

**Appendix A:
Air Quality, Greenhouse Gas Emissions, and Energy Supporting
Information**

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Appendix A: Air Quality, Greenhouse Gases, and Energy Supporting Information

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Demolition Debris Calculations

Parameters ¹			
1	building sq ft	10	cf building volume
1	cf building volume	0.25	cf waste volume
1	cf	0.037	cy
1	cy waste volume	0.5	ton waste weight
1	sf	0.04625	ton waste material

Description	square feet ²	height/ depth (ft) ³	density (lbs/cf) ⁴	Demolition Weight (pounds)	Demolition Weight (tons)
Buildings	2,803	-	-	-	129.64
Pavement	4,700	0.5	148	347,800	173.90
Totals	7,503	-	-	-	304

Notes:

cy = cubic yard

gsf = gross square feet

sf = square feet

cf = cubic feet

¹ Source: California Air Pollution Control Officers Association (CAPCOA). 2017. Appendix A Calculation Details for CalEEMod.

² Source: Google Earth Aerial Imagery.

³ Source: DC Construction Services. 2017. How Thick Is Parking Lot Asphalt? Website: <https://dccpaving.com/how-thick-is-parking-lot-asphalt/>.

⁴ Source: SFGate. 2021. How to Calculate Asphalt Weight Per Yard. Website: <https://homeguides.sfgate.com/calculate-asphalt-weight-per-yard-81825.html>.

231906 UNCNF	NONE ; NONE	6/22/17	7:51	Contact at	6/22/17	ID#	04556J	JAMES	KHOL
	Revd_by	845							
	Occur at	6/22/17	3:00	Report by	450			527 STURBRIDGE CT	
	Disp at	6/22/17	8:02	Update	6/29/17			Walnut Creek CA	94595
	Disp_to	450						(925)-817-8126	
	Complaint type:	Odor		'chemicals/oil'					
	Site Alleged	S0442							
	NOV#								
232097 UNCNF	NONE ; 1755 Trinity Ave	7/14/17	10:55	Contact at	7/14/17	ID#	000000	Anonymous	Anonymous
	Revd_by	521							
	Occur at	7/14/17	10:47	Report by	450				
	Disp at	7/14/17	11:04	Update	8/9/17				
	Disp_to	450							
	Complaint type:	Odor		'tar'					
	Site Alleged	Y8920							
	NOV#								
232663 UNCNF	NONE ; 1401 North Broadway	9/6/17	11:08	Contact at	9/6/17	ID#	04570H	KIM	MARKHAM
	Revd_by	864							
	Occur at	9/1/17	11:09	Report by	450			NONE	
	Disp at	9/6/17	11:34	Update	9/19/17			Walnut Creek CA	94596
	Disp_to	450						(510)-326-6085	
	Complaint type:	Odor		'Strong fumes frm con'					
	Site Alleged	Y9997							
	NOV#								
232737 UNCNF	NONE ; NONE	9/11/17	22:12	Contact at	9/12/17	ID#	04571T	BRYCE	ATKINSON
	Revd_by	999							
	Occur at	9/11/17	21:50	Report by	450			3216 SUN VALLEY AVENUE	
	Disp at	9/12/17	7:31	Update	9/25/17			Walnut Creek CA	94597
	Disp_to	450						(650)-269-7645	
	Complaint type:	Odor		'natural gas'					
	Site Alleged	N8833							
	NOV#								

234682 UNCNF	MFD ; 1696 San Miguel Drive Rcvd at 3/15/18 9:30 Rcvd_by 864 Occur at 3/15/18 9:30 Disp at 3/15/18 9:38 Disp_to 450 Complaint type: Odor 'lacquer fumes' Site Alleged Z3823 NOV#	Contact at 3/15/18 ID# 04611W ELAINE PIZZI 1696 SAN MIGUEL DRIVE Walnut Creek CA 94596 (925)-817-0933
235322 CNFRM	Sauced BBQ ; 1410 Locust St Rcvd at 5/4/18 8:52 Rcvd_by 521 Occur at 5/4/18 8:30 Disp at 5/4/18 9:10 Disp_to 450 Complaint type: Odor 'smoke/bbq' Site Alleged Z4128 NOV#	Contact at 5/4/18 ID# 04624N JEFF THOMAS 1535 BONANZA ST Walnut Creek CA 94595
235769 UNCNF	NONE ; NONE Rcvd at 6/4/18 9:53 Rcvd_by 864 Occur at 6/4/18 9:00 Disp at 6/4/18 10:44 Disp_to 450 Complaint type: Odor 'refinery fumes' Site Alleged S0442 NOV#	Contact at 6/4/18 ID# 04633G SHAWN WILHELMY 520 WIMBLETON RD Walnut Creek CA 94598 (925)-939-2233
236963 UNCNF	NONE ; NONE Rcvd at 8/12/18 8:50 Rcvd_by 999 Occur at 8/12/18 1:30 Disp at 8/13/18 9:42 Disp_to 450 Complaint type: Odor 'burning garbage' Site Alleged S0442 NOV#	Contact at 8/13/18 ID# 04655L GREGG MCVICAR PO BOX 187 Walnut Creek CA 94597 (925)-938-2877

238438 NONE ; Geary Rd & Pioneer Ave
 UNCNF Rcvd at 11/19/18 8:3' Contact at 11/19/18 ID# 04684R SALLY WEED
 Rcvd_by 864
 Occur at 11/19/18 7:00 Report by 450 1515 GEARY RD
 Disp at 11/19/18 8:40 Update 12/20/18 Walnut Creek CA 94597
 Disp_to 450 (925)-997-6846
 Complaint type: Odor 'exhaust'
 Site Alleged Z5399
 NOV#

242791 SFD ; 579 Pine Creek Rd
 UNCNF Rcvd at 2/27/20 12:10 Contact at 2/27/20 ID# 04776N ROBERT SCHAR
 Rcvd_by 873
 Occur at 2/26/20 8:00 Report by 875 NONE
 Disp at 2/27/20 14:24 Update 9/4/20 Walnut Creek CA 94595
 Disp_to 875 (925)-932-0896
 Complaint type: Odor 'spray paint'
 Site Alleged Z7299
 NOV#

243782 NONE ; NONE
 UNCNF Rcvd at 7/25/20 18:28 Contact at 9/27/20 ID# 04798D RENEE BERGED
 Rcvd_by 999
 Occur at 7/25/20 8:00 Report by 637 1241 LINDELL DR
 Disp at 7/27/20 8:28 Update 9/18/20 Walnut Creek CA 94596
 Disp_to 637 (925)-788-7021
 Complaint type: Odor 'chemical'
 Site Alleged P6354
 NOV#

243885 Superlative Wrap ; 2040 North Main Street #14
 UNCNF Rcvd at 8/6/20 10:08 Contact at 8/6/20 ID# 000000 AnonymousAnonymous
 Rcvd_by 521
 Occur at 8/6/20 9:44 Report by 875
 Disp at 8/6/20 10:18 Update 1/5/21
 Disp_to 875
 Complaint type: Odor 'paint'
 Site Alleged Z7783
 NOV#

243891 Superlative Wrap ; 2040 North Main Street #14
 UNCNF Rcvd at 8/6/20 11:54 Contact at 8/6/20 ID# 04800X JOSE LARA
 Rcvd_by 872
 Occur at 8/6/20 8:00 Report by 875 NONE
 Disp at 8/6/20 12:08 Update 1/5/21 Walnut Creek CA 94595
 Disp_to 875 (925)-451-9511
 Complaint type: Odor 'Paint'
 Site Alleged Z7783
 NOV#

244051 NONE ; NONE
 UNCNF Rcvd at 8/15/20 8:22 Contact at 8/18/20 ID# 04804L SUSAN TOWNSEND
 Rcvd_by 999
 Occur at 8/15/20 8:20 Report by 875 3536 ERIS CT
 Disp at 8/17/20 9:39 Update 12/29/20 Walnut Creek CA 94598
 Disp_to 875 (925)-451-5655
 Complaint type: Odor 'ranch smell'
 Site Alleged S0442
 NOV#

244322 Superlative Wrap ; 2040 North Main Street #14
 UNCNF Rcvd at 9/22/20 9:28 Contact at 9/22/20 ID# 04810A JOSE NONE
 Rcvd_by 871
 Occur at 9/22/20 8:30 Report by 875 GERMAN AUTO CLINIC
 Disp at 9/22/20 9:30 Update 12/22/20 Walnut Creek CA 94596
 Disp_to 875 (925)-944-0240
 Complaint type: Odor 'paint fumes'
 Site Alleged Z7783
 NOV#

246372 SFD ; 1688 Poplar Rd
 UNCNF Rcvd at 4/29/21 16:45 Contact at 4/29/21 ID# 04853C RHODA NONE
 Rcvd_by 872
 Occur at 4/29/21 16:00 Report by 892 POPLAR RD
 Disp at 4/29/21 16:57 Update 6/18/21 Walnut Creek CA 94595
 Disp_to 892 (925)-818-6961
 Complaint type: Odor 'incense'
 Site Alleged Z8986
 NOV#

246636 Kaiser ; 320 Lennon Ln
 UNCNF Rcvd at 5/29/21 10:00 Contact at 6/1/21 ID# 04858B CHRIS RYLEY
 Rcvd_by 999
 Occur at 5/29/21 10:00 Report by 868 FARMERS MARKET
 Disp at 6/1/21 7:41 Update 6/30/21 Alamo CA 94507
 Disp_to 868 (925)-989-5994
 Complaint type: Odor 'Generator'
 Site Alleged Z9156
 NOV#

248627 Cole European Service Center ; 1421 Lesnick Ln
 UNCNF Rcvd at 12/7/21 15:13 Contact at 12/7/21 ID# 000000 AnonymousAnonymous
 Rcvd_by 872
 Occur at 12/7/21 14:30 Report by 892
 Disp at 12/7/21 15:15 Update 12/27/21
 Disp_to 892
 Complaint type: Odor 'paint'
 Site Alleged FA058
 NOV#

249814 Construction Site ; Treat Blvd / Cherry Ln
 UNCNF Rcvd at 4/23/22 10:18 Contact at 4/25/22 ID# 04921D DAVID KELLOGG
 Rcvd_by 999
 Occur at 4/23/22 10:00 Report by 861 2918 CHERRY LN
 Disp at 4/25/22 8:29 Update 5/6/22 Walnut Creek CA 94597
 Disp_to 861 (510)-813-0127
 Complaint type: Odor 'generator'
 Site Alleged FA631
 NOV#

250347 NONE ; NONE
 CNFRM Rcvd at 7/15/22 8:34 Contact at 7/18/22 ID# 04932W SIMONE KLEIN
 Rcvd_by 999
 Occur at 7/15/22 8:34 Report by 861 280 PARK LAKE CIR #8
 Disp at 7/18/22 7:58 Update 8/4/22 Walnut Creek CA 94598
 Disp_to 861 (253)-240-9469
 Complaint type: Odor 'bad'
 Site Alleged S0442
 NOV#

250461	NONE ; NONE								
UNCNF	Rcvd at	8/6/22	13:28	Contact at	8/8/22	ID#	04935Y	DINA	ISHIDA
	Rcvd_by	999							
	Occur at	8/6/22	13:15	Report by	861			80 KING OAK PL	
	Disp at	8/8/22	8:06	Update	9/15/22			Walnut Creek CA	94597
	Disp_to	861						(925)-818-9022	
	Complaint type:	Odor		'bad'					
	Site Alleged	N8833							
	NOV#								
251254	Caliber Collision ; 1414 Pine St								
UNCNF	Rcvd at	10/13/22	16:28	Contact at		ID#	04952R	ALLEN	KOBER
	Rcvd_by	847							
	Occur at	10/13/22	16:27	Report by				NONE	
	Disp at	10/13/22	16:36	Update				Walnut Creek CA	94596
	Disp_to	861						(925)-352-7906	
	Complaint type:	Odor		'paint fumes'					
	Site Alleged	FB247							
	NOV#								

SUMMARY

Complaints

Confirmed	2
Unconfirmed	20
Pending	0
Total	22

NOVs

Violation Notices Total: 0

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Walnut Creek Walnut Blvd Residential Project****Contra Costa County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	19.60	1000sqft	0.45	19,602.00	0
City Park	1.65	Acre	1.65	71,948.00	0
Single Family Housing	10.00	Dwelling Unit	0.78	25,899.00	29
Other Asphalt Surfaces	1.62	1000sqft	0.04	1,618.00	0
Other Non-Asphalt Surfaces	0.93	1000sqft	0.02	927.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	5			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The model includes constrution and operation of the proposed residential project.

Land Use - Based on applicant-provided information, the project site includes a 2.88-acre site and 2,545 square-foot of frontage construction.

Construction Phase - Project applicant indicated that proposed project is assumed to be constructed in a single phase beginning in the first quarter of 2023.

Grading - Balanced site.

Demolition - There is a single family house on site. Demolition calculation is based on the square footage of the house and estimated hardscape. Please see appendix for details.

Architectural Coating - Project applicant indicated that paint of 30 g/L VOC would be applied.

Vehicle Trips - Only the proposed single family homes will generate operational trips.

Appendix A
Construction Off-road Equipment Mitigation - BAAQMD dust control measures.

