%	15%	14.7%	17.6%	0.37%	1.7%	1.13%	12.1%	5.0%	5.0%	6.4%	6.4%	0.32%	24%	0.102%	76%	25.2%	180%	7.00%	299%
R158	**591137.75**	**4807525.40**	16.6%	57%	2.3%	54%	5.3%	50%	1.16%	89%	0.26%	0.26%	22%	30%	3.7%	15%	14.9%	17.7%	0.36%	1.6%	1.08%	12.1%	4.9%	4.9%	6.3%	6.3%	0.32%	24%	0.098%	76%	24.5%	180%	6.64%	299%
R159	**591389.55**	**4807160.03**	18.9%	59%	3.0%	55%	5.4%	50%	1.46%	89%	0.33%	0.33%	24%	31%	4.5%	16%	15.3%	18.1%	0.43%	1.7%	1.30%	12.3%	5.0%	5.0%	6.4%	6.4%	0.30%	24%	0.120%	76%	27.5%	182%	8.62%	301%
R160	**591232.04**	**4806971.44**	22.8%	63%	3.9%	55%	6.2%	51%	1.82%	90%	0.39%	0.39%	27%	34%	5.5%	17%	16.8%	19.7%	0.50%	1.8%	1.59%	12.6%	5.5%	5.5%	7.0%	7.0%	0.36%	24%	0.147%	76%	31.8%	187%	10.92%	303%
R161	**591435.62**	**4807128.95**	19.6%	60%	3.0%	55%	5.2%	50%	1.45%	89%	0.33%	0.33%	25%	32%	5.0%	17%	15.5%	18.3%	0.43%	1.7%	1.29%	12.3%	5.0%	5.0%	6.4%	6.4%	0.30%	24%	0.118%	76%	27.2%	182%	8.57%	301%
R162	**591162.85**	**4806690.32**	25.6%	66%	4.7%	56%	9.4%	54%	2.26%	90%	0.42%	0.42%	39%	47%	7.7%	19%	20.2%	23.0%	0.66%	2.0%	2.04%	13.0%	6.0%	6.0%	7.7%	7.7%	0.57%	24%	0.173%	76%	47.9%	203%	13.62%	306%
R163	**591210.95**	**4806729.12**	24.5%	65%	4.4%	56%	8.8%	53%	2.12%	90%	0.40%	0.40%	37%	45%	7.3%	19%	19.8%	22.6%	0.64%	1.9%	1.91%	12.9%	5.9%	5.9%	7.6%	7.6%	0.53%	24%	0.164%	76%	46.0%	201%	12.76%	305%
R164	**591105.87**	**4806818.03**	24.6%	65%	4.8%	56%	7.4%	52%	2.22%	90%	0.43%	0.43%	34%	41%	7.2%	19%	17.7%	20.5%	0.59%	1.9%	1.94%	13.0%	5.8%	5.8%	7.5%	7.5%	0.44%	24%	0.176%	76%	40.8%	196%	13.43%	306%
R165	**591265.91**	**4806593.73**	27.6%	68%	4.3%	56%	9.5%	54%	2.09%	90%	0.40%	0.40%	43%	50%	5.5%	17%	22.3%	25.2%	0.65%	1.9%	1.92%	12.9%	5.6%	5.6%	7.2%	7.2%	0.56%	24%	0.158%	76%	50.8%	206%	12.63%	305%
R166	**591287.73**	**4806665.26**	26.1%	66%	4.2%	56%	9.2%	54%	2.03%	90%	0.37%	0.37%	40%	47%	5.0%	17%	21.6%	24.5%	0.65%	1.9%	1.85%	12.9%	5.9%	5.9%	7.6%	7.6%	0.55%	24%	0.153%	76%	48.7%	204%	12.20%	305%
R167	**591333.40**	**4806722.65**	24.6%	65%	4.0%	56%	8.6%	53%	1.91%	90%	0.35%	0.35%	36%	43%	5.2%	17%	20.7%	23.5%	0.61%	1.9%	1.74%	12.7%	5.8%	5.8%	7.5%	7.5%	0.50%	24%	0.147%	76%	46.1%	201%	11.47%	304%

Percentages of Criteria at Sensitive Receptors (Scenario D)

