

Appendix C:
Air Quality and Greenhouse Gas Emissions Supporting Information

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0404.0014 City of Orange Billboard Removal site - Orange County, Summer

0404.0014 City of Orange Billboard Removal site
Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.01	25.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8	Operational Year		2018	
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Removal sites- Construction only

Land Use - Removal of existing billboards

Construction Phase - It is expected to take approximately 2 working days per location to remove each of the existing billboard structures, for a maximum of approximately 6 working days to remove all 3 billboards.

Off-road Equipment - Hand tools and small crane rigs would be used to remove the billboards.

Trips and VMT - Additional vendor trips and haul trips were added to account for delivery of material and transport of removed billboards.

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	10/8/2018	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Cranes	1	2.00	231	0.29
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	2.00	6.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8616	7.5924	6.1071	0.0100		0.4805	0.4805		0.4634	0.4634		972.3961	972.3961	0.1641		976.4986
Total	0.8616	7.5924	6.1071	0.0100		0.4805	0.4805		0.4634	0.4634		972.3961	972.3961	0.1641		976.4986

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.6300e-003	0.3124	0.0711	7.8000e-004	0.0174	1.2400e-003	0.0187	4.7700e-003	1.1900e-003	5.9600e-003		87.0347	87.0347	9.0900e-003		87.2620
Vendor	8.1000e-003	0.2386	0.0640	5.1000e-004	0.0128	1.7700e-003	0.0145	3.6800e-003	1.6900e-003	5.3700e-003		54.8657	54.8657	4.7600e-003		54.9847
Worker	0.0358	0.0244	0.3142	9.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		92.5341	92.5341	2.4500e-003		92.5953
Total	0.0526	0.5753	0.4493	2.2200e-003	0.1196	3.6000e-003	0.1232	0.0322	3.4200e-003	0.0356		234.4344	234.4344	0.0163		234.8420

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8616	7.5924	6.1071	0.0100		0.4805	0.4805		0.4634	0.4634	0.0000	972.3961	972.3961	0.1641		976.4986
Total	0.8616	7.5924	6.1071	0.0100		0.4805	0.4805		0.4634	0.4634	0.0000	972.3961	972.3961	0.1641		976.4986

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.6300e-003	0.3124	0.0711	7.8000e-004	0.0174	1.2400e-003	0.0187	4.7700e-003	1.1900e-003	5.9600e-003		87.0347	87.0347	9.0900e-003		87.2620
Vendor	8.1000e-003	0.2386	0.0640	5.1000e-004	0.0128	1.7700e-003	0.0145	3.6800e-003	1.6900e-003	5.3700e-003		54.8657	54.8657	4.7600e-003		54.9847
Worker	0.0358	0.0244	0.3142	9.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		92.5341	92.5341	2.4500e-003		92.5953
Total	0.0526	0.5753	0.4493	2.2200e-003	0.1196	3.6000e-003	0.1232	0.0322	3.4200e-003	0.0356		234.4344	234.4344	0.0163		234.8420

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**0404.0014 City of Orange Billboard Construction
Orange County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.01	25.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction only

Land Use - Construction only

Construction Phase - Billboard construction will take approximately 2-4 weeks to complete.

Off-road Equipment - Estimated construction equipment

Off-road Equipment - Estimated construction equipment

Trips and VMT - Additional worker trips and vendor trips added to the building construction phase to account for the delivery of materials.