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	30.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	30.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	30.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	30.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	19,600.00	19,602.00
tblLandUse	LandUseSquareFeet	71,874.00	71,948.00
tblLandUse	LandUseSquareFeet	18,000.00	25,899.00
tblLandUse	LandUseSquareFeet	1,620.00	1,618.00
tblLandUse	LandUseSquareFeet	930.00	927.00
tblLandUse	LotAcreage	3.25	0.78
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

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					
2023	0.1955	1.5725	1.6362	3.3100e-003	0.0707	0.0680	0.1387	0.0229	0.0649	0.0878	0.0000	283.3468	283.3468	0.0467	5.2600e-003	286.0829
2024	0.0860	0.2577	0.3061	5.9000e-004	7.8700e-003	0.0107	0.0186	2.1300e-003	0.0102	0.0123	0.0000	50.8242	50.8242	8.7600e-003	8.3000e-004	51.2919

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Maximum	0.1955	1.5725	1.6362	3.3100e-003	0.0707	0.0680	0.1387	0.0229	0.0649	0.0878	0.0000	283.3468	283.3468	0.0467	5.2600e-003	286.0829
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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					
2023	0.1955	1.5725	1.6362	3.3100e-003	0.0559	0.0680	0.1239	0.0168	0.0649	0.0817	0.0000	283.3465	283.3465	0.0467	5.2600e-003	286.0826
2024	0.0860	0.2577	0.3061	5.9000e-004	7.8700e-003	0.0107	0.0186	2.1300e-003	0.0102	0.0123	0.0000	50.8241	50.8241	8.7600e-003	8.3000e-004	51.2919
Maximum	0.1955	1.5725	1.6362	3.3100e-003	0.0559	0.0680	0.1239	0.0168	0.0649	0.0817	0.0000	283.3465	283.3465	0.0467	5.2600e-003	286.0826

	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
Appendix A																

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Percent Reduction	0.00	0.00	0.00	0.00	18.82	0.00	9.41	24.21	0.00	6.05	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)
1	3-1-2023	5-31-2023	0.5297	0.5297
2	6-1-2023	8-31-2023	0.5335	0.5335
3	9-1-2023	11-30-2023	0.5289	0.5289
4	12-1-2023	2-29-2024	0.4748	0.4748
5	3-1-2024	5-31-2024	0.0475	0.0475
		Highest	0.5335	0.5335

2.2 Overall Operational**Unmitigated Operational**

	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					
Area	0.1832	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896
Energy	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	27.8203	27.8203	1.5600e-003	5.2000e-004	28.0141
Mobile	0.0397	0.0438	0.3622	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	68.5103	68.5103	4.5600e-003	3.3100e-003	69.6118
Waste						0.0000	0.0000		0.0000	0.0000	2.5009	0.0000	2.5009	0.1478	0.0000	6.1958
Water						0.0000	0.0000		0.0000	0.0000	0.2067	1.0958	1.3026	0.0214	5.2000e-004	1.9935
Total	0.2249	0.0638	0.5299	1.0300e-003	0.0797	0.0148	0.0945	0.0213	0.0147	0.0360	3.9787	97.8603	101.8390	0.1779	4.4200e-003	107.6048

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Operational**

	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					
Area	0.1832	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896
Energy	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	27.8203	27.8203	1.5600e-003	5.2000e-004	28.0141
Mobile	0.0397	0.0438	0.3622	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	68.5103	68.5103	4.5600e-003	3.3100e-003	69.6118
Waste						0.0000	0.0000		0.0000	0.0000	2.5009	0.0000	2.5009	0.1478	0.0000	6.1958
Water						0.0000	0.0000		0.0000	0.0000	0.2067	1.0958	1.3026	0.0214	5.2000e-004	1.9935
Total	0.2249	0.0638	0.5299	1.0300e-003	0.0797	0.0148	0.0945	0.0213	0.0147	0.0360	3.9787	97.8603	101.8390	0.1779	4.4200e-003	107.6048

	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

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	3/1/2023	3/28/2023	5	20	
2	Site Preparation	Site Preparation	3/29/2023	3/31/2023	5	3	
3	Grading	Grading	4/1/2023	4/10/2023	5	6	

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	4/11/2023	2/12/2024	5	220
5	Paving	Paving	2/13/2024	2/26/2024	5	10
6	Architectural Coating	Architectural Coating	2/27/2024	3/11/2024	5	10

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 6****Acres of Paving: 0.51****Residential Indoor: 52,445; Residential Outdoor: 17,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,329 (Architectural Coating – sqft)****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	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	5	13.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023**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					
Fugitive Dust					3.2500e-003	0.0000	3.2500e-003	4.9000e-004	0.0000	4.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	Appendix A	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	0.0147	0.1432	0.1346	2.4000e-004	3.2500e-003	6.7700e-003	0.0100	4.9000e-004	6.3300e-003	6.8200e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
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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	2.0200e-003	4.7000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.8943	0.8943	3.0000e-005	1.4000e-004	0.9373
Vendor	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
Worker	3.4000e-004	2.3000e-004	2.9200e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8019	0.8019	2.0000e-005	2.0000e-005	0.8093
Total	3.7000e-004	2.2500e-003	3.3900e-003	2.0000e-005	1.2800e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.6963	1.6963	5.0000e-005	1.6000e-004	1.7466

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Fugitive Dust					1.4600e-003	0.0000	1.4600e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	1.4600e-003	6.7700e-003	8.2300e-003	2.2000e-004	6.3300e-003	6.5500e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202

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	2.0200e-003	4.7000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.8943	0.8943	3.0000e-005	1.4000e-004	0.9373
Vendor	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
Worker	3.4000e-004	2.3000e-004	2.9200e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8019	0.8019	2.0000e-005	2.0000e-005	0.8093
Total	3.7000e-004	2.2500e-003	3.3900e-003	2.0000e-005	1.2800e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.6963	1.6963	5.0000e-005	1.6000e-004	1.7466

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

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					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	2.3900e-003	8.1000e-004	3.2000e-003	2.6000e-004	7.5000e-004	1.0100e-003	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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	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
Worker	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0740	0.0740	0.0000	0.0000	0.0747
Total	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0740	0.0740	0.0000	0.0000	0.0747

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Fugitive Dust					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	1.0700e-003	8.1000e-004	1.8800e-003	1.2000e-004	7.5000e-004	8.7000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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	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
Worker	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0740	0.0740	0.0000	0.0000	0.0747
Total	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0740	0.0740	0.0000	0.0000	0.0747

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Grading - 2023****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					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	4.0000e-003	0.0434	0.0261	6.0000e-005	0.0213	1.8100e-003	0.0231	0.0103	1.6700e-003	0.0119	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751

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	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
Worker	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1851	0.1851	1.0000e-005	1.0000e-005	0.1868
Total	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1851	0.1851	1.0000e-005	1.0000e-005	0.1868

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Fugitive Dust					9.5600e-003	0.0000	9.5600e-003	4.6200e-003	0.0000	4.6200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	4.0000e-003	0.0434	0.0261	6.0000e-005	9.5600e-003	1.8100e-003	0.0114	4.6200e-003	1.6700e-003	6.2900e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751

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	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
Worker	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1851	0.1851	1.0000e-005	1.0000e-005	0.1868
Total	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1851	0.1851	1.0000e-005	1.0000e-005	0.1868

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2023****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	0.1619	1.2875	1.3433	2.3600e-003		0.0580	0.0580		0.0556	0.0556	0.0000	196.2785	196.2785	0.0371	0.0000	197.2064
Total	0.1619	1.2875	1.3433	2.3600e-003		0.0580	0.0580		0.0556	0.0556	0.0000	196.2785	196.2785	0.0371	0.0000	197.2064

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	1.7300e-003	0.0675	0.0221	3.1000e-004	9.9500e-003	4.0000e-004	0.0104	2.8800e-003	3.8000e-004	3.2600e-003	0.0000	30.2973	30.2973	6.1000e-004	4.3800e-003	31.6192
Worker	0.0106	7.2900e-003	0.0911	2.7000e-004	0.0322	1.6000e-004	0.0324	8.5700e-003	1.5000e-004	8.7200e-003	0.0000	25.0663	25.0663	7.5000e-004	7.1000e-004	25.2961
Total	0.0124	0.0747	0.1132	5.8000e-004	0.0422	5.6000e-004	0.0427	0.0115	5.3000e-004	0.0120	0.0000	55.3636	55.3636	1.3600e-003	5.0900e-003	56.9153

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.1619	1.2875	1.3433	2.3600e-003		0.0580	0.0580		0.0556	0.0556	0.0000	196.2782	196.2782	0.0371	0.0000	197.2062
Total	0.1619	1.2875	1.3433	2.3600e-003		0.0580	0.0580		0.0556	0.0556	0.0000	196.2782	196.2782	0.0371	0.0000	197.2062

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	1.7300e-003	0.0675	0.0221	3.1000e-004	9.9500e-003	4.0000e-004	0.0104	2.8800e-003	3.8000e-004	3.2600e-003	0.0000	30.2973	30.2973	6.1000e-004	4.3800e-003	31.6192
Worker	0.0106	7.2900e-003	0.0911	2.7000e-004	0.0322	1.6000e-004	0.0324	8.5700e-003	1.5000e-004	8.7200e-003	0.0000	25.0663	25.0663	7.5000e-004	7.1000e-004	25.2961
Total	0.0124	0.0747	0.1132	5.8000e-004	0.0422	5.6000e-004	0.0427	0.0115	5.3000e-004	0.0120	0.0000	55.3636	55.3636	1.3600e-003	5.0900e-003	56.9153

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Building Construction - 2024****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	0.0248	0.1988	0.2186	3.9000e-004		8.3400e-003	8.3400e-003		7.9900e-003	7.9900e-003	0.0000	32.1957	32.1957	6.0000e-003	0.0000	32.3456
Total	0.0248	0.1988	0.2186	3.9000e-004		8.3400e-003	8.3400e-003		7.9900e-003	7.9900e-003	0.0000	32.1957	32.1957	6.0000e-003	0.0000	32.3456

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	2.8000e-004	0.0111	3.5300e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	6.0000e-005	5.3000e-004	0.0000	4.9011	4.9011	1.0000e-004	7.1000e-004	5.1143
Worker	1.6300e-003	1.0700e-003	0.0139	4.0000e-005	5.2900e-003	3.0000e-005	5.3100e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.9774	3.9774	1.1000e-004	1.1000e-004	4.0124
Total	1.9100e-003	0.0121	0.0175	9.0000e-005	6.9200e-003	1.0000e-004	7.0100e-003	1.8800e-003	8.0000e-005	1.9600e-003	0.0000	8.8785	8.8785	2.1000e-004	8.2000e-004	9.1267

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.0248	0.1988	0.2186	3.9000e-004		8.3400e-003	8.3400e-003		7.9900e-003	7.9900e-003	0.0000	32.1956	32.1956	6.0000e-003	0.0000	32.3455
Total	0.0248	0.1988	0.2186	3.9000e-004		8.3400e-003	8.3400e-003		7.9900e-003	7.9900e-003	0.0000	32.1956	32.1956	6.0000e-003	0.0000	32.3455

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	2.8000e-004	0.0111	3.5300e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	6.0000e-005	5.3000e-004	0.0000	4.9011	4.9011	1.0000e-004	7.1000e-004	5.1143
Worker	1.6300e-003	1.0700e-003	0.0139	4.0000e-005	5.2900e-003	3.0000e-005	5.3100e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	3.9774	3.9774	1.1000e-004	1.1000e-004	4.0124
Total	1.9100e-003	0.0121	0.0175	9.0000e-005	6.9200e-003	1.0000e-004	7.0100e-003	1.8800e-003	8.0000e-005	1.9600e-003	0.0000	8.8785	8.8785	2.1000e-004	8.2000e-004	9.1267

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****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	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7574	7.7574	2.4600e-003	0.0000	7.8188
Paving	6.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8500e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7574	7.7574	2.4600e-003	0.0000	7.8188

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	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
Worker	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4476	0.4476	1.0000e-005	1.0000e-005	0.4515
Total	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4476	0.4476	1.0000e-005	1.0000e-005	0.4515

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7573	7.7573	2.4600e-003	0.0000	7.8188
Paving	6.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8500e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7573	7.7573	2.4600e-003	0.0000	7.8188

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	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
Worker	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4476	0.4476	1.0000e-005	1.0000e-005	0.4515
Total	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4476	0.4476	1.0000e-005	1.0000e-005	0.4515

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.7 Architectural Coating - 2024****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					
Archit. Coating	0.0532					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0541	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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	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
Worker	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2685	0.2685	1.0000e-005	1.0000e-005	0.2709
Total	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2685	0.2685	1.0000e-005	1.0000e-005	0.2709

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Archit. Coating	0.0532					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0541	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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	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
Worker	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2685	0.2685	1.0000e-005	1.0000e-005	0.2709
Total	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2685	0.2685	1.0000e-005	1.0000e-005	0.2709

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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					
Mitigated	0.0397	0.0438	0.3622	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	68.5103	68.5103	4.5600e-003	3.3100e-003	69.6118
Unmitigated	0.0397	0.0438	0.3622	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	68.5103	68.5103	4.5600e-003	3.3100e-003	69.6118

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	94.40	95.40	85.50	215,420	215,420
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	94.40	95.40	85.50	215,420	215,420

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372
Other Asphalt Surfaces	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372
Single Family Housing	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372
Other Non-Asphalt Surfaces	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.2266	7.2266	1.1700e-003	1.4000e-004	7.2981
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.2266	7.2266	1.1700e-003	1.4000e-004	7.2981
Natural Gas Mitigated	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

NaturalGas Unmitigated	2.0800e- 003	0.0178	7.5700e- 003	1.1000e- 004		1.4400e- 003	1.4400e- 003		1.4400e- 003	1.4400e- 003	0.0000	20.5937	20.5937	3.9000e- 004	3.8000e- 004	20.7161
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Other Asphalt Surfaces	0	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
Other Non-Asphalt Surfaces	0	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
Single Family Housing	385911	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161
Total		2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Natural Gas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Other Asphalt Surfaces	0	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
Other Non-Asphalt Surfaces	0	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
Single Family Housing	385911	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161
Total		2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	78105.2		7.2266	1.1700e- 003	1.4000e- 004	7.2981
Total			7.2266	1.1700e- 003	1.4000e- 004	7.2981

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	78105.2		7.2266	1.1700e-003	1.4000e-004	7.2981
Total			7.2266	1.1700e-003	1.4000e-004	7.2981

6.0 Area Detail**6.1 Mitigation Measures Area**

	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					
Mitigated	0.1832 Appendix A	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.1832	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896
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6.2 Area by SubCategory**Unmitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0187					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0589	1.2900e-003	0.0857	1.8000e-004		0.0124	0.0124		0.0124	0.0124	1.2711	0.3121	1.5832	2.4000e-003	7.0000e-005	1.6649
Landscaping	2.2500e-003	8.6000e-004	0.0744	0.0000		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	0.1217	0.1217	1.2000e-004	0.0000	0.1247
Total	0.1831	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0187					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0589	1.2900e-003	0.0857	1.8000e-004		0.0124	0.0124		0.0124	0.0124	1.2711	0.3121	1.5832	2.4000e-003	7.0000e-005	1.6649
Landscaping	2.2500e-003	8.6000e-004	0.0744	0.0000		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	0.1217	0.1217	1.2000e-004	0.0000	0.1247
Total	0.1831	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896

7.0 Water Detail**7.1 Mitigation Measures Water**

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		1.3026	0.0214	5.2000e-004	1.9935

Appendix A

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated		1.3026	0.0214	5.2000e-004	1.9935
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7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 1.96594		0.6366	1.0000e-004	1.0000e-005	0.6429
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.65154 / 0.410754		0.6659	0.0213	5.1000e-004	1.3506
Total			1.3026	0.0214	5.2000e-004	1.9935

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 1.96594		0.6366	1.0000e-004	1.0000e-005	0.6429
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.65154 / 0.410754		0.6659	0.0213	5.1000e-004	1.3506
Total			1.3026	0.0214	5.2000e-004	1.9935

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated		2.5009	0.1478	0.0000	6.1958

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated		2.5009	0.1478	0.0000	6.1958
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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.14		0.0284	1.6800e-003	0.0000	0.0704
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.18		2.4724	0.1461	0.0000	6.1253
Total			2.5009	0.1478	0.0000	6.1958

Walnut Creek Walnut Blvd Residential Project - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.14		0.0284	1.6800e-003	0.0000	0.0704
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.18		2.4724	0.1461	0.0000	6.1253
Total			2.5009	0.1478	0.0000	6.1958

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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Appendix A

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number
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11.0 Vegetation

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Walnut Creek Walnut Blvd Residential Project Mitigated Scenario****Contra Costa County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	19.60	1000sqft	0.45	19,602.00	0
Other Asphalt Surfaces	1.62	1000sqft	0.04	1,618.00	0
Other Non-Asphalt Surfaces	0.93	1000sqft	0.02	927.00	0
City Park	1.65	Acre	1.65	71,948.00	0
Single Family Housing	10.00	Dwelling Unit	0.78	25,899.00	29

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	5			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The model includes mitigated construction of the proposed residential project.