			TSP				PM$_{2.5}$				RCS		NO$_2$				SO$_2$						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard ($\mu g/m^3$)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			55.6%	95.7%	10.1%	61.7%	16.9%	61.5%	4.5%	92.5%	0.8%	0.8%	44.3%	51.5%	12.0%	23.8%	29.3%	32.1%	1.1%	2.4%	3.9%	14.9%	19.6%	19.6%	25.2%	25.2%	1.0%	24.8%	0.3%	76.3%	92.5%	247.5%	28.9%	321.4%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R168	591234.22	4806518.76	31.6%	72%	4.5%	56%	10.0%	55%	2.18%	90%	0.46%	0.46%	42%	49%	5.9%	18%	22.0%	24.8%	0.67%	2.0%	1.99%	13.0%	5.4%	5.4%	7.0%	7.0%	0.57%	24%	0.164%	76%	54.3%	209%	13.24%	306%
R169	591154.03	4806495.46	35.3%	75%	5.2%	57%	11.0%	56%	2.47%	90%	0.52%	0.52%	42%	49%	6.0%	18%	22.3%	25.2%	0.73%	2.0%	2.23%	13.2%	5.7%	5.7%	7.4%	7.4%	0.62%	24%	0.187%	76%	60.7%	216%	15.15%	308%
R170	592963.29	4806056.44	6.4%	46%	0.7%	52%	2.2%	47%	0.36%	88%	0.10%	0.10%	14%	21%	2.8%	15%	7.1%	9.9%	0.19%	1.5%	0.36%	11.4%	2.3%	2.3%	3.0%	3.0%	0.12%	24%	0.027%	76%	11.7%	167%	2.01%	295%
R171	592548.41	4807420.43	8.9%	49%	1.2%	53%	3.1%	48%	0.62%	89%	0.14%	0.14%	18%	26%	1.9%	14%	9.9%	12.8%	0.23%	1.5%	0.59%	11.6%	2.8%	2.8%	3.6%	3.6%	0.16%	24%	0.047%	76%	15.3%	170%	3.49%	296%
R172	592951.92	4807025.44	7.7%	48%	0.8%	52%	2.6%	47%	0.43%	88%	0.11%	0.11%	17%	24%	1.9%	14%	8.7%	11.6%	0.22%	1.5%	0.43%	11.4%	2.5%	2.5%	3.2%	3.2%	0.14%	24%	0.033%	76%	13.3%	168%	2.40%	295%
R173	592512.22	4807840.43	8.0%	48%	1.0%	53%	2.2%	47%	0.55%	88%	0.13%	0.13%	16%	23%	2.6%	14%	8.8%	11.6%	0.18%	1.5%	0.54%	11.5%	2.4%	2.4%	3.0%	3.0%	0.14%	24%	0.042%	76%	11.5%	167%	3.05%	296%
R174	592241.77	4807860.57	7.9%	48%	1.2%	53%	2.5%	47%	0.60%	89%	0.14%	0.14%	16%	23%	2.7%	15%	9.2%	12.0%	0.20%	1.5%	0.59%	11.6%	2.8%	2.8%	3.6%	3.6%	0.16%	24%	0.049%	76%	13.4%	168%	3.37%	296%
R175	592089.28	4807558.47	10.7%	51%	1.5%	53%	2.9%	48%	0.76%	89%	0.17%	0.17%	17%	24%	3.1%	15%	9.8%	12.7%	0.23%	1.5%	0.72%	11.7%	3.0%	3.0%	3.8%	3.8%	0.18%	24%	0.060%	76%	15.1%	170%	4.30%	297%
R176	593448.24	4806616.60	6.3%	46%	0.6%	52%	2.3%	47%	0.31%	88%	0.09%	0.09%	14%	22%	2.2%	14%	7.2%	10.1%	0.19%	1.5%	0.31%	11.3%	1.7%	1.7%	2.2%	2.2%	0.12%	24%	0.024%	76%	11.5%	166%	1.74%	294%
R177	593312.53	4806745.71	6.8%	47%	0.6%	52%	2.4%	47%	0.34%	88%	0.10%	0.10%	15%	23%	2.0%	14%	7.6%	10.4%	0.21%	1.5%	0.34%	11.3%	2.0%	2.0%	2.6%	2.6%	0.12%	24%	0.027%	76%	12.3%	167%	1.86%	294%
R178	589896.14	4804503.60	12.7%	53%	0.8%	52%	3.2%	48%	0.41%	88%	0.24%	0.24%	19%	27%	3.0%	15%	11.8%	14.7%	0.26%	1.5%	0.36%	11.4%	5.3%	5.3%	6.8%	6.8%	0.17%	24%	0.031%	76%	15.9%	171%	2.28%	295%
R179	589806.86	4804615.64	12.2%	52%	1.0%	53%	3.5%	48%	0.48%	88%	0.23%	0.23%	20%	28%	2.7%	14%	12.1%	15.0%	0.27%	1.6%	0.42%	11.4%	5.7%	5.7%	7.3%	7.3%	0.20%	24%	0.036%	76%	18.7%	174%	2.67%	295%
R180	589696.72	4804647.38	10.3%	50%	1.1%	53%	3.6%	48%	0.53%	88%	0.19%	0.19%	21%	28%	3.0%	15%	11.9%	14.8%	0.28%	1.6%	0.47%	11.5%	6.1%	6.1%	7.8%	7.8%	0.21%	24%	0.038%	76%	19.1%	174%	2.93%	295%
R181	589584.24	4804517.22	9.6%	50%	0.9%	53%	3.3%	48%	0.47%	88%	0.19%	0.19%	21%	28%	3.2%	15%	11.1%	14.0%	0.25%	1.5%	0.44%	11.4%	6.3%	6.3%	8.2%	8.2%	0.19%	24%	0.033%	76%	17.3%	172%	2.61%	295%
R182	589636.85	4804582.64	9.8%	50%	1.0%	53%	3.4%	48%	0.50%	88%	0.19%	0.19%	21%	28%	3.2%	15%	11.4%	14.3%	0.27%	1.6%	0.45%	11.5%	6.3%	6.3%	8.1%	8.1%	0.20%	24%	0.036%	76%	18.2%	173%	2.77%	295%
R183	589520.07	4804445.87	9.3%	49%	0.9%	52%	3.1%	48%	0.45%	88%	0.18%	0.18%	20%	28%	3.3%	15%	10.7%	13.6%	0.25%	1.5%	0.42%	11.4%	6.6%	6.6%	8.5%	8.5%	0.18%	24%	0.031%	76%	16.3%	171%	2.45%	295%
R184	589424.10	4804324.30	9.5%	50%	0.8%	52%	3.0%	48%	0.40%	88%	0.19%	0.19%	20%	27%	3.3%	15%	10.4%	13.2%	0.25%	1.5%	0.38%	11.4%	6.9%	6.9%	8.9%	8.9%	0.17%	24%	0.029%	76%	14.6%	170%	2.20%	295%
R185	589626.45	4804718.61	11.6%	52%	1.2%	53%	3.8%	48%	0.61%	89%	0.22%	0.22%	21%	28%	4.0%	16%	11.8%	14.6%	0.31%	1.6%	0.55%	11.6%	6.5%	6.5%	8.4%	8.4%	0.22%	24%	0.044%	76%	18.9%	174%	3.36%	296%
R186	589475.29	4804698.61	13.2%	53%	1.3%	53%	4.0%	49%	0.63%	89%	0.25%	0.25%	21%	28%	4.7%	16%	12.0%	14.9%	0.32%	1.6%	0.58%	11.6%	7.4%	7.4%	9.6%	9.6%	0.20%	24%	0.044%	76%	18.4%	173%	3.45%	296%
R187	589396.66	4804788.79	14.6%	55%	1.5%	53%	4.3%	49%	0.72%	89%	0.28%	0.28%	20%	28%	5.0%	17%	12.4%	15.3%	0.31%	1.6%	0.66%	11.7%	8.3%	8.3%	10.6%	10.6%	0.22%	24%	0.051%	76%	19.8%	175%	3.93%	296%
R188	589559.04	4804789.94	14.0%	54%	1.4%	53%	4.2%	49%	0.70%	89%	0.27%	0.27%	21%	28%	4.8%	17%	12.5%	15.4%	0.35%	1.6%	0.63%	11.6%	7.1%	7.1%	9.1%	9.1%	0.22%	24%	0.049%	76%	19.5%	175%	3.82%	296%
R189	589464.66	4804561.55	12.0%	52%	1.0%	53%	3.7%	48%	0.53%	88%	0.23%	0.23%	20%	27%	4.1%	16%	11.1%	14.0%	0.30%	1.6%	0.49%	11.5%	7.1%	7.1%	9.2%	9.2%	0.19%	24%	0.038%	76%	16.8%	172%	2.90%	295%
R190	589381.48	4804662.33	13.9%	54%	1.2%	53%	4.2%	49%	0.61%	89%	0.27%	0.27%	20%	28%	4.7%	17%	12.0%	14.9%	0.31%	1.6%	0.57%	11.6%	8.0%	8.0%	10.3%	10.3%	0.21%	24%	0.042%	76%	19.1%	174%	3.36%	296%
R191	589419.87	4804486.37	12.0%	52%	1.0%	53%	3.7%	48%	0.49%	88%	0.23%	0.23%	20%	27%	4.0%	16%	10.9%	13.7%	0.30%	1.6%	0.46%	11.5%	7.2%	7.2%	9.3%	9.3%	0.18%	24%	0.033%	76%	16.7%	172%	2.68%	295%
R192	588195.90	4804357.37	6.9%	47%	0.8%	52%	2.6%	47%	0.43%	88%	0.11%	0.11%	17%	25%	2.8%	15%	10.5%	13.3%	0.21%	1.5%	0.37%	11.4%	6.3%	6.3%	8.2%	8.2%	0.17%	24%	0.033%	76%	11.4%	166%	2.03%	295%
R193	587601.39	4804639.77	9.3%	49%	0.6%	52%	3.5%	48%	0.32%	88%	0.15%	0.15%	23%	31%	2.0%	14%	12.8%	15.7%	0.25%	1.5%	0.27%	11.3%	5.7%	5.7%	7.3%	7.3%	0.20%	24%	0.027%	76%	16.3%	171%	1.51%	294%
R194	587160.07	4805072.46	6.7%	47%	0.4%	52%	2.6%	47%	0.22%	88%	0.11%	0.11%	23%	30%	1.8%	14%	11.3%	14.1%	0.19%	1.5%	0.19%	11.2%	5.1%	5.1%	6.5%	6.5%	0.15%	24%	0.020%	76%	11.8%	167%	1.10%	294%
R195	587350.72	4804886.57	7.2%	47%	0.5%	52%	2.7%	47%	0.26%	88%	0.11%	0.11%	24%	32%	1.7%	14%	11.3%	14.1%	0.22%	1.5%	0.23%	11.2%	4.9%	4.9%	6.3%	6.3%	0.16%	24%	0.022%	76%	12.8%	168%	1.28%	294%
R196	586906.61	4804895.76	5.5%	46%	0.3%	52%	2.1%	47%	0.19%	88%	0.09%	0.09%	22%	29%	1.6%	13%	10.9%	13.8%	0.16%	1.4%	0.17%	11.2%	4.5%	4.5%	5.8%	5.8%	0.14%	24%	0.018%	76%	9.7%	165%	0.94%	293%
R197	587481.04	4806511.43	6.0%	46%	0.3%	52%	2.2%	47%	0.16%	88%	0.09%	0.09%	15%	22%	2.3%	14%	7.5%	10.3%	0.17%	1.5%	0.15%	11.2%	4.0%	4.0%	5.2%	5.2%	0.13%	24%	0.013%	76%	10.8%	166%	0.88%	293%
R198	587364.33	4806419.19	5.8%	46%	0.3%	52%	2.2%	47%	0.16%	88%	0.09%	0.09%	17%	24%	2.6%	14%	8.1%	10.9%	0.18%	1.5%	0.15%	11.2%	4.5%	4.5%	5.9%	5.9%	0.13%	24%	0.013%	76%	10.6%	166%	0.88%	293%
R199	587233.51	4806472.84	5.4%	46%	0.3%	52%	2.1%	47%	0.14%	88%	0.09%	0.09%	16%	23%	2.4%	14%	7.8%	10.7%	0.17%	1.5%	0.14%	11.2%	4.3%	4.3%	5.5%	5.5%	0.12%	24%	0.011%	76%	10.0%	165%	0.80%	293%
R200	587145.04	4806367.42	5.0%	45%	0.3%	52%	1.9%	47%	0.14%	88%	0.08%	0.08%	16%	23%	2.5%	14%	7.6%	10.5%	0.17%	1.5%	0.14%	11.1%	4.4%	4.4%	5.7%	5.7%	0.11%	24%	0.011%	76%	9.8%	165%	0.78%	293%
R201	587045.27	4806250.72	4.9%	45%	0.3%	52%	1.9%	47%	0.14%	88%	0.07%	0.07%	16%	23%	2.4%	14%	7.1%	10.0%	0.16%	1.4%	0.13%	11.1%	4.8%	4.8%	6.2%	6.2%	0.10%	24%	0.011%	76%	9.5%	164%	0.74%	293%
R202	586965.27	4806150.95	4.7%	45%	0.2%	52%	1.8%	46%	0.14%	88%	0.07%	0.07%	15%	23%	2.3%	14%	7.4%	10.3%	0.15%	1.4%	0.13%	11.1%	4.8%	4.8%	6.2%	6.2%	0.10%	24%	0.011%	76%	8.9%	164%	0.72%	293%
R203	587953.83	4806878.51	7.0%	47%	0.3%	52%	2.7%	47%	0.18%	88%	0.11%	0.11%	16%	24%	2.6%	14%	8.2%	11.0%	0.22%	1.5%	0.17%	11.2%	4.6%	4.6%	5.9%	5.9%	0.15%	24%	0.013%	76%	13.4%	168%	1.00%	293%
R204	588739.26	4807221.01	7.8%	48%	0.5%	52%	2.7%	47%	0.22%	88%	0.14%	0.14%	20%	27%	3.5%	15%	10.7%	13.6%	0.22%	1.5%	0.19%	11.2%	4.8%	4.8%	6.2%	6.2%	0.15%	24%	0.018%	76%	15.2%	170%	1.28%	294%
R205	588362.75	4807367.85	6.0%	46%	0.3%	52%	2.1%	47%	0.16%	88%	0.10%	0.10%	18%	26%	2.6%	14%	9.6%	12.5%	0.18%	1.5%	0.14%	11.2%	3.9%	3.9%	5.0%	5.0%	0.12%	24%	0.013%	76%	11.7%	167%	0.91%	293%
R206	588356.16	4807310.43	6.2%	46%	0.3%	52%	2.2%	47%	0.16%	88%	0.10%	0.10%	18%	26%	2.5%	14%	9.5%	12.4%	0.20%	1.5%	0.15%	11.2%	3.9%	3.9%	5.1%	5.1%	0.13%	24%	0.013%	76%	12.1%	167%	0.94%	293%
R207	588840.92	4807474.22	8.2%	48%	0.4%	52%	2.5%	47%	0.20%	88%	0.14%	0.14%	19%	26%	3.9%	16%	10.3%	13.1%	0.18%	1.5%	0.18%	11.2%	4.5%	4.5%	5.8%	5.8%	0.15%	24%	0.016%	76%	12.6%	168%	1.16%	294%
R208	588523.06	4807632.25	5.5%	46%	0.3%	52%	1.7%	46%	0.15%	88%	0.10%	0.10%	16%	23%	2.9%	15%	8.3%	11.1%	0.13%	1.4%	0.14%	11.2%	3.6%	3.6%	4.7%	4.7%	0.10%	24%	0.011%	76%	9.8%	165%	0.84%	293%