Construction Off-road Equipment Mitigation -

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	10/1/2018	10/26/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	2	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4190	4.5913	2.1694	4.0300e-003		0.2419	0.2419		0.2225	0.2225		405.6397	405.6397	0.1263		408.7967
Total	0.4190	4.5913	2.1694	4.0300e-003		0.2419	0.2419		0.2225	0.2225		405.6397	405.6397	0.1263		408.7967

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.1000e-003	0.2386	0.0640	5.1000e-004	0.0128	1.7700e-003	0.0145	3.6800e-003	1.6900e-003	5.3700e-003		54.8657	54.8657	4.7600e-003		54.9847
Worker	0.0358	0.0244	0.3142	9.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		92.5341	92.5341	2.4500e-003		92.5953
Total	0.0439	0.2629	0.3783	1.4400e-003	0.1022	2.3600e-003	0.1046	0.0274	2.2300e-003	0.0296		147.3997	147.3997	7.2100e-003		147.5800

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4190	4.5913	2.1694	4.0300e-003		0.2419	0.2419		0.2225	0.2225	0.0000	405.6397	405.6397	0.1263		408.7967
Total	0.4190	4.5913	2.1694	4.0300e-003		0.2419	0.2419		0.2225	0.2225	0.0000	405.6397	405.6397	0.1263		408.7967

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.1000e-003	0.2386	0.0640	5.1000e-004	0.0128	1.7700e-003	0.0145	3.6800e-003	1.6900e-003	5.3700e-003		54.8657	54.8657	4.7600e-003		54.9847
Worker	0.0358	0.0244	0.3142	9.3000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		92.5341	92.5341	2.4500e-003		92.5953
Total	0.0439	0.2629	0.3783	1.4400e-003	0.1022	2.3600e-003	0.1046	0.0274	2.2300e-003	0.0296		147.3997	147.3997	7.2100e-003		147.5800

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Orange County, Annual**

1.0 Project Characteristics

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1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8	Operational Year	2018		
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Removal sites- Construction only

Land Use - Removal of existing billboards

Construction Phase - It is expected to take approximately 2 working days per location to remove each of the existing billboard structures, for a maximum of approximately 6 working days to remove all 3 billboards.

Off-road Equipment - Hand tools and small crane rigs would be used to remove the billboards.

Trips and VMT - Additional vendor trips and haul trips were added to account for delivery of material and transport of removed billboards.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	PhaseEndDate	10/12/2018	10/8/2018
tblLandUse	LandUseSquareFeet	0.00	25.00
tblLandUse	LotAcreage	0.00	0.01
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	2.7400e-003	0.0246	0.0196	4.0000e-005	3.5000e-004	1.4500e-003	1.8100e-003	9.0000e-005	1.4000e-003	1.5000e-003	0.0000	3.2716	3.2716	4.9000e-004	0.0000	3.2839
Maximum	2.7400e-003	0.0246	0.0196	4.0000e-005	3.5000e-004	1.4500e-003	1.8100e-003	9.0000e-005	1.4000e-003	1.5000e-003	0.0000	3.2716	3.2716	4.9000e-004	0.0000	3.2839

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	2.7400e-003	0.0246	0.0196	4.0000e-005	3.5000e-004	1.4500e-003	1.8100e-003	9.0000e-005	1.4000e-003	1.5000e-003	0.0000	3.2716	3.2716	4.9000e-004	0.0000	3.2839
Maximum	2.7400e-003	0.0246	0.0196	4.0000e-005	3.5000e-004	1.4500e-003	1.8100e-003	9.0000e-005	1.4000e-003	1.5000e-003	0.0000	3.2716	3.2716	4.9000e-004	0.0000	3.2839

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	10/8/2018	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Cranes	1	2.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	2.00	6.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5800e-003	0.0228	0.0183	3.0000e-005		1.4400e-003	1.4400e-003		1.3900e-003	1.3900e-003	0.0000	2.6464	2.6464	4.5000e-004	0.0000	2.6576
Total	2.5800e-003	0.0228	0.0183	3.0000e-005		1.4400e-003	1.4400e-003		1.3900e-003	1.3900e-003	0.0000	2.6464	2.6464	4.5000e-004	0.0000	2.6576