Land Use - Based on applicant-provided information, the project site includes a 2.88-acre site and 2,545 square-foot of frontage construction (1,618 sf of asphalt and 927 sf of sidewalk).

Construction Phase - Project applicant indicated that proposed project is assumed to be constructed in a single phase beginning in the first quarter of 2023.

Demolition - There is a single family house on site. Demolition calculation is based on the square footage of the house and estimated hardscape. Please see appendix for details.

Grading - Balanced site.

Architectural Coating - Project applicant indicated that paint of 30 g/L VOC would be applied.

Vehicle Trips - Only the proposed single family homes will generate operational trips.

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - BAAQMD dust control measures. Tier 4 final for all construction equipment equal to or greater than 25 horsepower.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	30.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	30.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	30.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	30.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblLandUse	LandUseSquareFeet	1,620.00	1,618.00
tblLandUse	LandUseSquareFeet	19,600.00	19,602.00
tblLandUse	LandUseSquareFeet	930.00	927.00
tblLandUse	LandUseSquareFeet	71,874.00	71,948.00
tblLandUse	LandUseSquareFeet	18,000.00	25,899.00
tblLandUse	LotAcreage	3.25	0.78
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

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					
2023	0.1955	1.5725	1.6364	3.3100e-003	0.0707	0.0680	0.1387	0.0229	0.0649	0.0878	0.0000	283.6740	283.6740	0.0467	5.2600e-003	286.4101
2024	0.0860	0.2577	0.3062	5.9000e-004	7.8700e-003	0.0107	0.0186	2.1300e-003	0.0102	0.0123	0.0000	50.9208	50.9208	8.7600e-003	8.3000e-004	51.3885

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Maximum	0.1955	1.5725	1.6364	3.3100e-003	0.0707	0.0680	0.1387	0.0229	0.0649	0.0878	0.0000	283.6740	283.6740	0.0467	5.2600e-003	286.4101
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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					
2023	0.0480	0.4603	1.7269	3.3100e-003	0.0559	4.4400e-003	0.0603	0.0168	4.4100e-003	0.0213	0.0000	283.6738	283.6738	0.0467	5.2600e-003	286.4099
2024	0.0627	0.0794	0.3271	5.9000e-004	7.8700e-003	8.7000e-004	8.7400e-003	2.1300e-003	8.7000e-004	3.0000e-003	0.0000	50.9207	50.9207	8.7600e-003	8.3000e-004	51.3885
Maximum	0.0627	0.4603	1.7269	3.3100e-003	0.0559	4.4400e-003	0.0603	0.0168	4.4100e-003	0.0213	0.0000	283.6738	283.6738	0.0467	5.2600e-003	286.4099

	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
Appendix A																

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Percent Reduction	60.67	70.52	-5.73	0.00	18.82	93.25	56.07	24.21	92.97	75.78	0.00	0.00	0.00	0.00	0.00	0.00
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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2023	5-31-2023	0.5297	0.1173
2	6-1-2023	8-31-2023	0.5335	0.1676
3	9-1-2023	11-30-2023	0.5289	0.1669
4	12-1-2023	2-29-2024	0.4748	0.1562
5	3-1-2024	5-31-2024	0.0475	0.0426
		Highest	0.5335	0.1676

2.2 Overall Operational**Unmitigated Operational**

	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					
Area	0.1832	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896
Energy	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	27.8203	27.8203	1.5600e-003	5.2000e-004	28.0141
Mobile	0.0397	0.0438	0.3631	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	69.6682	69.6682	4.5600e-003	3.3100e-003	70.7697
Waste						0.0000	0.0000		0.0000	0.0000	2.5009	0.0000	2.5009	0.1478	0.0000	6.1958
Water						0.0000	0.0000		0.0000	0.0000	0.2067	1.0958	1.3026	0.0214	5.2000e-004	1.9935
Total	0.2249	0.0638	0.5308	1.0300e-003	0.0797	0.0148	0.0945	0.0213	0.0147	0.0360	3.9787	99.0181	102.9968	0.1779	4.4200e-003	108.7627

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Mitigated Operational**

	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					
Area	0.1832	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896
Energy	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	27.8203	27.8203	1.5600e-003	5.2000e-004	28.0141
Mobile	0.0397	0.0438	0.3631	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	69.6682	69.6682	4.5600e-003	3.3100e-003	70.7697
Waste						0.0000	0.0000		0.0000	0.0000	2.5009	0.0000	2.5009	0.1478	0.0000	6.1958
Water						0.0000	0.0000		0.0000	0.0000	0.2067	1.0958	1.3026	0.0214	5.2000e-004	1.9935
Total	0.2249	0.0638	0.5308	1.0300e-003	0.0797	0.0148	0.0945	0.0213	0.0147	0.0360	3.9787	99.0181	102.9968	0.1779	4.4200e-003	108.7627

	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

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	3/1/2023	3/28/2023	5	20	
2	Site Preparation	Site Preparation	3/29/2023	3/31/2023	5	3	
3	Grading	Grading	4/1/2023	4/10/2023	5	6	

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	4/11/2023	2/12/2024	5	220
5	Paving	Paving	2/13/2024	2/26/2024	5	10
6	Architectural Coating	Architectural Coating	2/27/2024	3/11/2024	5	10

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 6****Acres of Paving: 0.51****Residential Indoor: 52,445; Residential Outdoor: 17,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,329 (Architectural Coating – sqft)****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	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	5	13.00	0.00	30.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023**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					
Fugitive Dust	Appendix A				3.2500e-003	0.0000	3.2500e-003	4.9000e-004	0.0000	4.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	3.2500e-003	6.7700e-003	0.0100	4.9000e-004	6.3300e-003	6.8200e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202

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	2.0200e-003	4.7000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.8943	0.8943	3.0000e-005	1.4000e-004	0.9373
Vendor	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
Worker	3.4000e-004	2.3000e-004	2.9200e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8120	0.8120	2.0000e-005	2.0000e-005	0.8193
Total	3.7000e-004	2.2500e-003	3.3900e-003	2.0000e-005	1.2800e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.7063	1.7063	5.0000e-005	1.6000e-004	1.7566

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Fugitive Dust					1.4600e-003	0.0000	1.4600e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8100e-003	0.0122	0.1472	2.4000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	2.8100e-003	0.0122	0.1472	2.4000e-004	1.4600e-003	3.7000e-004	1.8300e-003	2.2000e-004	3.7000e-004	5.9000e-004	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202

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	2.0200e-003	4.7000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.8943	0.8943	3.0000e-005	1.4000e-004	0.9373
Vendor	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
Worker	3.4000e-004	2.3000e-004	2.9200e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8120	0.8120	2.0000e-005	2.0000e-005	0.8193
Total	3.7000e-004	2.2500e-003	3.3900e-003	2.0000e-005	1.2800e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.7063	1.7063	5.0000e-005	1.6000e-004	1.7566

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2023****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					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	2.3900e-003	8.1000e-004	3.2000e-003	2.6000e-004	7.5000e-004	1.0100e-003	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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	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
Worker	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0756
Total	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0756

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Fugitive Dust					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	1.9600e-003	0.0178	4.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	4.5000e-004	1.9600e-003	0.0178	4.0000e-005	1.0700e-003	6.0000e-005	1.1300e-003	1.2000e-004	6.0000e-005	1.8000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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	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
Worker	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0756
Total	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0750	0.0750	0.0000	0.0000	0.0756

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2023****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					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	4.0000e-003	0.0434	0.0261	6.0000e-005	0.0213	1.8100e-003	0.0231	0.0103	1.6700e-003	0.0119	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751

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	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
Worker	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1874	0.1874	1.0000e-005	1.0000e-005	0.1891
Total	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1874	0.1874	1.0000e-005	1.0000e-005	0.1891

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Fugitive Dust					9.5600e-003	0.0000	9.5600e-003	4.6200e-003	0.0000	4.6200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6000e-004	3.2800e-003	0.0327	6.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	7.6000e-004	3.2800e-003	0.0327	6.0000e-005	9.5600e-003	1.0000e-004	9.6600e-003	4.6200e-003	1.0000e-004	4.7200e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751

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	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
Worker	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1874	0.1874	1.0000e-005	1.0000e-005	0.1891
Total	8.0000e-005	5.0000e-005	6.7000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1874	0.1874	1.0000e-005	1.0000e-005	0.1891

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2023****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	0.1619	1.2875	1.3433	2.3600e-003		0.0580	0.0580		0.0556	0.0556	0.0000	196.2785	196.2785	0.0371	0.0000	197.2064
Total	0.1619	1.2875	1.3433	2.3600e-003		0.0580	0.0580		0.0556	0.0556	0.0000	196.2785	196.2785	0.0371	0.0000	197.2064

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	1.7300e-003	0.0675	0.0221	3.1000e-004	9.9500e-003	4.0000e-004	0.0104	2.8800e-003	3.8000e-004	3.2600e-003	0.0000	30.2973	30.2973	6.1000e-004	4.3800e-003	31.6192
Worker	0.0106	7.2900e-003	0.0914	2.7000e-004	0.0322	1.6000e-004	0.0324	8.5700e-003	1.5000e-004	8.7200e-003	0.0000	25.3803	25.3803	7.5000e-004	7.1000e-004	25.6101
Total	0.0124	0.0747	0.1134	5.8000e-004	0.0422	5.6000e-004	0.0427	0.0115	5.3000e-004	0.0120	0.0000	55.6776	55.6776	1.3600e-003	5.0900e-003	57.2293

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.0311	0.3658	1.4114	2.3600e-003		3.3200e-003	3.3200e-003		3.3200e-003	3.3200e-003	0.0000	196.2782	196.2782	0.0371	0.0000	197.2062
Total	0.0311	0.3658	1.4114	2.3600e-003		3.3200e-003	3.3200e-003		3.3200e-003	3.3200e-003	0.0000	196.2782	196.2782	0.0371	0.0000	197.2062

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	1.7300e-003	0.0675	0.0221	3.1000e-004	9.9500e-003	4.0000e-004	0.0104	2.8800e-003	3.8000e-004	3.2600e-003	0.0000	30.2973	30.2973	6.1000e-004	4.3800e-003	31.6192
Worker	0.0106	7.2900e-003	0.0914	2.7000e-004	0.0322	1.6000e-004	0.0324	8.5700e-003	1.5000e-004	8.7200e-003	0.0000	25.3803	25.3803	7.5000e-004	7.1000e-004	25.6101
Total	0.0124	0.0747	0.1134	5.8000e-004	0.0422	5.6000e-004	0.0427	0.0115	5.3000e-004	0.0120	0.0000	55.6776	55.6776	1.3600e-003	5.0900e-003	57.2293

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Building Construction - 2024****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	0.0248	0.1988	0.2186	3.9000e-004		8.3400e-003	8.3400e-003		7.9900e-003	7.9900e-003	0.0000	32.1957	32.1957	6.0000e-003	0.0000	32.3456
Total	0.0248	0.1988	0.2186	3.9000e-004		8.3400e-003	8.3400e-003		7.9900e-003	7.9900e-003	0.0000	32.1957	32.1957	6.0000e-003	0.0000	32.3456

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	2.8000e-004	0.0111	3.5300e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	6.0000e-005	5.3000e-004	0.0000	4.9011	4.9011	1.0000e-004	7.1000e-004	5.1143
Worker	1.6300e-003	1.0700e-003	0.0140	4.0000e-005	5.2900e-003	3.0000e-005	5.3100e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	4.0592	4.0592	1.1000e-004	1.1000e-004	4.0942
Total	1.9100e-003	0.0121	0.0175	9.0000e-005	6.9200e-003	1.0000e-004	7.0100e-003	1.8800e-003	8.0000e-005	1.9600e-003	0.0000	8.9603	8.9603	2.1000e-004	8.2000e-004	9.2086

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	5.1100e-003	0.0600	0.2315	3.9000e-004		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	32.1956	32.1956	6.0000e-003	0.0000	32.3455
Total	5.1100e-003	0.0600	0.2315	3.9000e-004		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	32.1956	32.1956	6.0000e-003	0.0000	32.3455

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	2.8000e-004	0.0111	3.5300e-003	5.0000e-005	1.6300e-003	7.0000e-005	1.7000e-003	4.7000e-004	6.0000e-005	5.3000e-004	0.0000	4.9011	4.9011	1.0000e-004	7.1000e-004	5.1143
Worker	1.6300e-003	1.0700e-003	0.0140	4.0000e-005	5.2900e-003	3.0000e-005	5.3100e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	4.0592	4.0592	1.1000e-004	1.1000e-004	4.0942
Total	1.9100e-003	0.0121	0.0175	9.0000e-005	6.9200e-003	1.0000e-004	7.0100e-003	1.8800e-003	8.0000e-005	1.9600e-003	0.0000	8.9603	8.9603	2.1000e-004	8.2000e-004	9.2086