R209	588101.83	4807356.50	5.9%	46%	0.3%	52%	2.1%	47%	0.14%	88%	0.09%	0.09%	17%	24%	2.0%	14%	8.7%	11.5%	0.21%	1.5%	0.13%	11.1%	4.4%	4.4%	5.7%	5.7%	0.11%	24%	0.011%	76%	11.2%	166%	0.82%	293%
R210	587963.42	4807222.88	6.7%	47%	0.3%	52%	2.4%	47%	0.15%	88%	0.10%	0.10%	17%	24%	2.4%	14%	8.4%	11.3%	0.22%	1.5%	0.14%	11.1%	4.6%	4.6%	5.9%	5.9%	0.13%	24%	0.011%	76%	12.5%	167%	0.84%	293%
R211	588020.22	4807483.72	5.3%	45%	0.2%	52%	1.8%	46%	0.13%	88%	0.08%	0.08%	17%	24%	2.1%	14%	8.4%	11.3%	0.18%	1.5%	0.12%	11.1%	4.2%	4.2%	5.4%	5.4%	0.10%	24%	0.011%	76%	10.3%	165%	0.73%	293%
R212	587973.02	4807409.31	5.6%	46%	0.2%	52%	2.0%	47%	0.13%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.6%	11.4%	0.20%	1.5%	0.12%	11.1%	4.5%	4.5%	5.7%	5.7%	0.11%	24%	0.011%	76%	10.6%	166%	0.75%	293%
R213	587929.81	4807367.70	5.9%	46%	0.3%	52%	2.1%	47%	0.13%	88%	0.09%	0.09%	17%	24%	2.0%	14%	8.6%	11.5%	0.21%	1.5%	0.13%	11.1%	4.4%	4.4%	5.7%	5.7%	0.11%	24%	0.011%	76%	11.1%	166%	0.76%	293%
R214	587881.00	4807330.90	6.1%	46%	0.3%	52%	2.2%	47%	0.13%	88%	0.09%	0.09%	17%	25%	2.1%	14%	8.5%	11.4%	0.21%	1.5%	0.13%	11.1%	4.4%	4.4%	5.6%	5.6%	0.12%	24%	0.011%	76%	11.4%	166%	0.76%	293%
R215	587840.20	4807286.09	6.2%	46%	0.3%	52%	2.2%	47%	0.13%	88%	0.09%	0.09%	17%	24%	2.3%	14%	8.2%	11.1%	0.21%	1.5%	0.13%	11.1%	4.3%	4.3%	5.5%	5.5%	0.12%	24%	0.011%	76%	11.7%	167%	0.77%	293%
R216	587785.68	4807211.86	6.2%	46%	0.3%	52%	2.3%	47%	0.14%	88%	0.09%	0.09%	17%	24%	2.5%	14%	8.2%	11.1%	0.21%	1.5%	0.13%	11.1%	4.3%	4.3%	5.5%	5.5%	0.13%	24%	0.011%	76%	11.7%	167%	0.78%	293%
R217	587928.62	4807557.92	4.9%	45%	0.2%	52%	1.7%	46%	0.12%	88%	0.07%	0.07%	16%	23%	1.9%	14%	8.1%	11.0%	0.17%	1.5%	0.11%	11.1%	4.1%	4.1%	5.3%	5.3%	0.09%	24%	0.009%	76%	9.6%	165%	0.66%	293%
R218	587806.32	4807435.62	5.4%	46%	0.2%	52%	2.0%	47%	0.12%	88%	0.08%	0.08%	17%	24%	2.0%	14%	8.4%	11.3%	0.20%	1.5%	0.12%	11.1%	4.1%	4.1%	5.3%	5.3%	0.10%	24%	0.009%	76%	10.2%	165%	0.69%	293%
R219	587738.93	4807320.81	5.8%	46%	0.2%	52%	2.2%	47%	0.13%	88%	0.08%	0.08%	17%	24%	2.3%	14%	8.0%	10.9%	0.20%	1.5%	0.12%	11.1%	4.1%	4.1%	5.3%	5.3%	0.12%	24%	0.011%	76%	11.0%	166%	0.72%	293%
R220	587669.05	4807210.99	5.7%	46%	0.2%	52%	2.3%	47%	0.13%	88%	0.08%	0.08%	16%	23%	2.5%	14%	8.1%	11.0%	0.20%	1.5%	0.13%	11.1%	4.0%	4.0%	5.2%	5.2%	0.13%	24%	0.011%	76%	11.1%	166%	0.74%	293%
R221	587883.70	4807505.51	5.1%	45%	0.2%	52%	1.8%	46%	0.12%	88%	0.07%	0.07%	16%	23%	1.9%	14%	8.4%	11.2%	0.18%	1.5%	0.11%	11.1%	4.2%	4.2%	5.4%	5.4%	0.10%	24%	0.009%	76%	9.9%	165%	0.68%	293%
R222	591562.72	4806745.44	20.3%	60%	3.1%	55%	7.1%	52%	1.50%	89%	0.30%	0.30%	37%	44%	4.3%	16%	19.6%	22.5%	0.52%	1.8%	1.40%	12.4%	5.0%	5.0%	6.4%	6.4%	0.42%	24%	0.113%	76%	38.0%	193%	8.90%	301%
R223	591488.72	4806824.64	19.9%	60%	3.3%	55%	6.9%	52%	1.59%	90%	0.30%	0.30%	34%	41%	4.4%	16%	19.3%	22.2%	0.49%	1.8%	1.46%	12.5%	5.6%	5.6%	7.2%	7.2%	0.40%	24%	0.122%	76%	37.4%	192%	9.47%	302%
R224	591458.08	4806872.05	20.2%	60%	3.3%	55%	6.6%	51%	1.61%	90%	0.32%	0.32%	32%	39%	5.3%	17%	18.2%	21.1%	0.46%	1.7%	1.46%	12.5%	5.4%	5.4%	7.0%	7.0%	0.38%	24%	0.124%	76%	36.0%	191%	9.57%	302%
R225	591234.74	4806903.98	23.6%	64%	4.0%	56%	6.3%	51%	1.90%	90%	0.40%	0.40%	29%	36%	6.3%	18%	16.9%	19.7%	0.54%	1.8%	1.67%	12.7%	5.5%	5.5%	7.1%	7.1%	0.37%	24%	0.151%	76%	35.1%	190%	11.44%	304%
R226	591148.34	4807068.03	20.6%	61%	3.8%	55%	6.8%	51%	1.78%	90%	0.37%	0.37%	25%	32%	3.7%	15%	16.3%	19.1%	0.49%	1.8%	1.55%	12.6%	5.6%	5.6%	7.3%	7.3%	0.39%	24%	0.147%	76%	35.0%	190%	10.58%	303%
R227	591097.65	4807084.65	20.4%	61%	3.8%	55%	6.9%	51%	1.80%	90%	0.36%	0.36%	26%	33%	3.5%	15%	16.7%	19.6%	0.48%	1.8%	1.57%	12.6%	5.5%	5.5%	7.1%	7.1%	0.40%	24%	0.149%	76%	35.7%	191%	10.69%	303%
R228	591077.93	4807117.98	20.2%	60%	3.7%	55%	6.8%	51%	1.77%	90%	0.35%	0.35%	26%	33%	3.6%	15%	16.9%	19.7%	0.47%	1.8%	1.56%	12.6%	5.6%	5.6%	7.3%	7.3%	0.40%	24%	0.149%	76%	35.1%	190%	10.45%	303%
R229	590831.76	4807776.37	14.6%	55%	1.9%	53%	5.2%	50%	0.94%	89%	0.20%	0.20%	22%	29%	3.1%	15%	14.8%	17.7%	0.37%	1.7%	0.87%	11.9%	4.2%	4.2%	5.4%	5.4%	0.32%	24%	0.078%	76%	26.4%	181%	5.38%	298%
R230	590778.59	4807689.25	15.5%	56%	2.1%	54%	5.5%	50%	1.02%	89%	0.22%	0.22%	21%	29%	3.3%	15%	15.3%	18.1%	0.40%	1.7%	0.95%	12.0%	4.4%	4.4%	5.7%	5.7%	0.33%	24%	0.087%	76%	28.1%	183%	5.89%	298%
R231	591027.31	4806131.86	32.3%	72%	4.3%	56%	10.4%	55%	2.07%	90%	0.48%	0.48%	32%	39%	7.8%	20%	17.2%	20.0%	0.74%	2.0%	1.94%	13.0%	6.3%	6.3%	8.2%	8.2%	0.57%	24%	0.151%	76%	55.0%	210%	12.70%	305%
R232	591030.81	4806097.45	30.9%	71%	4.0%	56%	9.9%	55%	1.97%	90%	0.46%	0.46%	28%	36%	7.5%	19%	16.0%	18.8%	0.68%	2.0%	1.86%	12.9%	6.3%	6.3%	8.1%	8.1%	0.54%	24%	0.142%	76%	52.5%	207%	12.05%	305%
R233	591067.56	4806148.19	31.7%	72%	4.1%	56%	10.3%	55%	1.99%	90%	0.47%	0.47%	31%	38%	7.4%	19%	16.8%	19.6%	0.73%	2.0%	1.86%	12.9%	6.2%	6.2%	8.0%	8.0%	0.56%	24%	0.144%	76%	54.0%	209%	12.18%	305%
R234	591086.80	4806172.68	31.7%	72%	4.1%	56%	10.4%	55%	1.99%	90%	0.47%	0.47%	32%	39%	7.2%	19%	17.1%	20.0%	0.74%	2.0%	1.85%	12.9%	6.3%	6.3%	8.1%	8.1%	0.56%	24%	0.147%	76%	54.3%	209%	12.19%	305%
R235	591114.01	4806201.78	31.5%	72%	4.1%	56%	10.3%	55%	1.98%	90%	0.46%	0.46%	35%	42%	6.9%	19%	18.3%	21.1%	0.75%	2.0%	1.83%	12.8%	6.2%	6.2%	8.0%	8.0%	0.57%	24%	0.147%	76%	54.0%	209%	12.12%	305%
R236	591141.40	4806172.91	29.8%	70%	3.8%	55%	9.8%	54%	1.83%	90%	0.44%	0.44%	31%	38%	7.1%	19%	16.5%	19.4%	0.70%	2.0%	1.71%	12.7%	6.1%	6.1%	7.8%	7.8%	0.54%	24%	0.136%	76%	51.1%	206%	11.21%	304%
R237	591157.63	4806158.16	28.9%	69%	3.6%	55%	9.5%	54%	1.76%	90%	0.43%	0.43%	30%	37%	7.1%	19%	16.1%	19.0%	0.67%	2.0%	1.65%	12.7%	6.0%	6.0%	7.7%	7.7%	0.52%	24%	0.129%	76%	49.4%	204%	10.74%	303%
R238	591128.13	4806114.76	28.7%	69%	3.6%	55%	9.3%	54%	1.74%	90%	0.42%	0.42%	27%	34%	7.1%	19%	15.2%	18.1%	0.64%	1.9%	1.64%	12.7%	6.0%	6.0%	7.8%	7.8%	0.51%	24%	0.127%	76%	48.7%	204%	10.62%	303%
R239	591082.85	4806229.12	33.6%	74%	4.5%	56%	11.0%	56%	2.15%	90%	0.49%	0.49%	38%	45%	6.5%	18%	19.8%	22.6%	0.79%	2.1%	1.98%	13.0%	6.2%	6.2%	8.0%	8.0%	0.60%	24%	0.158%	76%	57.5%	212%	13.24%	306%
R240	591226.62	4806240.49	29.0%	69%	3.6%	55%	9.6%	54%	1.75%	90%	0.42%	0.42%	35%	42%	6.2%	18%	17.9%	20.8%	0.70%	2.0%	1.61%	12.6%	5.9%	5.9%	7.6%	7.6%	0.52%	24%	0.131%	76%	50.0%	205%	10.69%	303%
R241	591288.65	4806809.41	23.3%	63%	4.1%	56%	7.8%	52%	1.93%	90%	0.38%	0.38%	32%	39%	6.5%	18%	18.8%	21.7%	0.55%	1.8%	1.72%	12.7%	5.7%	5.7%	7.4%	7.4%	0.45%	24%	0.149%	76%	42.7%	198%	11.59%	304%
R242	591139.67	4806634.66	27.5%	68%	5.0%	57%	10.0%	55%	2.39%	90%	0.43%	0.43%	40%	48%	7.4%	19%	21.6%	24.4%	0.69%	2.0%	2.16%	13.2%	6.1%	6.1%	7.8%	7.8%	0.61%	24%	0.182%	76%	51.5%	206%	14.44%	307%
R243	591293.92	4806466.25	31.1%	71%	4.1%	56%	10.0%	55%	1.95%	90%	0.46%	0.46%	43%	51%	5.7%	18%	22.5%	25.3%	0.70%	2.0%	1.79%	12.8%	6.5%	6.5%	8.4%	8.4%	0.55%	24%	0.147%	76%	53.1%	208%	11.86%	304%
R244	589444.27	4806626.99	26.1%	66%	2.6%	54%	8.8%	53%	1.12%	89%	0.38%	0.38%	28%	35%	5.5%	17%	15.5%	18.3%	0.60%	1.9%	0.82%	11.8%	10.0%	10.0%	12.8%	12.8%	0.49%	24%	0.096%	76%	47.8%	203%	6.43%	299%
R245	589367.00	4806705.19	20.0%	60%	1.8%	53%	6.8%	51%	0.83%	89%	0.29%	0.29%	27%	34%	5.1%	17%	15.0%	17.8%	0.49%	1.8%	0.63%	11.6%	9.9%	9.9%	12.7%	12.7%	0.39%	24%	0.071%	76%	37.7%	193%	4.62%	297%
R246	588976.44	4806919.73	12.2%	52%	0.7%	52%	4.3%	49%	0.35%	88%	0.19%	0.19%	24%	31%	3.5%	15%	14.2%	17.0%	0.33%	1.6%	0.30%	11.3%	6.7%	6.7%	8.6%	8.6%	0.24%	24%	0.029%	76%	23.4%	178%	2.03%	295%
R247	588915.70	4806868.25	11.8%	52%	0.7%	52%	4.1%	49%	0.35%	88%	0.19%	0.19%	21%	28%	3.2%	15%	12.6%	15.5%	0.31%	1.6%	0.29%	11.3%	6.6%	6.6%	8.5%	8.5%	0.23%	24%	0.029%	76%	22.8%	178%	2.00%	294%
R248	588997.02	4807016.50	11.4%	52%	0.7%	52%	3.9%	48%	0.33%	88%	0.18%	0.18%	22%	29%	4.0%	16%	12.4%	15.3%	0.28%	1.6%	0.27%	11.3%	6.4%	6.4%	8.3%	8.3%	0.22%	24%	0.027%	76%	21.7%	177%	1.88%	294%
R249	591337.39	4806901.37	22.6%	63%	3.7%	55%	6.4%	51%	1.76%	90%	0.35%	0.35%	28%	36%	6.2%	18%	17.4%	20.2%	0.51%	1.8%	1.56%	12.6%	5.5%	5.5%	7.1%	7.1%	0.37%	24%	0.138%	76%	35.5%	191%	10.54%	303%
R250	591086.06	4807216.91	18.9%	59%	3.3%	55%	6.3%	51%	1.60%	90%	0.30%	0.30%	25%	32%	3.7%	16%	16.0%	18.9%	0.44%	1.7%	1.44%	12.5%	5.4%	5.4%	6.9%	6.9%	0.37%	24%	0.136%	76%	32.0%	187%	9.34%	302%