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	9.7000e-004	2.2000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.2354	0.2354	3.0000e-005	0.0000	0.2360
Vendor	2.0000e-005	7.3000e-004	2.0000e-004	0.0000	4.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1478	0.1478	1.0000e-005	0.0000	0.1481
Worker	1.1000e-004	8.0000e-005	9.0000e-004	0.0000	2.6000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2420	0.2420	1.0000e-005	0.0000	0.2422
Total	1.6000e-004	1.7800e-003	1.3200e-003	0.0000	3.5000e-004	1.0000e-005	3.7000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	0.6252	0.6252	5.0000e-005	0.0000	0.6263

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5800e-003	0.0228	0.0183	3.0000e-005		1.4400e-003	1.4400e-003		1.3900e-003	1.3900e-003	0.0000	2.6464	2.6464	4.5000e-004	0.0000	2.6576
Total	2.5800e-003	0.0228	0.0183	3.0000e-005		1.4400e-003	1.4400e-003		1.3900e-003	1.3900e-003	0.0000	2.6464	2.6464	4.5000e-004	0.0000	2.6576

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	9.7000e-004	2.2000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.2354	0.2354	3.0000e-005	0.0000	0.2360
Vendor	2.0000e-005	7.3000e-004	2.0000e-004	0.0000	4.0000e-005	1.0000e-005	4.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1478	0.1478	1.0000e-005	0.0000	0.1481
Worker	1.1000e-004	8.0000e-005	9.0000e-004	0.0000	2.6000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2420	0.2420	1.0000e-005	0.0000	0.2422
Total	1.6000e-004	1.7800e-003	1.3200e-003	0.0000	3.5000e-004	1.0000e-005	3.7000e-004	9.0000e-005	1.0000e-005	1.1000e-004	0.0000	0.6252	0.6252	5.0000e-005	0.0000	0.6263

0404.0014 City of Orange Billboard Construction - Orange County, Annual

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Orange County, Annual**

1.0 Project Characteristics

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Utility Company	Southern California Edison				
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Construction Off-road Equipment Mitigation -

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
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Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1900e-003	0.0459	0.0217	4.0000e-005		2.4200e-003	2.4200e-003		2.2200e-003	2.2200e-003	0.0000	3.6799	3.6799	1.1500e-003	0.0000	3.7085
Total	4.1900e-003	0.0459	0.0217	4.0000e-005		2.4200e-003	2.4200e-003		2.2200e-003	2.2200e-003	0.0000	3.6799	3.6799	1.1500e-003	0.0000	3.7085

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.4400e-003	6.7000e-004	1.0000e-005	1.3000e-004	2.0000e-005	1.4000e-004	4.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.4927	0.4927	4.0000e-005	0.0000	0.4938
Worker	3.6000e-004	2.7000e-004	2.9900e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8067	0.8067	2.0000e-005	0.0000	0.8072
Total	4.4000e-004	2.7100e-003	3.6600e-003	2.0000e-005	1.0100e-003	3.0000e-005	1.0200e-003	2.7000e-004	3.0000e-005	2.9000e-004	0.0000	1.2993	1.2993	6.0000e-005	0.0000	1.3010

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1900e-003	0.0459	0.0217	4.0000e-005		2.4200e-003	2.4200e-003		2.2200e-003	2.2200e-003	0.0000	3.6799	3.6799	1.1500e-003	0.0000	3.7085
Total	4.1900e-003	0.0459	0.0217	4.0000e-005		2.4200e-003	2.4200e-003		2.2200e-003	2.2200e-003	0.0000	3.6799	3.6799	1.1500e-003	0.0000	3.7085

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.0000e-005	2.4400e-003	6.7000e-004	1.0000e-005	1.3000e-004	2.0000e-005	1.4000e-004	4.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.4927	0.4927	4.0000e-005	0.0000	0.4938
Worker	3.6000e-004	2.7000e-004	2.9900e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8067	0.8067	2.0000e-005	0.0000	0.8072
Total	4.4000e-004	2.7100e-003	3.6600e-003	2.0000e-005	1.0100e-003	3.0000e-005	1.0200e-003	2.7000e-004	3.0000e-005	2.9000e-004	0.0000	1.2993	1.2993	6.0000e-005	0.0000	1.3010