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Paving - 2024****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	4.2100e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7574	7.7574	2.4600e-003	0.0000	7.8188
Paving	6.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.8500e-003	0.0405	0.0585	9.0000e-005		1.9800e-003	1.9800e-003		1.8300e-003	1.8300e-003	0.0000	7.7574	7.7574	2.4600e-003	0.0000	7.8188

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	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
Worker	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4568	0.4568	1.0000e-005	1.0000e-005	0.4607
Total	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4568	0.4568	1.0000e-005	1.0000e-005	0.4607

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	1.3500e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7573	7.7573	2.4600e-003	0.0000	7.8188
Paving	6.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.9900e-003	6.4000e-003	0.0664	9.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	7.7573	7.7573	2.4600e-003	0.0000	7.8188

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	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
Worker	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4568	0.4568	1.0000e-005	1.0000e-005	0.4607
Total	1.8000e-004	1.2000e-004	1.5700e-003	0.0000	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4568	0.4568	1.0000e-005	1.0000e-005	0.4607

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****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					
Archit. Coating	0.0532					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0541	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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	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
Worker	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2741	0.2741	1.0000e-005	1.0000e-005	0.2764
Total	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2741	0.2741	1.0000e-005	1.0000e-005	0.2764

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
Archit. Coating	0.0532					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	0.0534	6.4000e-004	9.1600e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784

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	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
Worker	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2741	0.2741	1.0000e-005	1.0000e-005	0.2764
Total	1.1000e-004	7.0000e-005	9.4000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2741	0.2741	1.0000e-005	1.0000e-005	0.2764

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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					
Mitigated	0.0397	0.0438	0.3631	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	69.6682	69.6682	4.5600e-003	3.3100e-003	70.7697
Unmitigated	0.0397	0.0438	0.3631	7.4000e-004	0.0797	5.6000e-004	0.0803	0.0213	5.2000e-004	0.0218	0.0000	69.6682	69.6682	4.5600e-003	3.3100e-003	70.7697

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	94.40	95.40	85.50	215,420	215,420
Total	94.40	95.40	85.50	215,420	215,420

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372
Other Asphalt Surfaces	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372
Other Non-Asphalt Surfaces	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372
Single Family Housing	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.2266	7.2266	1.1700e-003	1.4000e-004	7.2981
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.2266	7.2266	1.1700e-003	1.4000e-004	7.2981
Natural Gas Mitigated	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

NaturalGas Unmitigated	2.0800e- 003	0.0178	7.5700e- 003	1.1000e- 004		1.4400e- 003	1.4400e- 003		1.4400e- 003	1.4400e- 003	0.0000	20.5937	20.5937	3.9000e- 004	3.8000e- 004	20.7161
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Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Other Asphalt Surfaces	0	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
Other Non-Asphalt Surfaces	0	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
Single Family Housing	385911	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161
Total		2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Mitigated**

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Other Asphalt Surfaces	0	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
Other Non- Asphalt Surfaces	0	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
Single Family Housing	385911	2.0800e- 003	0.0178	7.5700e- 003	1.1000e- 004		1.4400e- 003	1.4400e- 003		1.4400e- 003	1.4400e- 003	0.0000	20.5937	20.5937	3.9000e- 004	3.8000e- 004	20.7161
Total		2.0800e- 003	0.0178	7.5700e- 003	1.1000e- 004		1.4400e- 003	1.4400e- 003		1.4400e- 003	1.4400e- 003	0.0000	20.5937	20.5937	3.9000e- 004	3.8000e- 004	20.7161

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	78105.2		7.2266	1.1700e- 003	1.4000e- 004	7.2981
Total			7.2266	1.1700e- 003	1.4000e- 004	7.2981

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Mitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	78105.2		7.2266	1.1700e-003	1.4000e-004	7.2981
Total			7.2266	1.1700e-003	1.4000e-004	7.2981

6.0 Area Detail**6.1 Mitigation Measures Area**

	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					
Mitigated	0.1832 Appendix A	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated	0.1832	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896
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6.2 Area by SubCategory**Unmitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0187					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0589	1.2900e-003	0.0857	1.8000e-004		0.0124	0.0124		0.0124	0.0124	1.2711	0.3121	1.5832	2.4000e-003	7.0000e-005	1.6649
Landscaping	2.2500e-003	8.6000e-004	0.0744	0.0000		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	0.1217	0.1217	1.2000e-004	0.0000	0.1247
Total	0.1831	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Mitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0187					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0589	1.2900e-003	0.0857	1.8000e-004		0.0124	0.0124		0.0124	0.0124	1.2711	0.3121	1.5832	2.4000e-003	7.0000e-005	1.6649
Landscaping	2.2500e-003	8.6000e-004	0.0744	0.0000		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	0.1217	0.1217	1.2000e-004	0.0000	0.1247
Total	0.1831	2.1500e-003	0.1601	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7896

7.0 Water Detail**7.1 Mitigation Measures Water**

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		1.3026	0.0214	5.2000e-004	1.9935

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated		1.3026	0.0214	5.2000e-004	1.9935
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7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 1.96594		0.6366	1.0000e-004	1.0000e-005	0.6429
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.65154 / 0.410754		0.6659	0.0213	5.1000e-004	1.3506
Total			1.3026	0.0214	5.2000e-004	1.9935

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Mitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 1.96594		0.6366	1.0000e-004	1.0000e-005	0.6429
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.65154 / 0.410754		0.6659	0.0213	5.1000e-004	1.3506
Total			1.3026	0.0214	5.2000e-004	1.9935

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated	2.5000	0.1478	0.0000	6.1958	

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated		2.5009	0.1478	0.0000	6.1958
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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.14		0.0284	1.6800e-003	0.0000	0.0704
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.18		2.4724	0.1461	0.0000	6.1253
Total			2.5009	0.1478	0.0000	6.1958

Walnut Creek Walnut Blvd Residential Project Mitigated Scenario - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Mitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.14		0.0284	1.6800e-003	0.0000	0.0704
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.18		2.4724	0.1461	0.0000	6.1253
Total			2.5009	0.1478	0.0000	6.1958

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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Appendix A

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number
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11.0 Vegetation

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Walnut Creek Walnut Blvd Residential Project Operation 2030****Contra Costa County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	19.60	1000sqft	0.45	19,602.00	0
Other Asphalt Surfaces	1.62	1000sqft	0.04	1,618.00	0
Other Non-Asphalt Surfaces	0.93	1000sqft	0.02	927.00	0
City Park	1.65	Acre	1.65	71,948.00	0
Single Family Housing	10.00	Dwelling Unit	0.78	25,899.00	29

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	5			Operational Year	2030
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The model includes operation of the proposed residential project in year 2030 for GHG estimation.

Land Use - Based on applicant-provided information, the project site includes a 2.88-acre site and 2,545 square-foot of frontage construction.

Construction Phase - Only operational emissions are estimated in this model.

Off-road Equipment - Only operational emissions are estimated in this model.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Only the proposed single family homes will generate operational trips. CalEEMod default trip rate is used.

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Woodstoves -

Construction Off-road Equipment Mitigation - BAAQMD dust control measures.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	0.00
tblLandUse	LandUseSquareFeet	1,620.00	1,618.00
tblLandUse	LandUseSquareFeet	19,600.00	19,602.00
tblLandUse	LandUseSquareFeet	930.00	927.00
tblLandUse	LandUseSquareFeet	71,874.00	71,948.00
tblLandUse	LandUseSquareFeet	18,000.00	25,899.00
tblLandUse	LotAcreage	3.25	0.78
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

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					
2024	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
Maximum	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

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2024	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
Maximum	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

	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)
Appendix A				

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Highest

2.2 Overall Operational**Unmitigated Operational**

	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					
Area	0.1831	2.1500e-003	0.1600	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7895
Energy	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	27.8203	27.8203	1.5600e-003	5.2000e-004	28.0141
Mobile	0.0313	0.0326	0.2943	6.3000e-004	0.0798	4.2000e-004	0.0802	0.0213	3.9000e-004	0.0217	0.0000	57.7127	57.7127	3.5900e-003	2.7300e-003	58.6156
Waste						0.0000	0.0000		0.0000	0.0000	2.5009	0.0000	2.5009	0.1478	0.0000	6.1958
Water						0.0000	0.0000		0.0000	0.0000	0.2067	1.0958	1.3026	0.0214	5.2000e-004	1.9935
Total	0.2165	0.0525	0.4619	9.2000e-004	0.0798	0.0146	0.0944	0.0213	0.0146	0.0359	3.9787	87.0627	91.0413	0.1769	3.8400e-003	96.6086

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Operational**

	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					
Area	0.1831	2.1500e-003	0.1600	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7895
Energy	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	27.8203	27.8203	1.5600e-003	5.2000e-004	28.0141
Mobile	0.0313	0.0326	0.2943	6.3000e-004	0.0798	4.2000e-004	0.0802	0.0213	3.9000e-004	0.0217	0.0000	57.7127	57.7127	3.5900e-003	2.7300e-003	58.6156
Waste						0.0000	0.0000		0.0000	0.0000	2.5009	0.0000	2.5009	0.1478	0.0000	6.1958
Water						0.0000	0.0000		0.0000	0.0000	0.2067	1.0958	1.3026	0.0214	5.2000e-004	1.9935
Total	0.2165	0.0525	0.4619	9.2000e-004	0.0798	0.0146	0.0944	0.0213	0.0146	0.0359	3.9787	87.0627	91.0413	0.1769	3.8400e-003	96.6086

	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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	2/27/2024	2/26/2024	5	0	

Acres of Grading (Site Preparation Phase): 0

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.51****Residential Indoor: 52,445; Residential Outdoor: 17,482; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 1,329 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

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
Architectural Coating	0	9.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Architectural Coating - 2024**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					
Archit. Coating	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
Off-Road	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	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
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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	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
Worker	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
Total	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Archit. Coating	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
Off-Road	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
Total	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

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	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
Worker	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
Total	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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					
Mitigated	0.0313	0.0326	0.2943	6.3000e-004	0.0798	4.2000e-004	0.0802	0.0213	3.9000e-004	0.0217	0.0000	57.7127	57.7127	3.5900e-003	2.7300e-003	58.6156
Unmitigated	0.0313	0.0326	0.2943	6.3000e-004	0.0798	4.2000e-004	0.0802	0.0213	3.9000e-004	0.0217	0.0000	57.7127	57.7127	3.5900e-003	2.7300e-003	58.6156

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	94.40	95.40	85.50	215,420	215,420
Total	94.40	95.40	85.50	215,420	215,420

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Appendix A									

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.577637	0.055806	0.175331	0.118814	0.021880	0.005573	0.007435	0.007088	0.000537	0.000305	0.024935	0.001797	0.002862
Other Asphalt Surfaces	0.577637	0.055806	0.175331	0.118814	0.021880	0.005573	0.007435	0.007088	0.000537	0.000305	0.024935	0.001797	0.002862
Other Non-Asphalt Surfaces	0.577637	0.055806	0.175331	0.118814	0.021880	0.005573	0.007435	0.007088	0.000537	0.000305	0.024935	0.001797	0.002862
Single Family Housing	0.577637	0.055806	0.175331	0.118814	0.021880	0.005573	0.007435	0.007088	0.000537	0.000305	0.024935	0.001797	0.002862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.2266	7.2266	1.1700e-003	1.4000e-004	7.2981
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.2266	7.2266	1.1700e-003	1.4000e-004	7.2981
Natural Gas Mitigated	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

NaturalGas Unmitigated	2.0800e- 003	0.0178	7.5700e- 003	1.1000e- 004		1.4400e- 003	1.4400e- 003		1.4400e- 003	1.4400e- 003	0.0000	20.5937	20.5937	3.9000e- 004	3.8000e- 004	20.7161
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Other Asphalt Surfaces	0	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
Other Non-Asphalt Surfaces	0	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
Single Family Housing	385911	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161
Total		2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Natural Gas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	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
Other Asphalt Surfaces	0	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
Other Non-Asphalt Surfaces	0	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
Single Family Housing	385911	2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161
Total		2.0800e-003	0.0178	7.5700e-003	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.5937	20.5937	3.9000e-004	3.8000e-004	20.7161

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	78105.2		7.2266	1.1700e- 003	1.4000e- 004	7.2981
Total			7.2266	1.1700e- 003	1.4000e- 004	7.2981

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	78105.2		7.2266	1.1700e-003	1.4000e-004	7.2981
Total			7.2266	1.1700e-003	1.4000e-004	7.2981

6.0 Area Detail**6.1 Mitigation Measures Area**

	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					
Mitigated	0.1831 Appendix A	2.1500e-003	0.1600	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7895

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.1831	2.1500e-003	0.1600	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7895
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6.2 Area by SubCategory**Unmitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0187					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0589	1.2900e-003	0.0857	1.8000e-004		0.0124	0.0124		0.0124	0.0124	1.2711	0.3121	1.5832	2.4000e-003	7.0000e-005	1.6649
Landscaping	2.2300e-003	8.6000e-004	0.0743	0.0000		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	0.1217	0.1217	1.2000e-004	0.0000	0.1246
Total	0.1831	2.1500e-003	0.1600	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7895

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0187					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1033					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0589	1.2900e-003	0.0857	1.8000e-004		0.0124	0.0124		0.0124	0.0124	1.2711	0.3121	1.5832	2.4000e-003	7.0000e-005	1.6649
Landscaping	2.2300e-003	8.6000e-004	0.0743	0.0000		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	0.1217	0.1217	1.2000e-004	0.0000	0.1246
Total	0.1831	2.1500e-003	0.1600	1.8000e-004		0.0128	0.0128		0.0128	0.0128	1.2711	0.4338	1.7049	2.5200e-003	7.0000e-005	1.7895

7.0 Water Detail**7.1 Mitigation Measures Water**

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		1.3026	0.0214	5.2000e-004	1.9935