Percentages of Criteria at Sensitive Receptors (Scenario D)

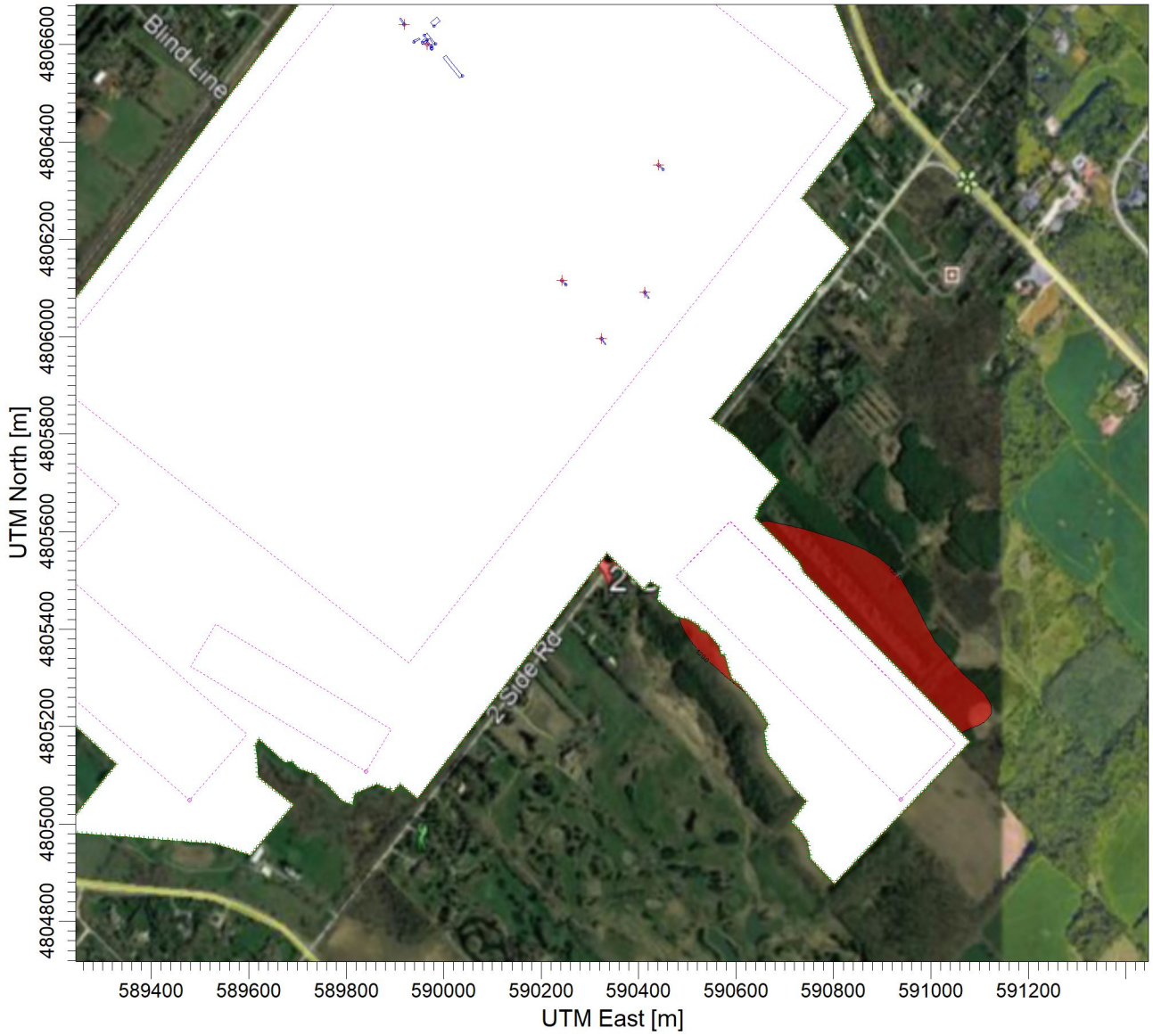
			TSP				$PM_{2.5}$				RCS		NO_2				SO_2						CO				Benzene				Benzo(a)pyrene			
			24-hour AAQC		Annual AAQC		24-hour CAAQS		Annual CAAQS		24-hour CAAQS		1-hour AAQC		24-hour AAQC		1-hour AAQC		24-hour AAQC		Annual AAQC		1-hour AAQC		8-hour AAQC		24-hour AAQC		Annual AAQC		24-hour AAQC		Annual AAQC	
Standard (µg/m³)			120	120	60	60	27	27	8.8	8.8	5	5	400	400	200	200	100	100	275	275	10	10	36200	36200	15700	15700	2.3	2.3	0.45	0.45	5.00E-05	0.00005	1.00E-05	0.00001
% of Criteria			Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background	Site	Site and Background
Maximum %			55.6%	95.7%	10.1%	61.7%	16.9%	61.5%	4.5%	92.5%	0.8%	0.8%	44.3%	51.5%	12.0%	23.8%	29.3%	32.1%	1.1%	2.4%	3.9%	14.9%	19.6%	19.6%	25.2%	25.2%	1.0%	24.8%	0.3%	76.3%	92.5%	247.5%	28.9%	321.4%
	X Coordinate (m)	Y Coordinate (m)	% of Criteria - 2018																															
R251	590926.50	4807386.35	18.9%	59%	2.9%	54%	6.1%	51%	1.43%	89%	0.30%	0.30%	24%	31%	4.0%	16%	16.4%	19.2%	0.40%	1.7%	1.31%	12.3%	5.3%	5.3%	6.9%	6.9%	0.37%	24%	0.120%	76%	27.9%	183%	8.19%	301%
R252	590969.19	4806836.93	25.8%	66%	5.3%	57%	8.0%	53%	2.44%	90%	0.45%	0.45%	31%	38%	5.0%	17%	18.2%	21.0%	0.60%	1.9%	2.08%	13.1%	6.1%	6.1%	7.9%	7.9%	0.48%	24%	0.198%	76%	43.9%	199%	14.83%	307%
R253	590905.98	4807178.59	21.7%	62%	3.8%	55%	6.7%	51%	1.83%	90%	0.35%	0.35%	26%	33%	4.5%	16%	16.7%	19.5%	0.45%	1.7%	1.64%	12.7%	5.6%	5.6%	7.2%	7.2%	0.40%	24%	0.156%	76%	33.9%	189%	10.67%	303%
R254	590899.10	4807138.17	22.1%	62%	4.0%	56%	6.9%	51%	1.92%	90%	0.35%	0.35%	26%	33%	4.8%	17%	16.7%	19.6%	0.47%	1.8%	1.71%	12.7%	5.7%	5.7%	7.3%	7.3%	0.41%	24%	0.164%	76%	35.0%	190%	11.19%	304%
R255	590956.66	4807071.56	21.4%	62%	4.1%	56%	7.2%	52%	1.97%	90%	0.35%	0.35%	27%	34%	4.9%	17%	17.2%	20.1%	0.49%	1.8%	1.72%	12.7%	6.0%	6.0%	7.7%	7.7%	0.43%	24%	0.167%	76%	36.3%	191%	11.56%	304%
R256	590997.27	4807177.52	20.5%	61%	3.7%	55%	6.4%	51%	1.75%	90%	0.33%	0.33%	25%	32%	4.1%	16%	16.3%	19.2%	0.45%	1.7%	1.56%	12.6%	5.4%	5.4%	6.9%	6.9%	0.38%	24%	0.149%	76%	33.3%	188%	10.23%	303%
R257	590917.52	4807307.02	20.0%	60%	3.2%	55%	6.3%	51%	1.57%	89%	0.32%	0.32%	25%	32%	4.2%	16%	16.2%	19.1%	0.42%	1.7%	1.43%	12.4%	5.5%	5.5%	7.0%	7.0%	0.38%	24%	0.133%	76%	29.6%	185%	9.06%	302%
R258	590878.48	4807357.84	19.5%	60%	3.1%	55%	6.2%	51%	1.49%	89%	0.31%	0.31%	25%	32%	3.9%	16%	16.7%	19.6%	0.41%	1.7%	1.37%	12.4%	5.4%	5.4%	6.9%	6.9%	0.38%	24%	0.127%	76%	28.8%	184%	8.60%	301%
R259	590956.33	4807370.47	19.0%	59%	2.9%	55%	6.0%	51%	1.44%	89%	0.30%	0.30%	24%	31%	4.1%	16%	16.0%	18.9%	0.40%	1.7%	1.32%	12.3%	5.3%	5.3%	6.8%	6.8%	0.37%	24%	0.122%	76%	28.0%	183%	8.27%	301%
R260	591082.58	4807189.52	19.2%	59%	3.4%	55%	6.4%	51%	1.65%	90%	0.31%	0.31%	25%	32%	3.7%	15%	16.4%	19.2%	0.45%	1.7%	1.47%	12.5%	5.5%	5.5%	7.1%	7.1%	0.38%	24%	0.140%	76%	33.0%	188%	9.65%	302%
R261	591071.70	4806646.35	29.0%	69%	5.5%	57%	10.4%	55%	2.60%	91%	0.48%	0.48%	39%	46%	8.4%	20%	20.8%	23.6%	0.71%	2.0%	2.31%	13.3%	6.3%	6.3%	8.1%	8.1%	0.63%	24%	0.200%	76%	54.2%	209%	15.82%	308%
R262	591035.97	4806582.50	33.8%	74%	6.2%	58%	11.5%	56%	2.88%	91%	0.53%	0.53%	39%	46%	8.2%	20%	22.8%	25.6%	0.76%	2.0%	2.53%	13.5%	6.6%	6.6%	8.5%	8.5%	0.68%	25%	0.220%	76%	63.1%	218%	17.73%	310%
R263	591117.31	4806692.72	25.8%	66%	5.0%	57%	9.4%	54%	2.37%	90%	0.44%	0.44%	40%	47%	8.2%	20%	19.8%	22.7%	0.67%	2.0%	2.12%	13.1%	5.9%	5.9%	7.6%	7.6%	0.57%	24%	0.184%	76%	48.3%	203%	14.31%	307%
R264	591236.66	4806622.03	27.3%	67%	4.5%	56%	9.7%	54%	2.16%	90%	0.39%	0.39%	42%	49%	5.2%	17%	22.4%	25.2%	0.66%	2.0%	1.97%	13.0%	5.8%	5.8%	7.5%	7.5%	0.58%	24%	0.164%	76%	51.1%	206%	13.06%	306%
R265	591210.05	4806550.57	30.4%	71%	4.7%	56%	10.0%	55%	2.26%	90%	0.45%	0.45%	44%	51%	5.8%	18%	22.6%	25.4%	0.67%	2.0%	2.06%	13.1%	5.7%	5.7%	7.4%	7.4%	0.58%	24%	0.169%	76%	54.3%	209%	13.70%	306%
R266	591169.76	4806533.85	32.6%	73%	5.1%	57%	10.5%	55%	2.41%	90%	0.48%	0.48%	43%	50%	5.8%	18%	22.8%	25.7%	0.70%	2.0%	2.18%	13.2%	5.8%	5.8%	7.5%	7.5%	0.61%	24%	0.182%	76%	58.1%	213%	14.70%	307%
R267	591055.32	4806496.37	38.6%	79%	6.3%	58%	12.1%	57%	2.92%	91%	0.57%	0.57%	43%	50%	6.5%	18%	23.9%	26.8%	0.78%	2.1%	2.58%	13.6%	6.1%	6.1%	7.8%	7.8%	0.69%	25%	0.222%	76%	68.3%	223%	18.10%	311%
R268	590945.40	4806605.50	35.2%	75%	7.0%	59%	11.8%	56%	3.20%	91%	0.58%	0.58%	37%	44%	8.9%	21%	21.7%	24.5%	0.83%	2.1%	2.74%	13.8%	6.6%	6.6%	8.5%	8.5%	0.70%	25%	0.249%	76%	64.5%	220%	19.85%	312%
R269	591153.86	4805932.23	21.7%	62%	2.7%	54%	7.3%	52%	1.35%	89%	0.33%	0.33%	27%	34%	5.8%	18%	14.0%	16.9%	0.58%	1.9%	1.29%	12.3%	6.1%	6.1%	7.8%	7.8%	0.39%	24%	0.098%	76%	36.5%	192%	8.05%	301%
R270	591173.01	4806086.35	26.4%	67%	3.2%	55%	8.6%	53%	1.58%	90%	0.39%	0.39%	26%	34%	6.8%	19%	14.7%	17.5%	0.62%	1.9%	1.50%	12.5%	5.7%	5.7%	7.3%	7.3%	0.47%	24%	0.116%	76%	44.7%	200%	9.60%	302%
R271	590883.45	4806059.73	34.4%	75%	4.9%	56%	10.9%	56%	2.39%	90%	0.51%	0.51%	30%	37%	8.1%	20%	16.7%	19.6%	0.75%	2.0%	2.27%	13.3%	6.7%	6.7%	8.6%	8.6%	0.59%	24%	0.171%	76%	58.2%	213%	14.71%	307%
R272	591084.23	4806254.79	34.4%	75%	4.7%	56%	11.2%	56%	2.23%	90%	0.50%	0.50%	39%	46%	6.1%	18%	20.1%	23.0%	0.81%	2.1%	2.04%	13.1%	6.3%	6.3%	8.1%	8.1%	0.61%	24%	0.164%	76%	58.9%	214%	13.71%	306%
R273	591110.44	4806235.73	32.7%	73%	4.3%	56%	10.7%	55%	2.08%	90%	0.48%	0.48%	38%	45%	6.4%	18%	19.5%	22.3%	0.77%	2.1%	1.91%	12.9%	6.1%	6.1%	7.9%	7.9%	0.59%	24%	0.153%	76%	56.1%	211%	12.77%	305%
R274	591154.50	4806189.68	29.8%	70%	3.8%	55%	9.8%	54%	1.83%	90%	0.44%	0.44%	32%	39%	6.9%	19%	16.7%	19.5%	0.71%	2.0%	1.70%	12.7%	6.1%	6.1%	7.9%	7.9%	0.54%	24%	0.136%	76%	51.1%	206%	11.22%	304%
R275	591271.28	4806254.56	28.2%	68%	3.4%	55%	9.4%	54%	1.67%	90%	0.41%	0.41%	35%	42%	6.0%	18%	17.7%	20.6%	0.69%	2.0%	1.54%	12.5%	5.8%	5.8%	7.5%	7.5%	0.51%	24%	0.124%	76%	48.7%	204%	10.16%	303%
R276	591515.74	4806421.68	24.7%	65%	2.8%	54%	8.2%	53%	1.38%	89%	0.36%	0.36%	39%	46%	4.5%	16%	18.5%	21.4%	0.61%	1.9%	1.28%	12.3%	5.3%	5.3%	6.8%	6.8%	0.44%	24%	0.104%	76%	42.9%	198%	8.28%	301%
R277	591462.49	4806297.83	24.3%	64%	2.7%	54%	8.1%	53%	1.34%	89%	0.35%	0.35%	34%	41%	5.3%	17%	16.5%	19.3%	0.61%	1.9%	1.24%	12.3%	5.5%	5.5%	7.1%	7.1%	0.44%	24%	0.100%	76%	42.4%	197%	8.08%	301%
R278	591626.91	4806044.49	16.5%	57%	1.8%	53%	5.9%	50%	0.93%	89%	0.25%	0.25%	33%	40%	6.7%	18%	15.1%	18.0%	0.47%	1.8%	0.90%	11.9%	4.9%	4.9%	6.3%	6.3%	0.33%	24%	0.069%	76%	28.1%	183%	5.46%	298%
R279	591566.46	4805968.10	16.8%	57%	1.8%	53%	5.9%	50%	0.93%	89%	0.25%	0.25%	28%	35%	6.0%	18%	13.5%	16.4%	0.47%	1.8%	0.90%	11.9%	5.3%	5.3%	6.9%	6.9%	0.33%	24%	0.069%	76%	28.4%	183%	5.47%	298%
R280	591514.80	4806050.53	18.4%	58%	2.1%	54%	6.3%	51%	1.05%	89%	0.27%	0.27%	29%	36%	6.3%	18%	14.3%	17.2%	0.50%	1.8%	1.01%	12.0%	5.2%	5.2%	6.8%	6.8%	0.35%	24%	0.078%	76%	31.1%	186%	6.21%	299%
R281	591496.67	4806080.21	18.9%	59%	2.2%	54%	6.5%	51%	1.09%	89%	0.28%	0.28%	29%	36%	6.2%	18%	14.6%	17.5%	0.50%	1.8%	1.05%	12.1%	5.4%	5.4%	7.0%	7.0%	0.36%	24%	0.080%	76%	32.1%	187%	6.49%	299%
R282	591515.90	4805960.41	17.3%	57%	1.9%	53%	6.0%	51%	0.97%	89%	0.26%	0.26%	27%	34%	5.8%	18%	13.4%	16.2%	0.48%	1.8%	0.93%	11.9%	5.4%	5.4%	7.0%	7.0%	0.34%	24%	0.071%	76%	29.3%	184%	5.70%	298%
R283	591574.70	4805918.10	16.3%	56%	1.7%	53%	5.7%	50%	0.89%	89%	0.24%	0.24%	28%	36%	5.2%	17%	13.7%	16.5%	0.45%	1.7%	0.85%	11.9%	5.2%	5.2%	6.6%	6.6%	0.32%	24%	0.067%	76%	27.3%	182%	5.19%	298%
R284	591633.50	4805907.11	15.8%	56%	1.6%	53%	5.5%	50%	0.84%	89%	0.24%	0.24%	28%	35%	4.9%	17%	13.3%	16.2%	0.43%	1.7%	0.81%	11.8%	5.0%	5.0%	6.5%	6.5%	0.31%	24%	0.062%	76%	26.4%	181%	4.90%	297%