Appendix A

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated		1.3026	0.0214	5.2000e-004	1.9935
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7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 1.96594		0.6366	1.0000e-004	1.0000e-005	0.6429
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.65154 / 0.410754		0.6659	0.0213	5.1000e-004	1.3506
Total			1.3026	0.0214	5.2000e-004	1.9935

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 1.96594		0.6366	1.0000e-004	1.0000e-005	0.6429
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.65154 / 0.410754		0.6659	0.0213	5.1000e-004	1.3506
Total			1.3026	0.0214	5.2000e-004	1.9935

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated	2.5000	0.1478	0.0000	6.1958	

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated		2.5009	0.1478	0.0000	6.1958
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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.14		0.0284	1.6800e-003	0.0000	0.0704
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.18		2.4724	0.1461	0.0000	6.1253
Total			2.5009	0.1478	0.0000	6.1958

Walnut Creek Walnut Blvd Residential Project Operation 2030 - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.14		0.0284	1.6800e-003	0.0000	0.0704
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Single Family Housing	12.18		2.4724	0.1461	0.0000	6.1253
Total			2.5009	0.1478	0.0000	6.1958

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number
----------------	--------

11.0 Vegetation

Walnut Blvd Residential Project Unmitigated Construction Emissions for HRA

Annual Construction Emissions (tons)
(as taken from CalEEMod)

	PM _{2.5} (Exhaust)
Onsite	0.00633
Offsite	0.00002
Demolition (2023)	0.00635
Onsite	0.00075
Offsite	-
Bldg B Site Preparation (2023)	0.00075
Onsite	0.00167
Offsite	-
Bldg B Grading (2023)	0.00167
Onsite	0.05560
Offsite	0.00053
Bldg A Building Construction (2023)	0.05613
Onsite	0.00799
Offsite	0.00008
Bldg B Building Construction (2023)	0.00807
Onsite	0.00183
Offsite	-
Bldg A Building Construction (2024)	0.00183
Onsite	0.00030
Offsite	-
Bldg B Building Construction (2024)	0.00030
Total Onsite	7.45E-02
Total Offsite	6.30E-04

Exhaust PM_{2.5}

Elapsed Days	376
Construction Hours	3,008.00 8 hours/day
Elapsed Hours	9,024.00 24 hours/day
Construction Year	1.03
Variable Factor	4.20 Applied in AERMOD
On-Site Emissions	148.94 pounds
	67,557.99 grams
	7.486E+00 grams/hours
	2.080E-03 grams/sec
	144.58 pounds/year
	0.0165 pounds/hour
Off-Site Emissions	1.26 pounds
	571.53 grams
	6.333E-02 grams/hour
	1.759E-05 grams/sec
	1.223 pounds/year
	1.396E-04 pounds/hour

Applied in HARP2

Applied in HARP2

Mitigation Applied

Mitigation Description

BAAQMD Dust Control BMPs.

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	PM _{2.5} (Exhaust) Emission Rate (g/sec)
Walnut Blvd	0.7	100.00%	1.781E-06
Totals	0.7	100.00%	1.781E-06
Notes:			
¹ Conversion factor of 453.592 grams/pound was used to convert daily emissions expressed in pounds to daily emissions expressed in grams.			
² Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site.			

Applied in HARP2
pounds/year pounds/hour
1.238E-01 1.413E-05

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Phase Name	Days	Vendor Trip Number (Daily)	Hauling Trip Number (Total)	Vendor Trip Length	Hauling Trip Length
Demolition	20	0	30	7.3	20
Site Preparation	3	0	0	7.3	20
Grading	6	0	0	7.3	20
Building Construction	220	16	0	7.3	20
Paving	10	0	0	7.3	20
Architectural Coating	10	0	0	7.3	20
Totals		3,520	30		

Diesel-Fueled Vehicle Results		
	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	3,520.00	25,696.00
Hauling Trucks	30	600
Total VMT		26,296

AERMOD 1,000-ft Radius Adjustment		
	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	3,520.00	2,638.91
Hauling Trucks	30	22
Total VMT		2,661.40

Proportion of off-site emissions potentially occurring within 1,000 of project site:	10.1209%
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Walnut Blvd Residential Project Mitigated Construction Emissions for HRA

Annual Construction Emissions (tons)
(as taken from CalEEMod)

	PM _{2.5} (Exhaust)
Onsite	0.00037
Offsite	0.00002
Demolition (2023)	0.00039
Onsite	0.00006
Offsite	-
Site Preparation (2023)	0.00006
Onsite	0.00010
Offsite	-
Grading (2023)	0.00010
Onsite	0.00332
Offsite	0.00053
Building Construction (2023)	0.00385
Onsite	0.00055
Offsite	0.00008
Building Construction (2024)	0.00063
Onsite	0.00021
Offsite	-
Paving	0.00021
Onsite	0.00002
Offsite	-
Arch Coating	0.00002
Total Onsite	4.63E-03
Total Offsite	6.30E-04

Exhaust PM_{2.5}

Elapsed Days	376
Construction Hours	3,008.00 8 hours/day
Elapsed Hours	9,024.00 24 hours/day
Construction Year	1.03
Variable Factor	4.20 Applied in AERMOD
On-Site Emissions	9.26 pounds 4,200.26 grams 4.655E-01 grams/hours 1.293E-04 grams/sec 8.99 pounds/year 0.0010 pounds/hour
Off-Site Emissions	1.26 pounds 571.53 grams 6.333E-02 grams/hour 1.759E-05 grams/sec 1.223 pounds/year 1.396E-04 pounds/hour

Applied in HARP2

Applied in HARP2

Mitigation Applied

Mitigation Description

BAAQMD Dust Control BMPs.

All equipment >= 25 hp needs to use Tier 4 Final Engines

Off-Site AERMOD Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	PM _{2.5} (Exhaust) Emission Rate (g/sec)
Walnut Blvd	0.5	100.00%	1.187E-06
Totals	0.5	100.00%	1.187E-06
Notes:			
¹ Conversion factor of 453.592 grams/pound was used to convert daily emissions expressed in pounds to daily emissions expressed in grams.			
² Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site.			

Applied in HARP2
pounds/year pounds/hour
8.251E-02 9.419E-06

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Phase Name	Days	Vendor Trip Number (Daily)	Hauling Trip Number (Total)	Vendor Trip Length	Hauling Trip Length
Demolition	20	0	30	7.3	20
Site Preparation	3	0	0	7.3	20
Grading	6	0	0	7.3	20
Building Construction	220	16	0	7.3	20
Paving	10	0	0	7.3	20
Architectural Coating	10	0	0	7.3	20
Totals		3,520	30		

Diesel-Fueled Vehicle Results		
	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	3,520.00	25,696.00
Hauling Trucks	30	600
Total VMT		26,296

AERMOD 1,000-ft Radius Adjustment		
	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	3,520.00	1,758.91
Hauling Trucks	30	15
Total VMT		1,773.90

Proportion of off-site emissions potentially occurring within 1,000 of project site:	6.7459%
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HARP2 - HRACalc (dated 22118) 11/18/2022 10:46:21 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.1

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25
0<2 Years Bin: 1.1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: OFF

16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Mixed

HOME GROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden

Fraction leafy: 0.137

Fraction exposed: 0.137

Fraction protected: 0.137

Fraction root: 0.137

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_CancerRisk.csv

Cancer risk total by receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_CancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_NCChronicRisk.csv

Chronic risk total by receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_NCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_NCAcuteRisk.csv

Acute risk total by receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_NCAcuteRiskSumByRec.csv

HRA ran successfully

HARP2 - HRACalc (dated 22118) 11/19/2022 12:56:45 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1.1

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25
0<2 Years Bin: 1.1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: OFF

16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Mixed

HOME GROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden

Fraction leafy: 0.137

Fraction exposed: 0.137

Fraction protected: 0.137

Fraction root: 0.137

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITCancerRisk.csv

Cancer risk total by receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITCancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITNCChronicRisk.csv

Chronic risk total by receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITNCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITNCAcuteRisk.csv

Acute risk total by receptor saved to:

C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITNCAcuteRiskSumByRec.csv

HRA ran successfully

Walnut Blvd Residential Project - Unmitigated Construction

Summary of HARP2 Results

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	7.6656E-05	77	7.8917E-02	0.00E+00
	X	Y	CONC	
MIR UTM	584148.60	4194650.54	0.394584	
Latitude, Longitude: 37.89548°N -122.04293°E				
Receptor # 2				

*HARP - HRACalc v22118 11/18/2022 10:46:21 PM - Cancer Risk - Input File: C:\AERMOD\WalnutBlvd\HARP2\CON_HRA\hra\CON_HRAInput.hra

SCENARIO 1.1YrCancerHighEnd_InhSoilDermMMilkCrops

POLID 9901

POLABBREV DieselExhPM

Sorted and show the highest 100 receptors

REC	GRP	X	Y	CONC	RISK_SUM	MAXHI NonCancerChronic	MAXHI Acute
	2 HOME	584148.6	4194650.54	0.394584	7.67E-05	7.89E-02	0.00E+00
21	HOME	584267.73	4194612.01	0.3537438	6.87E-05	7.07E-02	0.00E+00
1	HOME	584131.99	4194641.78	0.3227472	6.27E-05	6.45E-02	0.00E+00
26	HOME	584145.09	4194570.82	0.3178026	6.17E-05	6.36E-02	0.00E+00
12	HOME	584247.92	4194564.62	0.2705967	5.26E-05	5.41E-02	0.00E+00
25	HOME	584120.35	4194571.93	0.2597904	5.05E-05	5.20E-02	0.00E+00
8	HOME	584260.24	4194693.45	0.2473786	4.81E-05	4.95E-02	0.00E+00
24	HOME	584099.44	4194577.51	0.2268894	4.41E-05	4.54E-02	0.00E+00
10	HOME	584233.23	4194555.04	0.2256521	4.38E-05	4.51E-02	0.00E+00
22	HOME	584293.21	4194643.02	0.223081	4.33E-05	4.46E-02	0.00E+00
86	HOME	584090.17	4194617.13	0.1938239	3.77E-05	3.88E-02	0.00E+00
13	HOME	584244.73	4194550.57	0.1844306	3.58E-05	3.69E-02	0.00E+00
7	HOME	584263	4194703.6	0.1651432	3.21E-05	3.30E-02	0.00E+00
50	HOME	584106.86	4194652.3	0.1604528	3.12E-05	3.21E-02	0.00E+00
6	HOME	584252.39	4194710.98	0.1585241	3.08E-05	3.17E-02	0.00E+00
87	HOME	584080.27	4194625.79	0.1535796	2.98E-05	3.07E-02	0.00E+00
28	HOME	584154.66	4194541.11	0.1489199	2.89E-05	2.98E-02	0.00E+00
39	HOME	584280.56	4194549.62	0.1476705	2.87E-05	2.95E-02	0.00E+00
98	HOME	584053.14	4194597.02	0.1391092	2.70E-05	2.78E-02	0.00E+00
9	HOME	584272.69	4194703.6	0.1367707	2.66E-05	2.74E-02	0.00E+00
11	HOME	584256.86	4194541.63	0.1356316	2.63E-05	2.71E-02	0.00E+00
85	HOME	584042.21	4194585.88	0.132112	2.57E-05	2.64E-02	0.00E+00
23	HOME	584319.69	4194670.9	0.1276591	2.48E-05	2.55E-02	0.00E+00
3	HOME	584195.65	4194704.98	0.1149575	2.23E-05	2.30E-02	0.00E+00
40	HOME	584328.91	4194561.21	0.113887	2.21E-05	2.28E-02	0.00E+00
27	HOME	584185.38	4194538.09	0.113809	2.21E-05	2.28E-02	0.00E+00
90	HOME	584063.56	4194636	0.1086089	2.11E-05	2.17E-02	0.00E+00
5	HOME	584203.95	4194711.9	0.1002109	1.95E-05	2.00E-02	0.00E+00
14	HOME	584225.81	4194719.67	0.09346122	1.82E-05	1.87E-02	0.00E+00
96	HOME	584012.92	4194613.11	0.08276787	1.61E-05	1.66E-02	0.00E+00
32	HOME	584063.51	4194496.29	0.07769792	1.51E-05	1.55E-02	0.00E+00
561	HOME	584127.27	4194510.11	0.07536513	1.46E-05	1.51E-02	0.00E+00
42	HOME	584388.34	4194583.37	0.07498484	1.46E-05	1.50E-02	0.00E+00
51	HOME	584084.7	4194674.46	0.07435202	1.44E-05	1.49E-02	0.00E+00
31	HOME	584126.96	4194508.88	0.07342774	1.43E-05	1.47E-02	0.00E+00
30	HOME	584183.87	4194522.48	0.07157884	1.39E-05	1.43E-02	0.00E+00
4	HOME	584195.65	4194718.82	0.06907132	1.34E-05	1.38E-02	0.00E+00
155	PARK	583951.2	4194505.05	0.06078915	1.18E-05	1.22E-02	0.00E+00
36	HOME	584238.85	4194514.74	0.06061422	1.18E-05	1.21E-02	0.00E+00
278	PARK	583953.57	4194501.29	0.05984347	1.16E-05	1.20E-02	0.00E+00

277 PARK	583947.35	4194505.94	0.05956054	1.16E-05	1.19E-02	0.00E+00
52 HOME	584076.14	4194681.51	0.05954868	1.16E-05	1.19E-02	0.00E+00
279 PARK	583955.94	4194497.54	0.05874851	1.14E-05	1.17E-02	0.00E+00
154 PARK	583943.5	4194506.83	0.05830106	1.13E-05	1.17E-02	0.00E+00
64 HOME	584350.49	4194699.84	0.05792634	1.13E-05	1.16E-02	0.00E+00
280 PARK	583958.31	4194493.79	0.05754798	1.12E-05	1.15E-02	0.00E+00
37 HOME	584284.85	4194510.01	0.05725275	1.11E-05	1.15E-02	0.00E+00
38 HOME	584331.65	4194516.32	0.05706389	1.11E-05	1.14E-02	0.00E+00
276 PARK	583938.62	4194507.77	0.05704527	1.11E-05	1.14E-02	0.00E+00
43 HOME	584364.67	4194526.96	0.05680281	1.10E-05	1.14E-02	0.00E+00
281 PARK	583960.69	4194490.03	0.05632076	1.09E-05	1.13E-02	0.00E+00
53 HOME	584414.07	4194588.85	0.05584014	1.08E-05	1.12E-02	0.00E+00
275 PARK	583933.74	4194508.71	0.05574428	1.08E-05	1.11E-02	0.00E+00
63 HOME	584358.86	4194693.65	0.05557496	1.08E-05	1.11E-02	0.00E+00
282 PARK	583963.06	4194486.28	0.05506339	1.07E-05	1.10E-02	0.00E+00
274 PARK	583928.85	4194509.65	0.05438662	1.06E-05	1.09E-02	0.00E+00
46 HOME	584391.36	4194537.54	0.0543774	1.06E-05	1.09E-02	0.00E+00
97 HOME	583990.03	4194635.39	0.05383927	1.05E-05	1.08E-02	0.00E+00
156 PARK	583965.43	4194482.52	0.05377809	1.04E-05	1.08E-02	0.00E+00
273 PARK	583923.97	4194510.59	0.05301753	1.03E-05	1.06E-02	0.00E+00
283 PARK	583966.91	4194478.57	0.05204386	1.01E-05	1.04E-02	0.00E+00
29 HOME	584211.06	4194510.89	0.05167428	1.00E-05	1.03E-02	0.00E+00
272 PARK	583919.09	4194511.54	0.05161004	1.00E-05	1.03E-02	0.00E+00
284 PARK	583968.39	4194474.62	0.05031482	9.77E-06	1.01E-02	0.00E+00
271 PARK	583914.21	4194512.48	0.05020172	9.75E-06	1.00E-02	0.00E+00
270 PARK	583909.32	4194513.42	0.04887356	9.49E-06	9.77E-03	0.00E+00
285 PARK	583969.88	4194470.67	0.04861653	9.44E-06	9.72E-03	0.00E+00
35 HOME	584241.27	4194504.35	0.04841697	9.41E-06	9.68E-03	0.00E+00
48 HOME	584412.01	4194542.07	0.04833095	9.39E-06	9.67E-03	0.00E+00
44 HOME	584367.19	4194515.38	0.0480389	9.33E-06	9.61E-03	0.00E+00
269 PARK	583904.44	4194514.36	0.04752301	9.23E-06	9.50E-03	0.00E+00
286 PARK	583971.36	4194466.71	0.04690521	9.11E-06	9.38E-03	0.00E+00
45 HOME	584379.27	4194517.39	0.04680998	9.09E-06	9.36E-03	0.00E+00
268 PARK	583899.56	4194515.3	0.046154	8.97E-06	9.23E-03	0.00E+00
47 HOME	584396.4	4194525.45	0.04592584	8.92E-06	9.19E-03	0.00E+00
287 PARK	583972.84	4194462.76	0.0452591	8.79E-06	9.05E-03	0.00E+00
267 PARK	583894.68	4194516.24	0.04478671	8.70E-06	8.96E-03	0.00E+00
157 PARK	583974.32	4194458.81	0.04347967	8.45E-06	8.70E-03	0.00E+00
266 PARK	583889.79	4194517.18	0.04339544	8.43E-06	8.68E-03	0.00E+00
61 HOME	584435.22	4194614.03	0.04300931	8.36E-06	8.60E-03	0.00E+00
60 HOME	584438.75	4194601.44	0.04278104	8.31E-06	8.56E-03	0.00E+00
265 PARK	583884.91	4194518.12	0.04200385	8.16E-06	8.40E-03	0.00E+00
288 PARK	583976.89	4194455.25	0.04178151	8.12E-06	8.36E-03	0.00E+00
18 HOME	584242.41	4194750.96	0.04162236	8.09E-06	8.32E-03	0.00E+00
264 PARK	583880.03	4194519.07	0.04148135	8.06E-06	8.30E-03	0.00E+00
263 PARK	583875.15	4194520.01	0.04120557	8.01E-06	8.24E-03	0.00E+00
262 PARK	583870.26	4194520.95	0.04090223	7.95E-06	8.18E-03	0.00E+00
49 HOME	584415.79	4194521.34	0.04079845	7.93E-06	8.16E-03	0.00E+00
16 HOME	584260.29	4194757.34	0.04078154	7.92E-06	8.16E-03	0.00E+00
261 PARK	583865.38	4194521.89	0.04057338	7.88E-06	8.11E-03	0.00E+00
54 HOME	584438.24	4194547.05	0.04039621	7.85E-06	8.08E-03	0.00E+00
15 HOME	584212.4	4194742.66	0.04033522	7.84E-06	8.07E-03	0.00E+00
153 PARK	583860.5	4194522.83	0.04021557	7.81E-06	8.04E-03	0.00E+00
66 HOME	584367.95	4194715.85	0.04008465	7.79E-06	8.02E-03	0.00E+00
289 PARK	583979.46	4194451.7	0.04005811	7.78E-06	8.01E-03	0.00E+00
260 PARK	583858.37	4194518.68	0.04003194	7.78E-06	8.01E-03	0.00E+00
259 PARK	583856.23	4194514.53	0.03978413	7.73E-06	7.96E-03	0.00E+00
258 PARK	583854.1	4194510.38	0.0394789	7.67E-06	7.90E-03	0.00E+00
34 HOME	584212.57	4194495.79	0.03943068	7.66E-06	7.89E-03	0.00E+00
257 PARK	583851.96	4194506.23	0.03903199	7.58E-06	7.81E-03	0.00E+00

Walnut Blvd Residential Project - Mitigated Construction

Summary of HARP2 Results

	RISK_SUM	Cancer Risk/million	MAXHI NonCancer Chronic	MAXHI Acute
Maximum Risk	4.7800E-06	5	4.9197E-03	0.00E+00
	X	Y	CONC	
MIR UTM	584148.60	4194650.54	0.02459858	
Latitude, Longitude: 37.89548°N -122.04293°E				
Receptor # 2				

*HARP - HRACalc v22118 11/19/2022 12:56:45 AM - Cancer Risk - Input File: C:\AERMOD\WalnutBlvd\HARP2\CON_HRA_MIT\hra\CON_MITHRAInput.hra

SCENARIO 1.1YrCancerHighEnd_InhSoilDermMMilkCrops

POLID 9901

POLABBREV DieselExhPM

Sorted and show the highest 100 receptors

REC	GRP	X	Y	CONC	RISK_SUM	MAXHI NonCancerChronic	MAXHI Acute
2	HOME	584148.6	4194650.54	0.02459858	4.78E-06	4.92E-03	0.00E+00
21	HOME	584267.73	4194612.01	0.02203374	4.28E-06	4.41E-03	0.00E+00
1	HOME	584131.99	4194641.78	0.02016002	3.92E-06	4.03E-03	0.00E+00
26	HOME	584145.09	4194570.82	0.01984518	3.86E-06	3.97E-03	0.00E+00
12	HOME	584247.92	4194564.62	0.01691051	3.29E-06	3.38E-03	0.00E+00
25	HOME	584120.35	4194571.93	0.01621236	3.15E-06	3.24E-03	0.00E+00
8	HOME	584260.24	4194693.45	0.01540171	2.99E-06	3.08E-03	0.00E+00
10	HOME	584233.23	4194555.04	0.01414887	2.75E-06	2.83E-03	0.00E+00
24	HOME	584099.44	4194577.51	0.01415781	2.75E-06	2.83E-03	0.00E+00
22	HOME	584293.21	4194643.02	0.01389464	2.70E-06	2.78E-03	0.00E+00
86	HOME	584090.17	4194617.13	0.01213672	2.36E-06	2.43E-03	0.00E+00
13	HOME	584244.73	4194550.57	0.01158101	2.25E-06	2.32E-03	0.00E+00
7	HOME	584263	4194703.6	0.0102864	2.00E-06	2.06E-03	0.00E+00
50	HOME	584106.86	4194652.3	0.01008406	1.96E-06	2.02E-03	0.00E+00
6	HOME	584252.39	4194710.98	0.009875176	1.92E-06	1.98E-03	0.00E+00
87	HOME	584080.27	4194625.79	0.009635517	1.87E-06	1.93E-03	0.00E+00
28	HOME	584154.66	4194541.11	0.009319469	1.81E-06	1.86E-03	0.00E+00
39	HOME	584280.56	4194549.62	0.00928058	1.80E-06	1.86E-03	0.00E+00
98	HOME	584053.14	4194597.02	0.008690908	1.69E-06	1.74E-03	0.00E+00
9	HOME	584272.69	4194703.6	0.008520828	1.66E-06	1.70E-03	0.00E+00
11	HOME	584256.86	4194541.63	0.008560744	1.66E-06	1.71E-03	0.00E+00
85	HOME	584042.21	4194585.88	0.008249595	1.60E-06	1.65E-03	0.00E+00
23	HOME	584319.69	4194670.9	0.007954685	1.55E-06	1.59E-03	0.00E+00
3	HOME	584195.65	4194704.98	0.007171649	1.39E-06	1.43E-03	0.00E+00
27	HOME	584185.38	4194538.09	0.007165548	1.39E-06	1.43E-03	0.00E+00
40	HOME	584328.91	4194561.21	0.007167401	1.39E-06	1.43E-03	0.00E+00
90	HOME	584063.56	4194636	0.006833921	1.33E-06	1.37E-03	0.00E+00
5	HOME	584203.95	4194711.9	0.006251879	1.21E-06	1.25E-03	0.00E+00
14	HOME	584225.81	4194719.67	0.005829224	1.13E-06	1.17E-03	0.00E+00
96	HOME	584012.92	4194613.11	0.005181393	1.01E-06	1.04E-03	0.00E+00
32	HOME	584063.51	4194496.29	0.004854669	9.43E-07	9.71E-04	0.00E+00
42	HOME	584388.34	4194583.37	0.004737381	9.20E-07	9.47E-04	0.00E+00
561	HOME	584127.27	4194510.11	0.004720299	9.17E-07	9.44E-04	0.00E+00
51	HOME	584084.7	4194674.46	0.004714331	9.16E-07	9.43E-04	0.00E+00
31	HOME	584126.96	4194508.88	0.004599422	8.94E-07	9.20E-04	0.00E+00
30	HOME	584183.87	4194522.48	0.004518825	8.78E-07	9.04E-04	0.00E+00
4	HOME	584195.65	4194718.82	0.004314546	8.38E-07	8.63E-04	0.00E+00
36	HOME	584238.85	4194514.74	0.003898802	7.57E-07	7.80E-04	0.00E+00
155	PARK	583951.2	4194505.05	0.003794216	7.37E-07	7.59E-04	0.00E+00
52	HOME	584076.14	4194681.51	0.003790543	7.36E-07	7.58E-04	0.00E+00
278	PARK	583953.57	4194501.29	0.003735364	7.26E-07	7.47E-04	0.00E+00
277	PARK	583947.35	4194505.94	0.003717553	7.22E-07	7.44E-04	0.00E+00
37	HOME	584284.85	4194510.01	0.0036885	7.17E-07	7.38E-04	0.00E+00