R285	591700.55	4805960.96	15.7%	56%	1.6%	53%	5.5%	50%	0.83%	89%	0.23%	0.23%	27%	34%	5.5%	17%	12.8%	15.7%	0.43%	1.7%	0.80%	11.8%	5.1%	5.1%	6.5%	6.5%	0.31%	24%	0.062%	76%	26.5%	181%	4.86%	297%
R286	591754.40	4805913.15	15.1%	55%	1.5%	53%	5.2%	50%	0.77%	89%	0.23%	0.23%	25%	32%	4.7%	16%	12.2%	15.1%	0.40%	1.7%	0.74%	11.8%	4.8%	4.8%	6.2%	6.2%	0.29%	24%	0.058%	76%	25.3%	180%	4.50%	297%
R287	591656.03	4806002.72	16.0%	56%	1.7%	53%	5.7%	50%	0.88%	89%	0.24%	0.24%	32%	39%	6.5%	18%	14.7%	17.5%	0.45%	1.7%	0.85%	11.9%	5.0%	5.0%	6.4%	6.4%	0.32%	24%	0.064%	76%	27.1%	182%	5.14%	298%
R288	591807.92	4805987.25	14.8%	55%	1.5%	53%	5.2%	50%	0.78%	89%	0.22%	0.22%	24%	32%	5.3%	17%	12.3%	15.1%	0.41%	1.7%	0.75%	11.8%	4.9%	4.9%	6.4%	6.4%	0.29%	24%	0.058%	76%	25.1%	180%	4.56%	297%
R289	592160.67	4804305.92	6.1%	46%	0.4%	52%	2.3%	47%	0.22%	88%	0.08%	0.08%	17%	24%	2.5%	14%	8.6%	11.5%	0.20%	1.5%	0.22%	11.2%	2.7%	2.7%	3.5%	3.5%	0.13%	24%	0.018%	76%	11.5%	167%	1.20%	294%
R290	591994.34	4804188.62	6.3%	46%	0.4%	52%	2.4%	47%	0.22%	88%	0.09%	0.09%	17%	25%	2.7%	14%	9.3%	12.2%	0.22%	1.5%	0.21%	11.2%	2.7%	2.7%	3.4%	3.4%	0.12%	24%	0.016%	76%	11.8%	167%	1.18%	294%
R291	591920.81	4804129.09	6.2%	46%	0.4%	52%	2.3%	47%	0.21%	88%	0.09%	0.09%	19%	26%	2.4%	14%	9.9%	12.8%	0.21%	1.5%	0.21%	11.2%	2.9%	2.9%	3.8%	3.8%	0.12%	24%	0.016%	76%	11.6%	167%	1.17%	294%
R292	591854.27	4804059.05	6.2%	46%	0.4%	52%	2.3%	47%	0.21%	88%	0.09%	0.09%	20%	27%	2.5%	14%	10.2%	13.1%	0.20%	1.5%	0.20%	11.2%	2.8%	2.8%	3.7%	3.7%	0.12%	24%	0.016%	76%	11.5%	166%	1.14%	294%
R293	591767.05	4803967.41	6.2%	46%	0.4%	52%	2.2%	47%	0.21%	88%	0.09%	0.09%	17%	25%	2.2%	14%	9.2%	12.1%	0.17%	1.5%	0.21%	11.2%	2.7%	2.7%	3.5%	3.5%	0.12%	24%	0.016%	76%	11.3%	166%	1.14%	294%
R294	591339.02	4803835.11	5.8%	46%	0.4%	52%	1.9%	47%	0.21%	88%	0.08%	0.08%	18%	25%	3.5%	15%	9.5%	12.3%	0.18%	1.5%	0.20%	11.2%	2.9%	2.9%	3.8%	3.8%	0.11%	24%	0.016%	76%	10.3%	165%	1.17%	294%
R295	590844.25	4803738.73	5.8%	46%	0.4%	52%	2.1%	47%	0.20%	88%	0.09%	0.09%	18%	26%	2.9%	15%	9.5%	12.4%	0.19%	1.5%	0.18%	11.2%	3.2%	3.2%	4.1%	4.1%	0.12%	24%	0.016%	76%	10.3%	165%	1.11%	294%
R296	590246.67	4803815.84	7.2%	47%	0.4%	52%	2.2%	47%	0.22%	88%	0.13%	0.13%	18%	26%	3.6%	15%	10.0%	12.9%	0.23%	1.5%	0.20%	11.2%	3.7%	3.7%	4.7%	4.7%	0.12%	24%	0.016%	76%	11.2%	166%	1.18%	294%
R297	589925.40	4804008.60	9.6%	50%	0.5%	52%	2.5%	47%	0.26%	88%	0.18%	0.18%	20%	27%	2.8%	15%	10.6%	13.5%	0.23%	1.5%	0.24%	11.2%	4.7%	4.7%	6.0%	6.0%	0.14%	24%	0.020%	76%	12.5%	167%	1.43%	294%
R298	590548.68	4803764.43	6.3%	46%	0.4%	52%	2.1%	47%	0.21%	88%	0.10%	0.10%	19%	26%	3.0%	15%	10.3%	13.2%	0.16%	1.5%	0.19%	11.2%	3.6%	3.6%	4.6%	4.6%	0.12%	24%	0.016%	76%	10.1%	165%	1.13%	294%
R299	591101.27	4803770.86	5.4%	46%	0.4%	52%	1.9%	47%	0.20%	88%	0.08%	0.08%	18%	26%	3.6%	15%	9.4%	12.3%	0.18%	1.5%	0.19%	11.2%	3.0%	3.0%	3.9%	3.9%	0.11%	24%	0.016%	76%	9.6%	165%	1.12%	294%
R300	591551.06	4803860.81	5.9%	46%	0.4%	52%	1.9%	47%	0.21%	88%	0.08%	0.08%	18%	26%	2.8%	15%	9.4%	12.2%	0.19%	1.5%	0.21%	11.2%	2.8%	2.8%	3.6%	3.6%	0.11%	24%	0.016%	76%	10.6%	166%	1.16%	294%
R301	586572.95	4805620.11	3.9%	44%	0.2%	52%	1.6%	46%	0.12%	88%	0.06%	0.06%	15%	23%	1.8%	14%	7.6%	10.5%	0.11%	1.4%	0.11%	11.1%	3.3%	3.3%	4.3%	4.3%	0.11%	24%	0.011%	76%	7.1%	162%	0.65%	293%
R302	588597.17	4808143.62	5.8%	46%	0.2%	52%	1.8%	46%	0.12%	88%	0.10%	0.10%	15%	22%	2.6%	14%	7.9%	10.8%	0.14%	1.4%	0.11%	11.1%	2.9%	2.9%	3.7%	3.7%	0.10%	24%	0.009%	76%	8.6%	164%	0.66%	293%
R303	588982.92	4808143.62	6.7%	47%	0.3%	52%	2.4%	47%	0.15%	88%	0.10%	0.10%	17%	24%	3.1%	15%	8.9%	11.8%	0.21%	1.5%	0.14%	11.1%	3.2%	3.2%	4.2%	4.2%	0.14%	24%	0.011%	76%	11.5%	167%	0.84%	293%
R304	589386.61	4808125.68	8.6%	49%	0.4%	52%	2.8%	47%	0.22%	88%	0.14%	0.14%	19%	26%	3.3%	15%	10.2%	13.0%	0.25%	1.5%	0.20%	11.2%	3.4%	3.4%	4.4%	4.4%	0.15%	24%	0.018%	76%	13.3%	168%	1.20%	294%
R305	589772.36	4808125.68	9.2%	49%	0.6%	52%	3.0%	48%	0.31%	88%	0.15%	0.15%	20%	28%	5.2%	17%	10.5%	13.3%	0.26%	1.5%	0.28%	11.3%	4.5%	4.5%	5.8%	5.8%	0.16%	24%	0.027%	76%	15.6%	171%	1.69%	294%
R306	590143.84	4808204.91	11.3%	51%	0.9%	52%	3.9%	48%	0.42%	88%	0.16%	0.16%	20%	27%	4.3%	16%	10.9%	13.7%	0.32%	1.6%	0.37%	11.4%	4.2%	4.2%	5.3%	5.3%	0.23%	24%	0.036%	76%	19.2%	174%	2.32%	295%
R307	590552.82	4808089.80	11.1%	51%	1.3%	53%	4.0%	49%	0.66%	89%	0.16%	0.16%	20%	28%	3.8%	16%	12.4%	15.3%	0.31%	1.6%	0.59%	11.6%	4.2%	4.2%	5.4%	5.4%	0.23%	24%	0.058%	76%	20.6%	176%	3.70%	296%
R308	590893.72	4808098.77	11.5%	52%	1.4%	53%	4.5%	49%	0.69%	89%	0.16%	0.16%	24%	31%	2.7%	15%	13.7%	16.6%	0.33%	1.6%	0.63%	11.6%	4.2%	4.2%	5.4%	5.4%	0.30%	24%	0.060%	76%	20.7%	176%	3.86%	296%
R309	591315.35	4808107.74	10.8%	51%	1.3%	53%	4.0%	49%	0.69%	89%	0.16%	0.16%	24%	31%	3.4%	15%	13.7%	16.5%	0.28%	1.6%	0.66%	11.7%	3.8%	3.8%	4.8%	4.8%	0.25%	24%	0.058%	76%	19.8%	175%	3.81%	296%
R310	588292.16	4808027.00	4.3%	44%	0.2%	52%	1.5%	46%	0.11%	88%	0.07%	0.07%	15%	22%	2.6%	14%	7.8%	10.7%	0.11%	1.4%	0.11%	11.1%	2.9%	2.9%	3.7%	3.7%	0.09%	24%	0.009%	76%	7.8%	163%	0.63%	293%
R311	587448.90	4807829.64	3.0%	43%	0.1%	52%	1.2%	46%	0.07%	88%	0.05%	0.05%	12%	20%	1.4%	13%	6.3%	9.2%	0.12%	1.4%	0.07%	11.1%	2.6%	2.6%	3.4%	3.4%	0.06%	24%	0.007%	76%	5.9%	161%	0.41%	293%
R312	587054.18	4807578.46	3.9%	44%	0.1%	52%	1.6%	46%	0.08%	88%	0.05%	0.05%	12%	20%	1.8%	14%	6.5%	9.3%	0.14%	1.4%	0.08%	11.1%	2.7%	2.7%	3.5%	3.5%	0.09%	24%	0.007%	76%	7.7%	163%	0.44%	293%
R313	586874.76	4807085.06	4.3%	44%	0.2%	52%	1.7%	46%	0.10%	88%	0.06%	0.06%	13%	20%	1.7%	14%	6.7%	9.6%	0.13%	1.4%	0.10%	11.1%	3.1%	3.1%	4.0%	4.0%	0.11%	24%	0.009%	76%	7.9%	163%	0.55%	293%
R314	588417.75	4803810.68	6.2%	46%	0.6%	52%	2.0%	47%	0.32%	88%	0.11%	0.11%	17%	24%	2.6%	14%	8.9%	11.8%	0.15%	1.4%	0.30%	11.3%	5.9%	5.9%	7.6%	7.6%	0.12%	24%	0.024%	76%	10.0%	165%	1.67%	294%
R315	589027.77	4803801.71	6.3%	46%	0.5%	52%	2.1%	47%	0.28%	88%	0.11%	0.11%	17%	25%	2.9%	15%	9.0%	11.8%	0.19%	1.5%	0.28%	11.3%	5.6%	5.6%	7.2%	7.2%	0.13%	24%	0.020%	76%	10.8%	166%	1.52%	294%
R316	589467.35	4803774.80	6.5%	47%	0.4%	52%	2.3%	47%	0.22%	88%	0.10%	0.10%	16%	23%	2.0%	14%	8.9%	11.7%	0.19%	1.5%	0.21%	11.2%	4.9%	4.9%	6.3%	6.3%	0.13%	24%	0.016%	76%	12.6%	168%	1.20%	294%
R317	587852.59	4804052.90	5.8%	46%	0.6%	52%	2.1%	47%	0.32%	88%	0.09%	0.09%	16%	24%	2.5%	14%	9.4%	12.2%	0.17%	1.5%	0.28%	11.3%	4.8%	4.8%	6.2%	6.2%	0.15%	24%	0.027%	76%	9.6%	165%	1.53%	294%
R318	591979.19	4808062.88	8.3%	48%	1.1%	53%	2.8%	47%	0.57%	88%	0.13%	0.13%	15%	22%	2.0%	14%	8.6%	11.4%	0.23%	1.5%	0.56%	11.6%	2.7%	2.7%	3.4%	3.4%	0.15%	24%	0.044%	76%	13.3%	168%	3.15%	296%
R319	592965.99	4804689.83	3.7%	44%	0.3%	52%	1.4%	46%	0.19%	88%	0.06%	0.06%	13%	20%	2.0%	14%	6.5%	9.3%	0.13%	1.4%	0.19%	11.2%	2.0%	2.0%	2.6%	2.6%	0.08%	24%	0.016%	76%	6.0%	161%	1.02%	294%
R320	592903.19	4804447.62	3.2%	43%	0.3%	52%	1.3%	46%	0.17%	88%	0.05%	0.05%	13%	20%	1.4%	13%	6.5%	9.3%	0.12%	1.4%	0.17%	11.2%	2.0%	2.0%	2.6%	2.6%	0.07%	24%	0.013%	76%	5.5%	160%	0.93%	293%
R321	589917.34	4807771.52	12.3%	52%	1.1%	53%	4.3%	49%	0.50%	88%	0.19%	0.19%	22%	29%	6.1%	18%	13.3%	16.2%	0.33%	1.6%	0.42%	11.4%	5.5%	5.5%	7.0%	7.0%	0.26%	24%	0.042%	76%	21.6%	177%	2.82%	295%
R322	589928.61	4808104.27	9.6%	50%	0.8%	52%	3.3%	48%	0.37%	88%	0.14%	0.14%	20%	28%	4.6%	16%	11.5%	14.3%	0.27%	1.6%	0.32%	11.3%	4.4%	4.4%	5.7%	5.7%	0.19%	24%	0.031%	76%	16.9%	172%	2.03%	295%
R323	590196.67	4807870.35	14.2%	54%	1.3%	53%	4.9%	50%	0.63%	89%	0.20%	0.20%	20%	27%	4.9%	17%	14.1%	16.9%	0.38%	1.7%	0.55%	11.6%	4.6%	4.6%	5.9%	5.9%	0.28%	24%	0.056%	76%	25.3%	180%	3.59%	296%

Appendix F

Contour Plots

PROJECT TITLE:

Figure 6-1A
PM 24 hr - Scenario A



PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

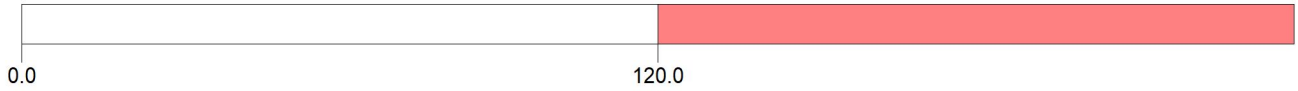
0.0 120.0

COMMENTS: Note: This figure is for sensitivity analysis of contours based on a conservative modelling setup only. Please see Receptor Results Tables for actual assessment results.	SOURCES: **18**	COMPANY NAME: **BCX Environmental Consulting**	
	RECEPTORS: **12625**		BCX
	OUTPUT TYPE: **Concentration**	SCALE: 1:13,848 0 0.5 km	
		DATE: **12-Feb-2020**	PROJECT NO.: **1080-02.01**

PROJECT TITLE:

Figure 6-1B
PM 24 hr - Scenario B

PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3



COMMENTS: Note: This figure is for sensitivity analysis of contours based on a conservative modelling setup only. Please see Receptor Results Tables for actual assessment results.	SOURCES: **18**	COMPANY NAME: **BCX Environmental Consulting**	
	RECEPTORS: **12625**		
	OUTPUT TYPE: **Concentration**	SCALE: 1:11,892 0 0.4 km	
		DATE: **12-Feb-2020**	PROJECT NO.: **1080-02.01**

PROJECT TITLE:

Figure 6-1C
PM 24 hr - Scenario C

PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

0.0 120.0

COMMENTS: Note: This figure is for sensitivity analysis of contours based on a conservative modelling setup only. Please see Receptor Results Tables for actual assessment results.	SOURCES: **18**	COMPANY NAME: **BCX Environmental Consulting**	
	RECEPTORS: **12625**		
	OUTPUT TYPE: **Concentration**	SCALE: 1:15,141 0 0.5 km	
		DATE: **12-Feb-2020**	PROJECT NO.: **1080-02.01**

Appendix G

CVs

BCX ENVIRONMENTAL CONSULTING

Bridget Mills, P.Eng.
Senior Environmental Engineer

PROFILE

Ms. Bridget Mills is a principal and senior environmental engineer at BCX Environmental Consulting with almost 30 years of experience in environmental consulting. Ms. Mills' particular areas of expertise include air quality, land use compatibility and nuisance impact management for the aggregate sector.

With regard to air quality Ms. Mills manages and actively participates in a variety of air quality studies to support Environmental Assessments; Aggregate Resource Act License Applications; Official Plan and By-law Zoning amendments, environmental permits (e.g. Environmental Compliance Approvals (Air)) and annual emissions reporting.

Ms. Mills regularly prepares and reviews various land use compatibility (Guideline D-6) studies prepared from both the perspective of a new sensitive land use proposed near existing industrial/commercial uses and a new industrial/ commercial land use proposed near existing sensitive land uses. Ms. Mills is well versed in the D-series guidelines which govern land use compatibility assessments.

Ms. Mills has also developed particular expertise in the assessment and management of nuisance impacts including fugitive dust and odours from various industrial facilities such as asphalt plants, concrete and cement plants, pits and quarries, and waste management operations. Her work includes the development of best management practices plans and public communication.

SPECIFIC EXPERTISE/SKILLS

- Air Quality Impact Assessments
- Environmental Compliance Approvals (Air and Noise)
- Annual Air Emissions Reporting
- Land Use Compatibility Studies
- Fugitive Dust and Odour Management Plans
- Peer Reviews and Expert Testimony

EDUCATION

B.Sc., Chemical Engineering
University of Surrey
Guildford, Surrey, UK, 1987

OTHER ACADEMIC CREDENTIALS/COURSES

Evaluation of Olfactory Sensitivity ("Trained Nose") **Ortech International/Pinchin Environmental**, 1990/2005

Conducting Environmental Compliance Audits **University of Wisconsin, Madison, WI**, 1994

EMPLOYMENT HISTORY

2010 – Present: BCX Environmental Consulting – Principal and Senior Environmental Engineer

2005 – 2010: Pottinger Gaherty Environmental Consultants – Air Quality Manager and Senior Environmental Engineer

1998 – 2005: SENES Consultants –Senior Environmental Engineer

1989 – 1998 – SNC Lavalin – Environmental Scientist and Engineer

109 Main Street South, Newmarket, ON L3Y 3Y8

(P) 905-235-4218 (F) 905-235-4217

BCX ENVIRONMENTAL CONSULTING

Neil Chan, B.A.Sc., P.Eng.
Senior Environmental Engineer

PROFILE

Neil Chan is a senior environmental engineer at BCX. As one of BCX's senior technical engineers and project managers, his efforts involve emission inventory development and advanced air dispersion modelling for simple and complex facilities in support of Environmental Compliance Approvals (ECA), Environmental Activity and Sector Registries (EASR), Air Quality Studies (for Environmental Assessments (EAs), site plan approvals, rezoning applications, etc.), and annual reporting (NPRI, TRA, GHG, ChemTRAC, etc.).

SPECIFIC EXPERTISE/SKILLS

- Environmental Compliance Approval Applications (Air and Noise)
- Environmental Activity and Sector Registries (EASR)
- Air Quality Impact Studies in support of Environmental Assessments, site plan and rezoning applications, etc.
- Air Emission Inventories
- Advanced Air Dispersion Modelling with the Application of:
  - AERMOD (AERMET land-use processing)
  - ASHRAE and Scorer Barrett (Self-Contamination)
  - US EPA TANKS
  - Screen 3
  - MOVES and Mobile 6.2
  - Reg. 346 Appendix Model
  - CALPUFF
- Air Pollution Control Strategies
- Dust and Odour Management Plans
- Annual Environmental Reporting (NPRI, O.Reg.127, TRA, GHGs, O.Reg.194, Toronto ChemTRAC, GRI, CMP)
- Industry Emissions – Nitrogen Oxides and Sulphur Dioxide (O.Reg.194/05)
- Peer Review of Emission Inventories and Advanced Air Dispersion Modelling

EDUCATION

B.A.Sc. (Honours)
Chemical Engineering
University of Toronto
Toronto, Ontario
2007

EMPLOYMENT HISTORY

2010 to Present
Senior Environmental Engineer, BCX Environmental Consulting, Newmarket, ON

2008 to 2010
Environmental Scientist
Pottinger Gaherty Environmental Consultants Ltd., Newmarket, ON

2007 to 2008
Project Engineer-in-Training,
Ascendia Brands (Canada) Ltd., Scarborough, ON

OTHER ACADEMIC CREDENTIALS/TRAINING

AERMOD Air Dispersion Modelling Training Course and Workshop using Lakes Environmental Interface
Toronto, ON 2008

OpenFOAM Computational Fluid Dynamics (CFD) Modelling Training Course and Workshop
Chicago, USA, 2015

AWMA Modelling Conference
Chapel Hill, USA, 2017

MEMBERSHIPS AND CERTIFICATION

Professional Engineer Professional Engineers of Ontario (PEO)
Air & Waste Management Association (AWMA)

AWARDS

Canada Millennium Scholarship, University of Toronto. 2006

Appendix H

Best Management Practices Plan for Fugitive Dust

NELSON AGGREGATE CO.
BURLINGTON QUARRY

BEST MANAGEMENT PRACTICES PLAN FOR THE CONTROL OF FUGITIVE DUST EMISSIONS

Site Location:
2433 No. 2 Sideroad
Burlington, Ontario
L7P 0G8

March 2020
(Revision 0)

Introduction

The Best Management Practices (BMP) Plan is divided into two separate sections to: (a) facilitate fugitive dust management in the facility as shown in Figure 1 and (b) demonstrate clearly that the requirements of the BMP Plan are being fully addressed.

Part A identifies and describes the main sources of fugitive emissions from the ***Burlington Quarry***; the potential causes of high dust emissions from these main sources; and the preventative and control measures in place or under development to minimize the likelihood of high dust emissions from these main sources.

Part B clarifies the implementation schedules presented in Part A; staff training; inspection and maintenance procedures; "visual monitoring" and written record-keeping initiatives to ensure effective implementation of the preventative and control measures.

Appendices A, B, and C complete the BMP Plan as follows:

Appendix A: Environmental Training Record and BMP Plan Training Scope; and
Appendix B: Log Books / Documentation Requirements / Record Retention
Appendix C: Figures

PART A:

(1) Identification and Description of the Main Sources of Fugitive Dust Emissions

- **(1a) On-Site Traffic**
- **(1b) Unpaved Roads/Area Characteristics**
- **(1c) Paved Roads/Area Characteristics**
- **(1d) Material Stockpiles**
- **(1e) Loading and Unloading**
- **(1f) Crushing and Screening**
- **(1g) Quarry Extension Activities**

(2) Potential Causes of High Dust Emissions from these Sources

(3) Preventative and Control Measures in Place or Under Development to Minimize the Likelihood of High Dust Emissions from the Sources of Fugitive Dust Identified Above

Table 1: Unpaved Road/Area Characteristics
Table 2: Paved Road/Area Characteristics
Table 3: Stockpile Characteristics
Table 3a: Moisture and Silt Contents of Stockpiles
Table 4: Potential Causes of High Dust Emissions
Table 5: Preventative and Control Measures for Fugitive Emissions Generated by On-Site Traffic
Table 6: Preventative and Control Measures for Fugitive Emissions Generated from Unpaved Roads/Areas
Table 7: Preventative and Control Measures for Fugitive Emissions Generated from Paved Roads/Areas
Table 8: Preventative and Control Measures for Fugitive Emissions Generated from the Site Entrance
Table 9: Preventative and Control Measures for Fugitive Emissions Generated from 2 Side Road Crossing
Table 10: Preventative and Control Measures for Fugitive Emissions Generated from Material Stockpiles: Fragmented Stone
Table 11: Preventative and Control Measures for Fugitive Emissions Generated from Material Stockpiles: High Silt Materials
Table 12: Preventative and Control Measures for Fugitive Emissions Generated from Material Stockpiles: Low Silt Materials
Table 13: Preventative and Control Measures for Fugitive Emissions Generated from Loading/Unloading
Table 14: Preventative and Control Measures for Fugitive Emissions Generated from Crushing and Screening
Table 15: Preventative and Control Measures for Fugitive Emissions Generated from Extension Activities

REVISION HISTORY

Revision Number	Changes Made	Date
Revision 0	Original version	March 2020

REVIEW HISTORY

Annual Review Number	Changes Made	Date

PART A: BURLINGTON QUARRY

Process Description

Limestone is extracted via blasting. The blasting process includes drilling a number of holes at the blast face, followed by insertion of the explosive material. Fugitive dust emissions from blasting are managed by Nelson's Drilling and Blasting Policy. Wet fragmented stone from the blast face is loaded using excavators/loaders into off-road haul trucks which transport the material to the portable crushing/screening plants.

The fragmented stone is deposited from the off-road trucks to input piles for the portable crushing and screening plants. See Figure 1). The portable crusher hoppers are loaded via excavator/loader.

Following crushing and screening, the stone is transferred onto product piles via stackers, depending on product specifications.

Aggregate materials are loaded into highway trucks using a front-end loader or excavator.

(1) Identification and Description of the Main Sources of Fugitive Dust Emissions

The main potential sources of dust in the Burlington Quarry are presented in Table 4 below and are shown on Figure 1. Tables 1 and 2 provide source and material characteristics for the unpaved roads/areas and the paved roads/areas, respectively. The general material properties for aggregate stockpiles provided in Table 3/3a are directly applicable to other potential sources of emissions including loading/unloading techniques.

(1a) On-Site Traffic

On-site traffic consists of highway trucks, off-road haul trucks, passenger vehicles, and heavy equipment (i.e. excavators). Fugitive dust emissions from passenger vehicles are typically negligible. Off-road trucks operate almost entirely below grade, except when crossing 2 Side Road between the existing quarry and southern quarry extension. Highway trucks make up the largest volume of on-site traffic and have the potential to cause off-site impacts as they exit and enter the site.

(1b) Unpaved Roads / Area Characteristics

There is one main haul road (R1B) leading into the crusher area, which branches off into four additional roads that lead further into the quarry (R2, R3, R4, and R5). Haul road R1B is shared with the separate HMA plant operations.

Aggregate fill is hauled into the quarry and deposited in the fill area via R1 and the fill haul road (R5).

The material loading points are directly adjacent to the stockpiles and are considered part of the main haul route.

Table 1 – Unpaved Road/Area Characteristics

Unpaved Road/Area	Traffic/Equipment Type	Frequency of Travel/Activity
R1B	• Highway Trucks	High
R2	• Off-Road Haul trucks • Highway Trucks	High
R3	• Off-Road Haul trucks • Highway Trucks	High
R4	• Off-Road Haul trucks • Highway Trucks	High
R5	• Off-Road Haul trucks • Highway Trucks	High

(1c) Paved Roads / Area Characteristics

The site entrance and weigh scale area are completely paved, as well as the first segment of the main haul road (R1A).

Road trucks circle the paved area after being weighed to dislodge as much dust as possible before leaving the site.

Off-road haul trucks haul fragmented stone across 2 Side Road from the southern quarry extension to the existing quarry.

Table 2 – Paved Road/Area Characteristics

Paved Road/Area	Traffic/Equipment Type	Frequency of Travel/Activity
R1A	• Highway trucks	High
Site Entrance	• Highway trucks	High
2 Side Road Crossing	• Off-Road Haul Trucks	High

(1d) Material Stockpiles

There are six (6) primary stockpiles in the Burlington Quarry as shown in Table 3. The potential for fugitive emissions is a function of stockpile dimensions and the frequency of disturbance.

Table 3 – Stockpile Characteristics

Stockpile ID	Material[1]	Frequency of Activities[2]	
		Charging	Discharging
1	Granular A	High	High
2	Granular B11	High	High
3	Screenings	High	Low
4	HL3	High	Medium
5	HL8	High	Medium
6	Fill	High	Medium

Notes:

1. The product piles may vary depending on market demand. This table provides a summary of products that may be stored on site.
2. LOW: 0 -<2 hours/day; MEDIUM: >2-<8 hours/day; HIGH: >8 - 13 hours/day

Moisture and Silt Contents of Stockpiles

The potential for fugitive emissions is also a function of moisture content and silt content. Fugitive emissions can be significant when the moisture content is low and silt content is high. Stockpile moisture contents (i.e. Low: <4%, Medium: 4-8%: High: >8%) and silt contents (i.e. High: >10%, Medium: 5-10%, Low: <5%) are identified in Table 3a.

Table 3a – Moisture and Silt Contents of Stockpiles

Stockpile ID		Moisture Content	Silt Content
1	Granular A	High	Medium
2	Granular B11	High	High
3	Screenings	High	High
4	HL3	High	Low
5	HL8	High	Low
6	Fill	High	High

(1e) Loading/unloading areas and loading/unloading techniques

The crusher hoppers are located entirely below grade and shielded from wind by the quarry face. Truck loading and unloading is conducted entirely below grade. Off-site fugitive dust impacts from loading/unloading areas are therefore not anticipated.

(1f) Crushing and Screening

Crushing and screening activities take place entirely below grade and are shielded from wind by the quarry face. Stackers associated with the crushing and screening activities are low to the ground. The material being processed has a high moisture content. Off-site fugitive dust impacts from crushing and screening activities are therefore not anticipated.

(1h) Extension Activities

Quarry extension activities include site preparation and rehabilitation. Site preparation activities include general construction and earthworks.

(2) Potential Causes of High Dust Emissions from these Sources

The potential causes for high dust emissions are presented in Table 5 as follows:

Table 4 – Potential Causes of High Dust Emissions

Source	Main Sources of Fugitive Dust	Prioritization of Resources	Relative Contribution	Potential Causes of High Dust Emissions
A	On-site traffic: Off-road haul trucks Highway trucks	Medium	5	• Off-road haul truck movement on the haul routes (R2,R3,R4) • Highway truck movement on the haul routes (R1A, R1B, R2, R3, R4, R5)
B	Unpaved roads/areas on site	High	2	Suspension (by traffic movement or wind) of fines generated from heavy traffic/equipment movement on unpaved roads/areas;
C1	Paved roads/areas on site	Medium	4	Suspension (by traffic movement or wind) of fines generated from heavy traffic/equipment movement on paved roads/areas;
C2	Site Entrance (Paved)	High	1	Truck track out and suspension of fines generated by heavy traffic movement on paved areas
C3	2 Side Road Crossing	High	3	Truck track out on 2 Side Road as off-road haul trucks travel

				between original quarry and extension area
D1	Material stockpiles: Fragmented blast stone	Low	10	Material transfers between equipment and stockpiles
D2	Material stockpiles: High silt content product stockpiles	Medium	8	High silt content material transfers between equipment and stockpiles
D3	Material stockpiles: Low silt content product stockpiles	Low	11	Material transfers between equipment and stockpiles
E	Loading/Unloading Areas and Loading/Unloading Techniques	Low	9	High silt content material transfers between equipment and stockpiles
F	Crushing and Screening	Medium	6	Material processing and downsizing of aggregates suspending fines
G	Extension Activities	Medium	7	Site preparation and site rehabilitation

(3) Preventative and Control Measures in Place or Under Development to Minimize the Likelihood of High Dust Emissions from the Sources of Fugitive Dust Emissions Identified Above.

Tables 5 through 15 identify and summarize preventative or control measure in place or under development for each significant fugitive dust source identified in Table 4. The tables include a description of the preventative/control measure; the implementation date for the measure; and the frequency of occurrence for periodic preventative/control measures. Sources identified has high priority (i.e. ranks 1-3) include an additional section for preventative/control measures under development.

A: ON SITE TRAFFIC

Table 5 – Preventative and Control Measures for Fugitive Emissions Generated by On-Site Traffic

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Limiting traffic speed	• Highway truck speed is limited to 20 km/hr • Speed limit sign to be posted at the entrance to the quarry • Off-road haul truck driver training to control traffic speed according to road conditions and load	In place In place In place	Continuous n/a Annual
Restricting vehicle movement to the haul route and loading areas	• Frequent highway truck and heavy work equipment movement is restricted to the haul route and loading areas	In place	Continuous
Using the shortest dedicated routes	• Haul trucks use only the most direct haul routes from the working face to the crusher(s)	In place	Continuous
Wheel Wash	• Highway trucks exiting the site use the wheel wash station to remove excess mud and fines during non-winter months	In place	Continuous during non-winter months

Control/Preventative Measure Under Development	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
See Section C.2	See Section C.2	See Section C.2	See Section C.2

B: UNPAVED ROADS/AREAS

Table 6 – Preventative and Control Measures for Fugitive Emissions Generated from Unpaved Roads/Areas

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Watering of unpaved roads/areas	• Water is applied to haul routes and loading area at the stockpiles using Nelson's dedicated water truck;	In place	Continuously on dry days during spring, summer, and fall months
Minimizing the size of the loading area	• The loading area moves parallel to the working face to minimize the distance traveled by the loaders	In Place	Continuous during shipping
Application of long-lasting dust suppressant	• Long-lasting dust suppressants (i.e. calcium chloride) are applied to heavily travelled unpaved roads and areas	In Place	As required during spring, summer, and fall months

Control/Preventative Measure Under Development	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Progressive Paving	Pave R1B leading into the quarry	June 2020	N/A

C1: PAVED ROADS/AREAS

Table 7 – Preventative and Control Measures for Fugitive Emissions Generated from Paved Roads/Areas

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Repairs	• Any damage to paved roads/areas will be repaired as soon as possible	In place	As required
Vacuum sweeping	• Nelson owns a vacuum sweeper that operates all day during working hours • Nelson contracts an additional third-party sweeper if required	In place	Continuously during all hours of site operation

Control/Preventative Measure Under Development	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
See Section C.2	See Section C.2	See Section C.2	See Section C.2

C2: SITE ENTRANCE

Table 8 – Preventative and Control Measures for Fugitive Emissions Generated from the Site Entrance

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Repairs	• Any damage to paved roads/areas will be repaired as soon as possible	In place	As required
Vacuum sweeping	• Nelson owns a vacuum sweeper that operates all day during working hours • Nelson contracts an additional third-party sweeper if required	In place	Continuously during all hours of site operation

Control/Preventative Measure Under Development	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Winter Dust Suppressant	• Nelson is investigating the use of a dust suppressant rated for winter use	December 2020	As required

C3: 2 SIDE ROAD CROSSING

Table 9 – Preventative and Control Measures for Fugitive Emissions Generated from 2 Side Road Crossing

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Repairs	• Any damage to paved roads/areas will be repaired as soon as possible	In place	As required
Vacuum sweeping	• Nelson owns a vacuum sweeper that operates all day during working hours • Nelson contracts an additional third-party sweeper if required	In place	Continuously during all hours of site operation

Control/Preventative Measure Under Development	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Winter Dust Suppressant	• Nelson is investigating the use of a dust suppressant rated for winter use on the areas directly before and after 2 Side Road	December 2020	As required

D1: FRAGMENTED STONE STOCKPILES

Table 10 – Preventative and Control Measures for Fugitive Emissions Generated from Fragmented Stone Stockpiles

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Below grade	• All material stockpiles are located below grade and shielded from wind by the quarry face	In Place	Ongoing
Water stockpiles with misting system or water truck	• Water stockpiles with misting system or water truck during hot, dry periods if the piles begin to dry out	In place	As Required
Minimizing the disturbed area of low moisture/high silt content stockpiles	• Material is placed on to and removed from each stockpile according to a consistent pattern which minimizes the amount of disturbed material subject to wind erosion	In place	Continuous during charging/shipping

D2: HIGH SILT MATERIAL STOCKPILES

Table 11 – Preventative and Control Measures for Fugitive Emissions Generated from High Silt Material Stockpiles

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Below grade	• All material stockpiles are located below grade and shielded from wind by the quarry face	In Place	Ongoing
Water stockpiles with misting system or water truck	• Water stockpiles with misting system or water truck during hot, dry periods if the piles begin to dry out	In place	As Required
Minimizing the disturbed area of low moisture/high silt content stockpiles	• Material is placed on to and removed from each stockpile according to a consistent pattern which minimizes the amount of disturbed material subject to wind erosion	In place	Continuous during charging/shipping

D3: LOW SILT MATERIAL STOCKPILES

Table 12 – Preventative and Control Measures for Fugitive Emissions Generated from Low-Silt Material Stockpiles

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Below grade	• All material stockpiles are located below grade and shielded from wind by the quarry face	In Place	Ongoing
Low silt material	• Clear stone stockpiles have no fines and therefore no potential to cause off-site fugitive dust impacts	In place	Ongoing

E: LOADING/UNLOADING TECHNIQUES

Table 13 – Preventative and Control Measures for Fugitive Emissions Generated from Loading/Unloading Materials

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Below grade	• All material stockpiles are located below grade and shielded from wind by the quarry face	In Place	Ongoing
Minimize drop heights	• Minimize drop heights from haul trucks onto stockpiles and from excavator drops onto haul trucks and crusher hoppers	In place	Ongoing

F: CRUSHING AND SCREENING

Table 14 – Preventative and Control Measures for Fugitive Emissions Generated from Crushing and Screening

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Water sprays	• Water sprays are active on the crusher to increase the moisture content of crushed material	In place	Continuous
Below grade	• All material stockpiles are located below grade and shielded from wind by the quarry face	In Place	Ongoing

G: EXTENSION ACTIVITIES

Table 15 – Preventative and Control Measures for Fugitive Emissions Generated from Extension Activities

Control/Preventative Measure	Description	Implementation Date	Frequency of Occurrence for Periodic Measures
Apply water via mister or water truck	• Apply water to work areas as required during prolonged dry periods and/or periods of high winds	In place	As required during extension activities
Hydroseed	• Hydroseed disturbed areas as soon as possible after construction activities are complete	In place	As soon as a construction activity is completed

PART B:
EFFECTIVE IMPLEMENTATION OF THE PREVENTATIVE AND CONTROL MEASURES

(1) An Implementation Schedule for the Best Management Practices Plan, including Training of Facility Personnel

(2) Inspection and Maintenance Procedures of All Fugitive Dust Control Equipment

(3) "Visual Monitoring" and Written Record-Keeping Initiatives to Ensure Effective Implementation of the Preventative and Control Measures

PART B: EFFECTIVE IMPLEMENTATION OF THE PREVENTATIVE AND CONTROL MEASURES

(1) An Implementation Schedule for the Best Management Practices Plan, including Training of Facility Personnel

The implementation schedule is presented in Tables 5 through 15. As indicated in these tables, the majority of the preventative/control measures for each area are in-place at the time of writing.

Employee personnel will be trained prior to the implementation of the Plan. All new staff will be trained at their hiring and all personnel will review the training annually. This training will include the requirement for all staff to visually monitor for fugitive dust emissions throughout their work shift.

A copy of Nelson's Environmental Training Record and Training Material Summary is attached as Appendix A.

(2) "Visual Monitoring" and Written Record-Keeping Initiatives to Ensure Effective Implementation of the Preventative and Control Measures

(i) Daily Visual Monitoring

The Site Manager will designate a responsible person to conduct a visual overview once per day from an appropriate vantage point. The observations will be recorded in the Daily Dust Inspection Log-Book (See Appendix B, Table B.1).

In addition to the periodic visual checks, other staff will visually monitor all aspects of the operations on a continuous basis during operating hours. In the event that significant fugitive emissions are observed, the staff member will be required to report to the Site Manager and/or designated responsible person immediately. The Site Manager/designated responsible person will record the observation in the Log-Book and will immediately proceed to investigate and mitigate the source of significant fugitive dust emissions. The investigation, the mitigation measure and the resulting effect of the mitigation efforts will also be recorded in the Log-Book.

(ii) Periodic Controls

Periodic controls will be recorded daily or as appropriate in the Log-Book, as detailed in Appendix B, Tables B.2.

Assessment of the Effectiveness of the BMP Plan

The effective implementation of the Plan will be the responsibility of the Site Manager.

The Site Manager will monitor the on-going performance of the Plan at scheduled health and safety meetings. The Plan will be mentioned as a topic during the daily toolbox talks, where staff can bring up any concerns/suggestions. The log-book will be reviewed each month to ensure that records are being maintained. As necessary specific incidents or improvement recommendations will be assessed.

On an annual basis the Site Manager will evaluate the overall performance of the Plan. As required, the Plan and record keeping procedures will be updated to reflect the plant's continuous improvement objective.

APPENDIX A

ENVIRONMENTAL TRAINING RECORD AND BMP PLAN TRAINING SCOPE

Environmental Training Record

Trainer:	
Purpose / Type:	
Date/Time:	
Location	

Print Name	Signature	Employee #

Training Materials

The following items will serve as training material for sessions to be held with appropriate staff and/or contractors:

1. BMP Plan
    a. Overview and Importance
    b. Responsibilities
    c. Control/Preventative Measures
    d. Inspection/Maintenance
    e. Reporting Fugitive Dust

2. Log Book/Forms
    a. Inspection/Maintenance Forms
    b. Daily Observation Forms
    c. Periodic Activities Forms
    d. Improvement Suggestion Form

APPENDIX B

LOG-BOOK
DOCUMENTATION REQUIREMENTS / RECORD RETENTION

Table B.1 – Daily Observations/Corrective Actions –

[✓] PASS - No significant fugitive dust.

[**X**] FAIL - Fugitive dust with potential to migrate off-site. Corrective action required. Record in ACTIONS.

Date	On – Site Traffic [1]	Unpaved Roads and Areas	Paved Roads and Areas [2]	Material Stockpiles	Crushing and Screening	Loading/Unloading Techniques	Extension Activities	Comments/Actions	Initials

[1]Drivers causing fugitive dust emissions as a result of not obeying speed limits and traffic routes will be cautioned and directed to observe the signage at the site entrance. If the issue is not resolved, the manager or designate must escalate the issue to Nelson management.

[2] Damage to paved areas (ex. potholes) should be noted in the comments section and addressed promptly.

As appropriate, record corrective actions in Periodic Activities table (e.g. additional watering)

Guidance

Potential Source of Fugitive Dust	Guidance
On-site traffic:	• Additional dust suppression measures are required when the height of the dust plume trailing a vehicle reaches the top of the vehicle tires. • Aggregate trucks should be tarped or loaded such that there is a freeboard of at least 7cm
Unpaved roads/areas on site	• Additional dust suppression measures are required when the height of the dust plume trailing a vehicle reaches the top of the vehicle tires. • Monitor the weather daily and adjust watering frequency as required. (i.e. Increase frequency of dust control measures during hot, dry, or windy days)
Paved roads/areas on site	• Sweeping frequency should be increased if visible dust build-up is observed
Site Entrance (Paved)	• Sweeping frequency should be increased if visible dust build-up is observed
2 Side Road Crossing (Paved)	• Sweeping frequency should be increased if visible dust build-up is observed • Limit haul truck speed during road crossing
Material stockpiles: Fragmented blast stone	• Wet/mist stockpiles if dust is blowing off the piles
Material stockpiles: High silt content product stockpiles	• Wet/mist stockpiles if dust is blowing off the pile
Material stockpiles: Low silt content product stockpiles	• Ensure only low fines materials are being stockpiled together
Loading/Unloading Areas and Loading/Unloading Techniques	• Loading/unloading activities should be conducted on the downwind side of the pile where possible • Minimize drop heights into hoppers (no more than 1 metre above hopper), do not overload excavator bucket
Crushing and Screening	• Ensure water sprays are active and incoming material has high moisture content

Table B.2A – Summer Periodic Activities

Name	Date dd/mm/yyyy	Start Time	End Time	Description of Preventative Measure/Procedure	Comments

Table B.2B – Winter Periodic Activities

Name	Date dd/mm/yyyy	Start Time	End Time	Description of Preventative Measure/Procedure	Comments

Chapter 3 – Fugitive Dust Incidents and Suggestions for Improvement

This chapter is included to assist the plant manager identify and develop continuous improvement initiatives with respect to fugitive dust. Data from Chapter 1 and Chapter 2 will be used to facilitate this activity.

Fugitive dust incidents and suggestions for improvement will be reviewed at the weekly health, safety and environment meeting and summarized per Table 6.

Table B.3 – Fugitive Dust Incident or Improvement Suggestion

Date	Description Dust Incident or Suggestion for Improvement	Action

Chapter 4 - Installation of a New or Improved Control Measures; and New or Improved Preventative Measures/Operating Procedures.

Based on the actions presented in Chapter 3, Chapter 4 will document the installation of any new or improved control measures (per Table B.4); and/or new or improved preventative measures/operating procedures (per Table B.5).

Table B.4 - New or Improved Control Measures

Date Installed	Description

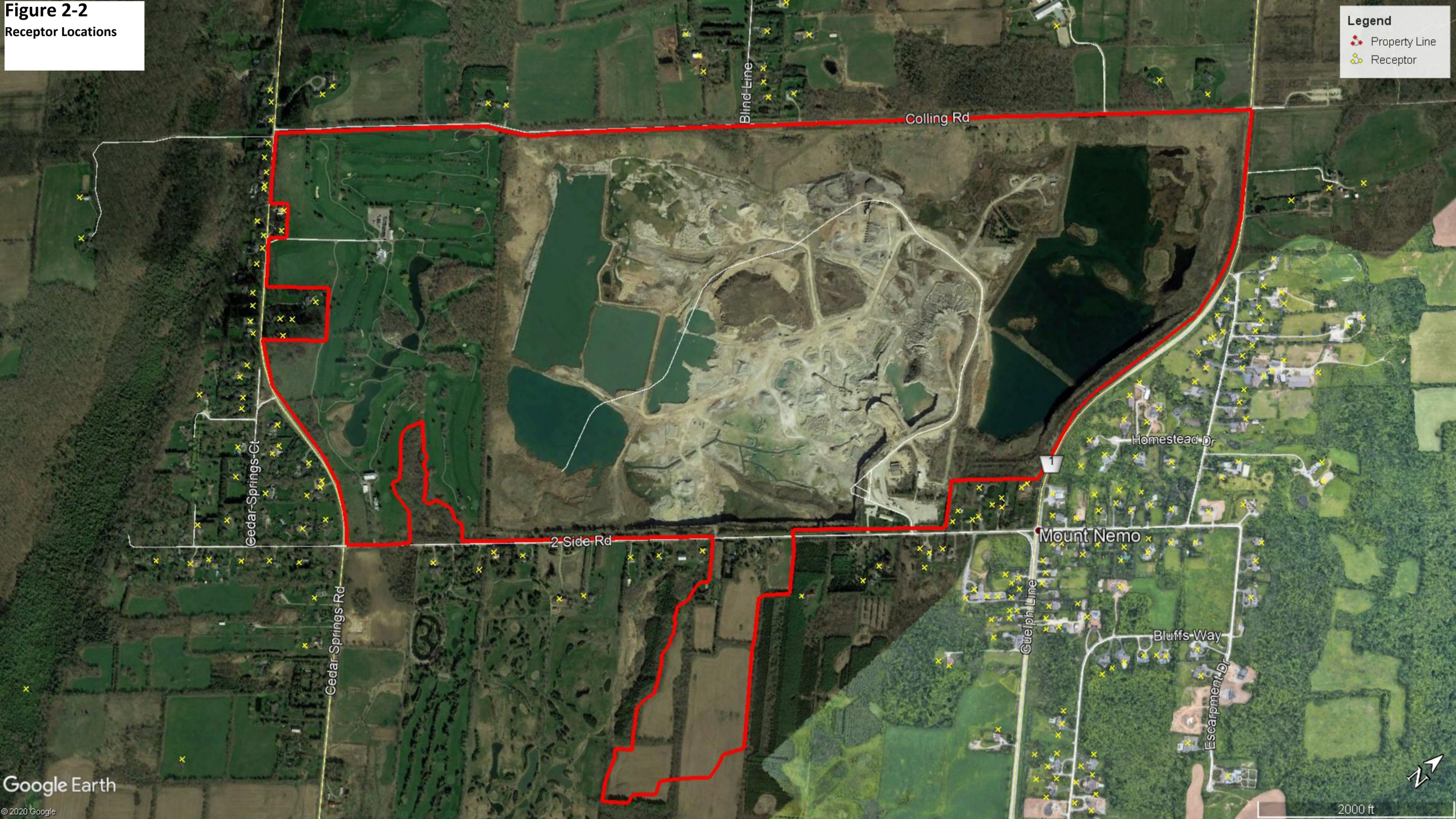
Table B.5 - New or Improved Preventative Measures/Operating Procedures

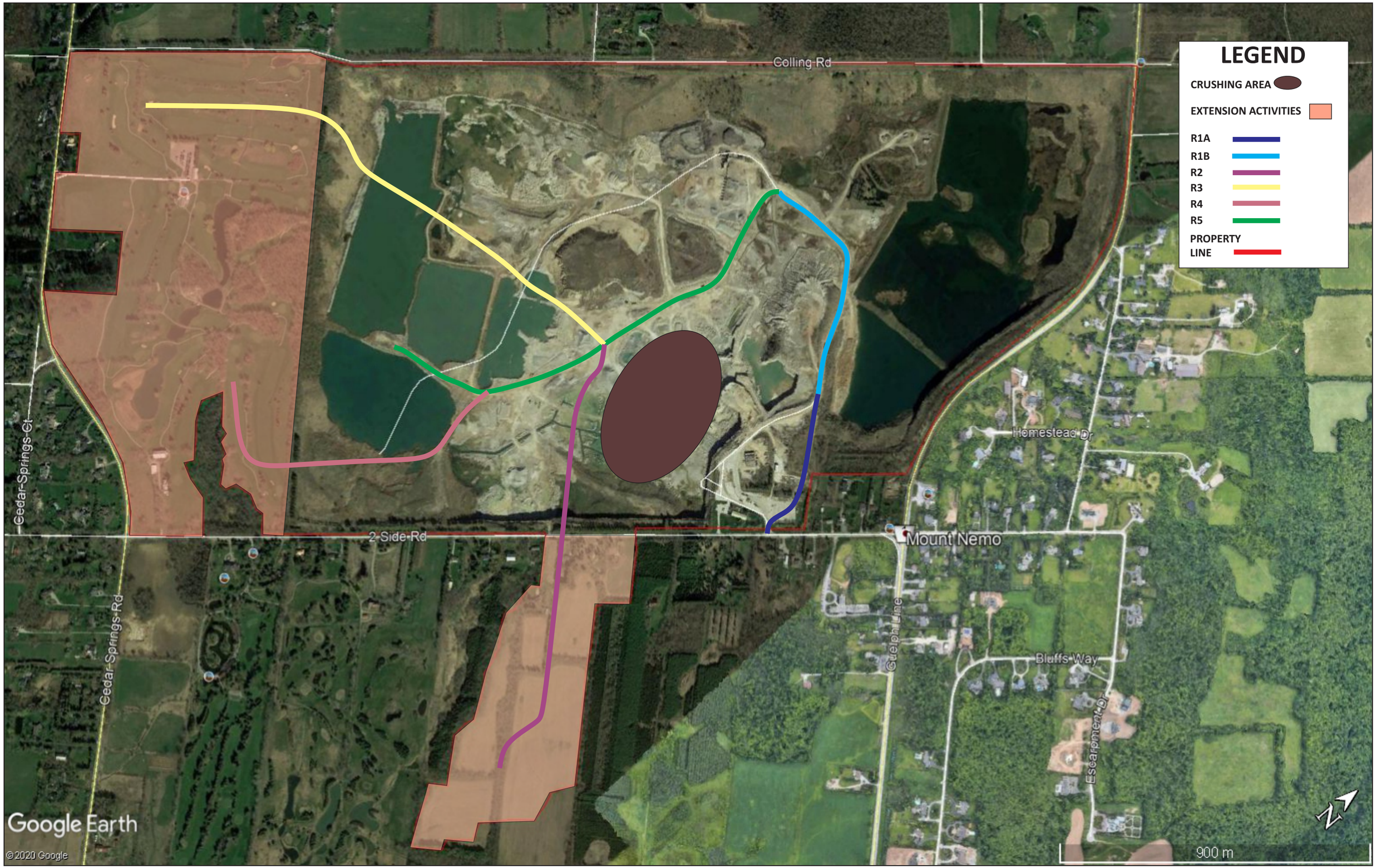
Date Implemented	Description

APPENDIX C

FIGURES

Figure 2-2
Receptor Locations




LEGEND
CRUSHING AREA
EXTENSION ACTIVITIES
R1A
R1B
R2
R3
R4
R5
PROPERTY LINE
Colling Rd
2 Side Rd
Cedar Springs Ct
Cedar Springs Rd
Homestead Dr
Mount Nemo
Guelph Line
Bluffs Way
Escarpment Dr
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