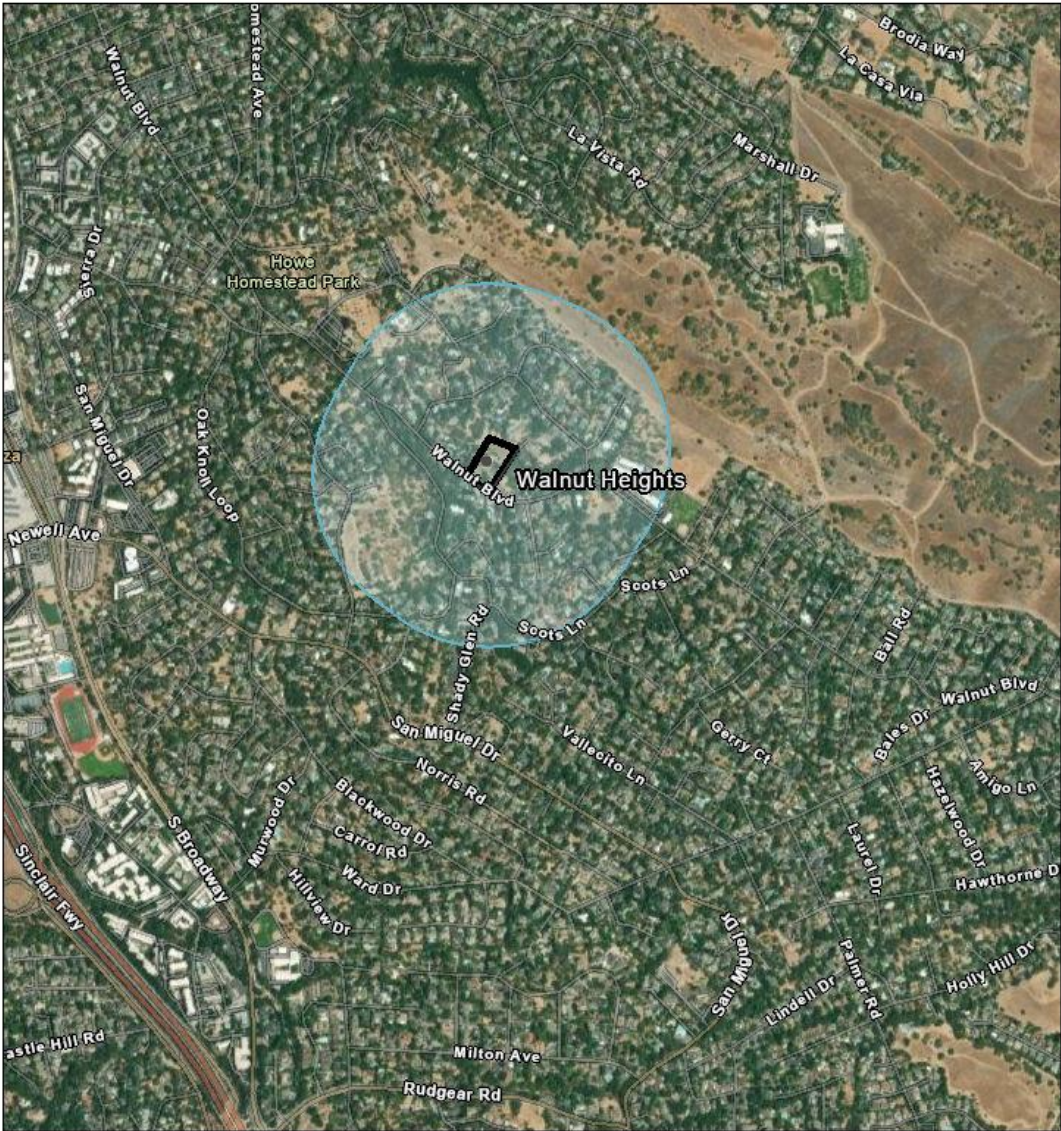
38 HOME	584331.65	4194516.32	0.003664803	7.12E-07	7.33E-04	0.00E+00
279 PARK	583955.94	4194497.54	0.003667233	7.12E-07	7.33E-04	0.00E+00
43 HOME	584364.67	4194526.96	0.003653269	7.10E-07	7.31E-04	0.00E+00
154 PARK	583943.5	4194506.83	0.003638985	7.07E-07	7.28E-04	0.00E+00
64 HOME	584350.49	4194699.84	0.003613961	7.02E-07	7.23E-04	0.00E+00
280 PARK	583958.31	4194493.79	0.003592547	6.98E-07	7.19E-04	0.00E+00
276 PARK	583938.62	4194507.77	0.003560646	6.92E-07	7.12E-04	0.00E+00
53 HOME	584414.07	4194588.85	0.003553224	6.90E-07	7.11E-04	0.00E+00
281 PARK	583960.69	4194490.03	0.003516237	6.83E-07	7.03E-04	0.00E+00
46 HOME	584391.36	4194537.54	0.003502387	6.80E-07	7.00E-04	0.00E+00
275 PARK	583933.74	4194508.71	0.003479508	6.76E-07	6.96E-04	0.00E+00
63 HOME	584358.86	4194693.65	0.003468048	6.74E-07	6.94E-04	0.00E+00
282 PARK	583963.06	4194486.28	0.003438054	6.68E-07	6.88E-04	0.00E+00
274 PARK	583928.85	4194509.65	0.003394837	6.60E-07	6.79E-04	0.00E+00
97 HOME	583990.03	4194635.39	0.003383207	6.57E-07	6.77E-04	0.00E+00
156 PARK	583965.43	4194482.52	0.003358147	6.52E-07	6.72E-04	0.00E+00
273 PARK	583923.97	4194510.59	0.003309462	6.43E-07	6.62E-04	0.00E+00
29 HOME	584211.06	4194510.89	0.003292066	6.40E-07	6.58E-04	0.00E+00
283 PARK	583966.91	4194478.57	0.00325024	6.31E-07	6.50E-04	0.00E+00
272 PARK	583919.09	4194511.54	0.003221707	6.26E-07	6.44E-04	0.00E+00
284 PARK	583968.39	4194474.62	0.003142664	6.11E-07	6.29E-04	0.00E+00
271 PARK	583914.21	4194512.48	0.003133898	6.09E-07	6.27E-04	0.00E+00
48 HOME	584412.01	4194542.07	0.003109097	6.04E-07	6.22E-04	0.00E+00
35 HOME	584241.27	4194504.35	0.003102774	6.03E-07	6.21E-04	0.00E+00
44 HOME	584367.19	4194515.38	0.003067961	5.96E-07	6.14E-04	0.00E+00
270 PARK	583909.32	4194513.42	0.003051094	5.93E-07	6.10E-04	0.00E+00
285 PARK	583969.88	4194470.67	0.003037009	5.90E-07	6.07E-04	0.00E+00
45 HOME	584379.27	4194517.39	0.002987779	5.80E-07	5.98E-04	0.00E+00
269 PARK	583904.44	4194514.36	0.002966906	5.76E-07	5.93E-04	0.00E+00
47 HOME	584396.4	4194525.45	0.00293479	5.70E-07	5.87E-04	0.00E+00
286 PARK	583971.36	4194466.71	0.00293054	5.69E-07	5.86E-04	0.00E+00
268 PARK	583899.56	4194515.3	0.002881569	5.60E-07	5.76E-04	0.00E+00
287 PARK	583972.84	4194462.76	0.002828135	5.49E-07	5.66E-04	0.00E+00
267 PARK	583894.68	4194516.24	0.002796335	5.43E-07	5.59E-04	0.00E+00
60 HOME	584438.75	4194601.44	0.002726928	5.30E-07	5.45E-04	0.00E+00
61 HOME	584435.22	4194614.03	0.002718806	5.28E-07	5.44E-04	0.00E+00
157 PARK	583974.32	4194458.81	0.002717412	5.28E-07	5.43E-04	0.00E+00
266 PARK	583889.79	4194517.18	0.002709614	5.26E-07	5.42E-04	0.00E+00
265 PARK	583884.91	4194518.12	0.002622874	5.10E-07	5.25E-04	0.00E+00
288 PARK	583976.89	4194455.25	0.002611784	5.07E-07	5.22E-04	0.00E+00
18 HOME	584242.41	4194750.96	0.002599856	5.05E-07	5.20E-04	0.00E+00
49 HOME	584415.79	4194521.34	0.00260023	5.05E-07	5.20E-04	0.00E+00
54 HOME	584438.24	4194547.05	0.002601605	5.05E-07	5.20E-04	0.00E+00
264 PARK	583880.03	4194519.07	0.002590327	5.03E-07	5.18E-04	0.00E+00
263 PARK	583875.15	4194520.01	0.002573176	5.00E-07	5.15E-04	0.00E+00
262 PARK	583870.26	4194520.95	0.002554316	4.96E-07	5.11E-04	0.00E+00
16 HOME	584260.29	4194757.34	0.002546754	4.95E-07	5.09E-04	0.00E+00
261 PARK	583865.38	4194521.89	0.002533873	4.92E-07	5.07E-04	0.00E+00
15 HOME	584212.4	4194742.66	0.002521697	4.90E-07	5.04E-04	0.00E+00
34 HOME	584212.57	4194495.79	0.002510191	4.88E-07	5.02E-04	0.00E+00
153 PARK	583860.5	4194522.83	0.002511631	4.88E-07	5.02E-04	0.00E+00
289 PARK	583979.46	4194451.7	0.002504577	4.87E-07	5.01E-04	0.00E+00
66 HOME	584367.95	4194715.85	0.0025025	4.86E-07	5.01E-04	0.00E+00
260 PARK	583858.37	4194518.68	0.002500111	4.86E-07	5.00E-04	0.00E+00
259 PARK	583856.23	4194514.53	0.002484591	4.83E-07	4.97E-04	0.00E+00
258 PARK	583854.1	4194510.38	0.002465498	4.79E-07	4.93E-04	0.00E+00
99 HOME	583969.92	4194652.09	0.002446675	4.75E-07	4.89E-04	0.00E+00

Screening Report

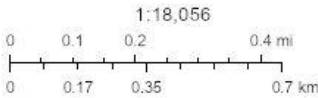
Area of Interest (AOI) Information

Area : 7,037,804.72 ft²

Oct 20 2022 11:09:56 Pacific Daylight Time



• Permitted Stationary Sources



Esri Community Maps Contributors, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., MET/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Maxar

Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	0	N/A	N/A

NOTE: A larger buffer than 1000 feet may be warranted depending on proximity to significant sources.

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

- **County:** Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.
- **Roadway Direction:** Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.
- **Side of the Roadway:** Identify on which side of the roadway the project is located.
- **Distance from Roadway:** Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.
- **Annual Average Daily Traffic (ADT):** Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>.

Notes and References listed below the Search Boxes

Search Parameters	Results
County: Contra Costa Roadway Direction: North-South Side of the Roadway: East Distance from Roadway: 50 feet Annual Average Daily Traffic (ADT): 4,000	Contra Costa County NORTH-SOUTH DIRECTIONAL ROADWAY PM2.5 annual average 0.030 ($\mu\text{g}/\text{m}^3$) Cancer Risk 1.15 (per million) Data for Contra Costa County based on meteorological data collected from Chevron Refinery in 2005

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHH toxicity values adopted in 2013.

Adjustment factor to account for updated OEHHH Guidance: 1.3744
Adjusted Cancer Risk: 1.58

Walnut Boulevard Residential Project Energy Use Summary

Summary of Energy Use During Construction

Construction vehicle fuel	6,473 gallons (gasoline, diesel)
Construction equipment fuel	25,905 gallons (diesel)
Total construction fuel	32,378 gallons (gasoline, diesel)
Construction office electricity	8,930 kilowatt hours

Summary of Energy Use During Operations

(Annually)

Operation vehicle fuel	7,341 gallons (gasoline, diesel)
Operation natural gas*	385,911 kilo-British Thermal Units
Operation electricity	78,105 kilowatt hours

*The proposed project is likely to adopt all-electric design. However, the natural gas use is included in CaEEMod model as a default option and provides a conservative estimate of emissions

Construction Equipment Fuel Calculation

On-site

Source: AQ/GHG Appendix, CalEEMod Output

Walnut Boulevard Residential Project Construction and Operation - Contra Costa County, Annual

Date: 11/9/2022 11:02 AM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days
					Week	
	Demolition	Demolition	3/1/2023	3/28/2023	5	20
	Site Preparation	Site Preparation	3/29/2023	3/31/2023	5	3
	Grading	Grading	4/1/2023	4/10/2023	5	6
	Building Construction	Building Construction	4/11/2023	2/12/2024	5	220
	Paving	Paving	2/13/2024	2/26/2024	5	10
	Architectural Coating	Architectural Coating	2/27/2024	3/11/2024	5	10

Construction Equipment	Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load	Number of	HP Hours	Diesel Fuel Usage
						Factor	Days		
	Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9,460.80	473.04
	Demolition	Rubber Tired Dozers	1	8	247	0.4	20	15,808.00	790.40
	Demolition	Tractors/Loaders/Backhoes	3	8	97	0.37	20	17,227.20	861.36
	Site Preparation	Graders	1	8	187	0.41	3	1,840.08	92.00
	Site Preparation	Scrapers	1	8	367	0.48	3	4,227.84	211.39
	Site Preparation	Tractors/Loaders/Backhoes	1	7	97	0.37	3	753.69	37.68
	Grading	Graders	1	8	187	0.41	6	3,680.16	184.01
	Grading	Rubber Tired Dozers	1	8	247	0.4	6	4,742.40	237.12
	Grading	Tractors/Loaders/Backhoes	2	7	97	0.37	6	3,014.76	150.74
	Building Construction	Cranes	1	8	231	0.29	220	117,902.40	5,895.12
	Building Construction	Forklifts	2	7	89	0.2	220	54,824.00	2,741.20
	Building Construction	Generator Sets	1	8	84	0.74	220	109,401.60	5,470.08
	Building Construction	Tractors/Loaders/Backhoes	1	6	97	0.37	220	47,374.80	2,368.74
	Building Construction	Welders	3	8	46	0.45	220	109,296.00	5,464.80
	Paving	Cement and Mortar Mixers	1	8	9	0.56	10	403.20	20.16
	Paving	Pavers	1	8	130	0.42	10	4,368.00	218.40
	Paving	Paving Equipment	1	8	132	0.36	10	3,801.60	190.08
	Paving	Rollers	2	8	80	0.38	10	4,864.00	243.20
	Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	2,871.20	143.56
	Architectural Coating	Air Compressors	1	6	78	0.48	10	2,246.40	112.32
Construction Equipment Fuel Consumption									25,905.41 gallons

Notes:

Equipment assumptions are provided in the CalEEMod output files.

Fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

South Coast Air Quality Management District. 1993. Air Quality Handbook, Table A9-3E.

Website: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>. Accessed November 10, 2022.

Construction Vehicle Fuel Calculations
 California Air Resource Board (ARB). EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory>.

VMT = Vehicle Miles Traveled
 FE = Fuel Economy

Source: EMFAC2017 (v1.0.3) Emissions Inventory
 Region Type: County
 Region: Contra Costa
 Calendar Year: 2024
 Season: Annual
 Vehicle Classification: EMFAC2007 Categories
 Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	Fuel_Consumption (1000 gallons/day)	Calculations	
										FE (mi/gallon)	VMT*FE
CONTRA COSTA	2024	HHDT	Aggregate	Aggregate	Gasoline	2.6261559	352.5716015	52.54413	0.0774131	4.554418885	1605.75876
CONTRA COSTA	2024	HHDT	Aggregate	Aggregate	Diesel	5369.9653	644008.0963	56390.28	93.323972	6.900778926	4444157.499
CONTRA COSTA	2024	LDA	Aggregate	Aggregate	Gasoline	424002.7	15638010.16	1989774	462.90547	33.78229694	528287902.6
CONTRA COSTA	2024	LDA	Aggregate	Aggregate	Diesel	4766.1828	178809.3011	22364.41	3.4622982	51.64468461	9234549.959
CONTRA COSTA	2024	LDT1	Aggregate	Aggregate	Gasoline	43486.313	1574810.822	199275.4	54.827102	28.72321846	45233635.29
CONTRA COSTA	2024	LDT1	Aggregate	Aggregate	Diesel	21.540584	370.3409183	71.30525	0.0149886	24.70822463	9150.466598
CONTRA COSTA	2024	LDT2	Aggregate	Aggregate	Gasoline	138047.48	5107761.37	640696.3	189.74045	26.91972847	137499549.2
CONTRA COSTA	2024	LDT2	Aggregate	Aggregate	Diesel	1027.9305	42718.23482	4981.522	1.1315688	37.75133806	1612670.524
CONTRA COSTA	2024	LHDT1	Aggregate	Aggregate	Gasoline	10022.063	348469.3135	149313.8	40.604018	8.582138731	2990611.992
CONTRA COSTA	2024	LHDT1	Aggregate	Aggregate	Diesel	8682.7692	315653.4193	109218.3	16.916929	18.65902597	5889785.347
CONTRA COSTA	2024	LHDT2	Aggregate	Aggregate	Gasoline	1278.1281	45708.80706	19042.2	6.0406187	7.566908124	345874.3435
CONTRA COSTA	2024	LHDT2	Aggregate	Aggregate	Diesel	3036.8239	112130.3371	38199.42	6.7216917	16.68186253	1870542.869
CONTRA COSTA	2024	MHDT	Aggregate	Aggregate	Gasoline	831.9285	47583.73455	16645.23	9.3615035	5.082915873	241864.1197
CONTRA COSTA	2024	MHDT	Aggregate	Aggregate	Diesel	4761.3471	264391.325	45288.92	26.658787	9.917605129	2622128.761
Worker											
Sum of VMT*FE (Column BI)											196580167.4
Total VMT											7252939.383
Weighted Average FE											27.10351721
Vendor											
Sum of VMT*FE (Column BI)											15415958.7
Total VMT											1429828.291
Weighted Average FE											10.78168532
Haul											
Sum of VMT*FE (Column BI)											4445763.258
Total VMT											644360.6679
Weighted Average FE											6.89949508

Walnut Boulevard Residential Project Construction Assumptions

On-site Construction
 Source: AQ/GHG Appendix, CalEEMod Output
 Walnut Boulevard Residential Project Construction and Operation - Contra Costa County, Annual
 Date: 11/9/2022 11:02 AM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days	
					Week	Num Days
	Demolition	Demolition	3/1/2023	3/28/2023	5	20
	Site Preparation	Site Preparation	3/29/2023	3/31/2023	5	3
	Grading	Grading	4/1/2023	4/10/2023	5	6
	Building Construction	Building Construction	4/11/2023	2/12/2024	5	220
	Paving	Paving	2/13/2024	2/26/2024	5	10
	Architectural Coating	Architectural Coating	2/27/2024	3/11/2024	5	10

Trips and VMT	Phase Name	Trips per Day		Total Trips		Trips per Phase			VMT per Phase			Fuel Consumption (gallons)			
		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Vehicle Class	Num Days	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
	Demolition	13	0	30	10.8	7.3	20	HDT_Mix	20	260	0	30	2,808	0	600
	Site Preparation	8	0	0	10.8	7.3	20	HDT_Mix	3	24	0	0	259	0	0
	Grading	10	0	0	10.8	7.3	20	HDT_Mix	6	60	0	0	648	0	0
	Building Construction	43	16	0	10.8	7.3	20	HDT_Mix	220	9,460	3,520	0	102,168	25,696	0
	Paving	15	0	0	10.8	7.3	20	HDT_Mix	10	150	0	0	1,620	0	0
	Architectural Coating	9	0	0	10.8	7.3	20	HDT_Mix	10	90	0	0	972	0	0
On-site Total Construction VMT (miles)															
134,771															
On-Site Total Fuel Consumption (gallons)															
6,473															

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Typical Construction Trailer - Contra Costa County, Annual

Date: 11/1/2022 12:04 PM

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	8668.8	0.8021	1.3000e-004	2.0000e-005	0.8100
Total		0.8021	1.3000e-004	2.0000e-005	0.8100

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual

8,669 kWh/yr

Total Over Construction

8,930 kWh

Total Construction Schedule

Start

3/1/2023

End

3/11/2024

Total Calendar Days

376

Years

1.03

Proposed Operation Fuel Calculation

California Air Resource Board (ARB). EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory>.

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: County

Region: Contra Costa

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Given

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
CONTRA COSTA	2024	HHDT	Aggregate	Aggregate	Gasoline	2.62615587	352.571602	0.077413082	4.554419	1605.75876
CONTRA COSTA	2024	HHDT	Aggregate	Aggregate	Diesel	5369.96533	644008.096	93.32397156	6.900779	4444157.499
CONTRA COSTA	2024	LDA	Aggregate	Aggregate	Gasoline	424002.7	15638010.2	462.9054734	33.7823	528287902.6
CONTRA COSTA	2024	LDA	Aggregate	Aggregate	Diesel	4766.18285	178809.301	3.462298249	51.64468	9234549.959
CONTRA COSTA	2024	LDT1	Aggregate	Aggregate	Gasoline	43486.3132	1574810.82	54.82710178	28.72322	45233635.29
CONTRA COSTA	2024	LDT1	Aggregate	Aggregate	Diesel	21.5405842	370.340918	0.014988569	24.70822	9150.466598
CONTRA COSTA	2024	LDT2	Aggregate	Aggregate	Gasoline	138047.48	5107761.37	189.7404491	26.91973	137499549.2
CONTRA COSTA	2024	LDT2	Aggregate	Aggregate	Diesel	1027.93047	42718.2348	1.131568761	37.75134	1612670.524
CONTRA COSTA	2024	LHDT1	Aggregate	Aggregate	Gasoline	10022.0628	348469.314	40.60401777	8.582139	2990611.992
CONTRA COSTA	2024	LHDT1	Aggregate	Aggregate	Diesel	8682.76917	315653.419	16.91692909	18.65903	5889785.347
CONTRA COSTA	2024	LHDT2	Aggregate	Aggregate	Gasoline	1278.12814	45708.8071	6.040618746	7.566908	345874.3435
CONTRA COSTA	2024	LHDT2	Aggregate	Aggregate	Diesel	3036.82387	112130.337	6.721691715	16.68186	1870542.869
CONTRA COSTA	2024	MCY	Aggregate	Aggregate	Gasoline	20272.9721	150835.274	4.036357781	37.36915	5636586.525
CONTRA COSTA	2024	MDV	Aggregate	Aggregate	Gasoline	96641.9601	3343210.94	153.7335167	21.74679	72704115.9
CONTRA COSTA	2024	MDV	Aggregate	Aggregate	Diesel	2405.86448	94971.4265	3.310076524	28.69161	2724883.185
CONTRA COSTA	2024	MH	Aggregate	Aggregate	Gasoline	1848.85436	16982.6047	3.409749877	4.980601	84583.58342
CONTRA COSTA	2024	MH	Aggregate	Aggregate	Diesel	796.078241	7171.6485	0.711608539	10.07808	72276.45449
CONTRA COSTA	2024	MHDT	Aggregate	Aggregate	Gasoline	831.928497	47583.7346	9.361503464	5.082916	241864.1197
CONTRA COSTA	2024	MHDT	Aggregate	Aggregate	Diesel	4761.34708	264391.325	26.65878724	9.917605	2622128.761
CONTRA COSTA	2024	OBUS	Aggregate	Aggregate	Gasoline	293.333926	13840.1398	2.807456993	4.929778	68228.81691
CONTRA COSTA	2024	OBUS	Aggregate	Aggregate	Diesel	134.625537	10562.0349	1.278009258	8.264443	87289.33737
CONTRA COSTA	2024	SBUS	Aggregate	Aggregate	Gasoline	68.2737846	3441.19612	0.34318331	10.02728	34505.84687
CONTRA COSTA	2024	SBUS	Aggregate	Aggregate	Diesel	960.261868	31547.4635	3.439132547	9.173087	289387.6406
CONTRA COSTA	2024	UBUS	Aggregate	Aggregate	Gasoline	25.281148	2468.69094	0.300432202	8.217132	20285.55832
CONTRA COSTA	2024	UBUS	Aggregate	Aggregate	Diesel	188.434558	19045.969	2.882599841	6.607219	125840.8915

Total VMT

Source: AQ/GHG Appendix, CalEEMod Output

Walnut Boulevard Residential Project Construction and Operation - Contra Costa County, Annual

Date: 11/9/2022 11:02 AM

Vehicles	
Sum of VMT*FE	822132012.4
Total VMT	28014855.22
Weighted Average FE	29.3462881 miles/gallon

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	94.40	95.40	85.50	215,420	215,420
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	94.40	95.40	85.50	215,420	215,420

trip summ already updated for Walnut Blvd

	Annual VMT	Fuel	
	(miles)	Consumption	
Total VMT	215,420	7,341	gallons per year

Operation Natural Gas Use *

Source: AQ/GHG Appendix, CalEEMod Output

Walnut Boulevard Residential Project Construction and Operation - Contra Costa County, Annual

Date: 11/9/2022 11:02 AM

kBTU/yr = kilo-British Thermal Units/year

CF = cubic feet

Natural Gas Use	
City Park	0
Other Asphalt Surfaces	0
Singe Family Housing	385,911
Total	385,911 kBTU/yr

* The proposed project is likely to adopt all-electric design. However, the natural gas use is included in CaEEMod model as a default option and provides a conservative estimate of emissions

Operation Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

Walnut Boulevard Residential Project Construction and Operation - Contra Costa County, Annual

Date: 11/9/2022 11:02 AM

Project Electricity Use

kWh/yr = kilowatt hours per year

	Electricity Use (kWh/yr)
Land Use	
City Park	-
Other Asphalt Surfaces	-
Singe Family Housing	78,105
 Total	 78,105 kWh/yr

Contra Costa County Residential Project Typical Construction Trailer - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grayson Road Residential Project Typical Construction Trailer
Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	5			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Typical construction trailer for estimate of energy usage
- Land Use - 12'x60' single-wide unit (720 sq ft)
- Construction Phase - Typical construction trailer for energy use estimates - estimates are included in the operational component of the results
- Off-road Equipment - Zeroed out construction equipment
- Trips and VMT -
- Architectural Coating -
- Vehicle Trips - Zeroed out off-site trips
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Vehicle Emission Factors -
- Consumer Products

Contra Costa County Residential Project Typical Construction Trailer - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

- Area Coating -
- Landscape Equipment -
- Energy Use -
- Water And Wastewater -
- Area Mitigation -
- Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

2.0 Emissions Summary

Contra Costa County Residential Project Typical Construction Trailer - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2023	3.7500e-003	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
Maximum	3.7500e-003	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

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					
2023	3.7500e-003	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
Maximum	3.7500e-003	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

	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2023	5-31-2023	0.0038	0.0038
		Highest	0.0038	0.0038

2.2 Overall Operational**Unmitigated Operational**

	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					
Area	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.5379	1.5379	1.4000e-004	3.0000e-005	1.5502
Mobile	2.2900e-003	2.5600e-003	0.0211	4.0000e-005	4.6900e-003	3.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0302	4.0302	2.6000e-004	1.9000e-004	4.0944
Waste						0.0000	0.0000		0.0000	0.0000	0.1360	0.0000	0.1360	8.0400e-003	0.0000	0.3369
Water						0.0000	0.0000		0.0000	0.0000	0.0406	0.0895	0.1301	4.1800e-003	1.0000e-004	0.2645
Total	5.5500e-003	3.2400e-003	0.0217	4.0000e-005	4.6900e-003	8.0000e-005	4.7800e-003	1.2500e-003	8.0000e-005	1.3300e-003	0.1766	5.6575	5.8341	0.0126	3.2000e-004	6.2460

Contra Costa County Residential Project Typical Construction Trailer - Contra Costa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	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					
Area	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.5379	1.5379	1.4000e-004	3.0000e-005	1.5502
Mobile	2.2900e-003	2.5600e-003	0.0211	4.0000e-005	4.6900e-003	3.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0302	4.0302	2.6000e-004	1.9000e-004	4.0944
Waste						0.0000	0.0000		0.0000	0.0000	0.1360	0.0000	0.1360	8.0400e-003	0.0000	0.3369
Water						0.0000	0.0000		0.0000	0.0000	0.0406	0.0895	0.1301	4.1800e-003	1.0000e-004	0.2645
Total	5.5500e-003	3.2400e-003	0.0217	4.0000e-005	4.6900e-003	8.0000e-005	4.7800e-003	1.2500e-003	8.0000e-005	1.3300e-003	0.1766	5.6575	5.8341	0.0126	3.2000e-004	6.2460

	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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/1/2023	3/7/2023	5	5	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,080; Non-Residential Outdoor: 360; Striped Parking Area: 0
(Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

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
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Architectural Coating - 2023****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					
Archit. Coating	3.7500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	3.7500e-003	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Architectural Coating - 2023****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	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
Worker	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
Total	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

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					
Archit. Coating	3.7500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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
Total	3.7500e-003	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Architectural Coating - 2023****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	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
Worker	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
Total	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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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					
Mitigated	2.2900e-003	2.5600e-003	0.0211	4.0000e-005	4.6900e-003	3.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0302	4.0302	2.6000e-004	1.9000e-004	4.0944
Unmitigated	2.2900e-003	2.5600e-003	0.0211	4.0000e-005	4.6900e-003	3.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0302	4.0302	2.6000e-004	1.9000e-004	4.0944

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	7.01	1.59	0.50	12,686	12,686
Total	7.01	1.59	0.50	12,686	12,686

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.561700	0.056037	0.179622	0.127612	0.023848	0.005501	0.007131	0.007135	0.000546	0.000337	0.025847	0.001311	0.003372

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.0 Energy Detail**

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.8021	0.8021	1.3000e-004	2.0000e-005	0.8100
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.8021	0.8021	1.3000e-004	2.0000e-005	0.8100
NaturalGas Mitigated	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7358	0.7358	1.0000e-005	1.0000e-005	0.7402
NaturalGas Unmitigated	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7358	0.7358	1.0000e-005	1.0000e-005	0.7402

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	13788	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7358	0.7358	1.0000e-005	1.0000e-005	0.7402
Total		7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7358	0.7358	1.0000e-005	1.0000e-005	0.7402

Mitigated

	NaturalGas Use	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
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	13788	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7358	0.7358	1.0000e-005	1.0000e-005	0.7402
Total		7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7358	0.7358	1.0000e-005	1.0000e-005	0.7402

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	8668.8	0.8021	1.3000e-004	2.0000e-005	0.8100
Total		0.8021	1.3000e-004	2.0000e-005	0.8100

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	8668.8	0.8021	1.3000e-004	2.0000e-005	0.8100
Total		0.8021	1.3000e-004	2.0000e-005	0.8100

6.0 Area Detail**6.1 Mitigation Measures Area**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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					
Mitigated	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

6.2 Area by SubCategory**Unmitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	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
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.1301	4.1800e-003	1.0000e-004	0.2645
Unmitigated	0.1301	4.1800e-003	1.0000e-004	0.2645

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.127968 / 0.0784322	0.1301	4.1800e-003	1.0000e-004	0.2645
Total		0.1301	4.1800e-003	1.0000e-004	0.2645

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.127968 / 0.0784322	0.1301	4.1800e-003	1.0000e-004	0.2645
Total		0.1301	4.1800e-003	1.0000e-004	0.2645

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1360	8.0400e-003	0.0000	0.3369
Unmitigated	0.1360	8.0400e-003	0.0000	0.3369

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0.67	0.1360	8.0400e- 003	0.0000	0.3369
Total		0.1360	8.0400e- 003	0.0000	0.3369

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0.67	0.1360	8.0400e- 003	0.0000	0.3369
Total		0.1360	8.0400e- 003	0.0000	0.3369

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation
