



Scientific Resources Associated
1328 Kaimalino Lane
San Diego, CA 92109

To: County of San Diego
Department of Planning and Land Use **From:** Valorie Thompson

Re: Otay Crossings **Date:** May 19, 2011

This technical memorandum addresses comments on the Air Quality Technical Report and the Global Climate Change Analysis prepared for the Otay Crossings Project on East Otay Mesa.

Use of Certified/Controlled Construction Equipment

The Air Quality Technical Report included a measure that was provided by Department of Planning and Land Use Staff to reduce emissions from construction equipment. The measure states:

“In accordance with County of San Diego Department of Planning and Land Use requirements, the project will require ten percent of the construction fleet to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or ARB certified Tier I, II, or III equipment. Ten percent was determined to be a reasonable requirement based on the amount of contractors whose fleets have already been retrofit and engines repowered as a result of the local and neighboring Carl Moyer Programs. With use of ten percent of the construction fleet retrofit and/or repowered, the project would mitigate emissions to the extent feasible.”

The County has requested quantification of emission reductions that would be achievable through implementation of this measure. While it is not possible to accurately quantify the reductions that would be achieved because the specific mix of construction equipment is not known and the percentage that would use each control measure is not known at this time, this memorandum provides an estimate of the percent reduction in emissions from implementation of this requirement. Table 1 below is an excerpt from the Air Quality Technical Report, which summarizes the maximum daily emissions calculated for the project without implementation of this measure.

Activity	CO	VOCs	NOx	SOx	PM₁₀
Fugitive Dust - Grading	-	-	-	-	156.00
Heavy Equipment Exhaust	440.16	120.71	1158.36	0.99	45.44
Worker Travel – Vehicle Emissions	43.35	1.92	3.99	0.06	0.51
TOTAL	483.51	122.63	1162.35	1.05	201.95
Screening-Level Thresholds	550	75	250	250	100

An estimate of the reductions that would be achievable by requiring 10 percent of the construction equipment to meet Tier 2 equipment standards can be calculated based on a comparison of Tier 2 and Tier 1 standards. Based on the ARB and USEPA off-road equipment standards, the following emission limitations are required:

Horsepower Rating	NMHC + NOx			CO			PM		
	Tier 1	Tier 2	% Reduction	Tier 1	Tier 2	% Reduction	Tier 1	Tier 2	% Reduction
< 11	7.8	5.6	28.21%	6.0	6.0	0.00%	0.75	0.6	20.00%
11<hp<25	7.1	5.6	21.13%	4.9	4.9	0.00%	0.60	0.6	0.00%
25<hp<50	7.1	5.6	21.13%	4.1	4.1	0.00%	0.60	0.45	25.00%
50<hp<75	6.9	5.6	18.84%	4.1	3.7	9.76%	0.60	0.3	50.00%
75<hp<100	6.9	5.6	18.84%	4.1	3.7	9.76%	0.60	0.3	50.00%
100<hp<175	6.9	4.9	28.99%	4.1	3.7	9.76%	0.60	0.22	63.33%
175<hp<300	6.9	4.9	28.99%	8.5	2.6	69.41%	0.49	0.15	69.39%
300<hp<600	6.9	4.8	30.43%	8.5	2.6	69.41%	0.49	0.15	69.39%
600<hp<750	6.9	4.8	30.43%	8.5	2.6	69.41%	0.49	0.15	69.39%
>750	6.9	4.8	30.43%	8.5	2.6	69.41%	0.49	0.15	69.39%
Average			25.74%			30.69%			48.59%

As shown in Table 2, on average, replacing Tier 1 equipment with Tier 2 equipment would an average reduction in non-methane hydrocarbon (NMHC) and NOx of 25.74%, an average reduction in CO of 30.69%, and an average reduction in PM of 48.59%. Assuming that a minimum of ten percent of the equipment would meet these standards, the associated reduction in emissions would be 2.57% for NOx, 3.07% for CO, and 4.86% for PM. Other measures may achieve different average reductions in emissions, but these values represent a conservative estimate of the emission reductions that would be achieved through implementation of the County's measure. Table 3 presents estimated reductions in construction emissions that would be achieved.

Activity	CO	VOCs	NOx	SOx	PM ₁₀
Fugitive Dust - Grading	-	-	-	-	156.00
Heavy Equipment Exhaust	426.65	117.61	1128.84	0.99	43.23
Worker Travel – Vehicle Emissions	43.35	1.92	3.99	0.06	0.51
TOTAL	470.00	119.53	1132.83	1.05	199.74
Screening-Level Thresholds	550	75	250	250	100

Global Climate Change Analysis

The Global Climate Change Technical Report that was prepared for the Otay Crossings project was prepared in accordance with the County Department of Planning and Land Use guidelines that were in effect at the time that the analysis was prepared. Those guidelines indicated that projects within the East Otay Mesa Specific Plan Area must demonstrate that greenhouse gas emissions would be 25% below “business as usual” levels. Since the analysis was prepared, the County has revised their guidelines to require projects to demonstrate that their emissions will be 28.3% below “business as usual” levels to be consistent with the goals of AB 32. The goal of 28.3% is based on the 2008 CARB Scoping Plan, which stated that 2020 BAU emissions of 596 MMTCO_{2e} would need to be reduced by 28.3% to achieve a reduction to 1990 emissions of 427 MMTCO_{2e}.

Since the analysis was prepared, several state and federal requirements have been implemented. These requirements will further reduce emissions from the levels presented in the analysis. The measures identified in Table 7 in the Global Climate Change Technical Report provide a basis for individual developments within the Otay Crossings Project to identify feasible GHG reduction measures that would reduce emissions of GHGs for operations. The purpose of this analysis is not to provide a specific development plan at this time, but to demonstrate the feasibility of the project’s meeting the County’s requirement to reduce emissions by 28.3% below business as usual. To estimate the effectiveness of implementing some of the measures, the following scenario was assumed:

- Project applicant will exceed Title 24 energy efficiency standards (as of 2005) by 8.59% for electricity and 8.63% for natural gas, based on the California Energy Commission’s study on improvements from implementation of Title 24 as of 2008 over Title 24 as of 2005 for nonresidential buildings, for Climate Zone 7, San Diego¹.
- Project will be built to meet LEED certification standards where applicable (assumed reduction in electricity and natural gas emissions of an additional 5%). These measures may include increased insulation, building design, and heating/cooling systems that will reduce energy demands by an additional 5%. For the purpose of this analysis, it was conservatively assumed that additional energy efficiency measures would be equivalent to an additional 1% improvement over Title 24 standards. Based on CAPCOA’s *Quantifying Greenhouse Gas Mitigation Measures*² (CAPCOA 2010), this will amount to a reduction in emissions of 0.29% for electricity and 0.66% for natural gas.
- Project will install water-saving irrigation systems, use drought-resistant plants, and use recycled water where feasible (assumed reduction in water usage of 10%, based on the Bay Area Air Quality Management District Greenhouse Gas Model (BGM), which assumes a reduction of 10% for outdoor water use due to drought-resistant landscaping, and a 2% reduction in indoor water use due to use of low-flow fixtures. Additional water use reduction measures will be implemented at the design stage by applicants, and may include measures identified in Appendices C and E of the Pacific Institute’s *Waste Not, Want Not, The Potential for Urban Water Conservation in California*, (Pacific Institute 2003) which estimates that water reduction measures in retail establishments through implementation of reductions in restrooms, cooling water use, landscaping and kitchen use can be reduced by 28 to 43 percent).

Because the state of California has implemented requirements that will reduce emissions through implementation of the Low Carbon Fuel Standard, the Pavley fuel efficiency standard, and the Federal Corporate Average Fuel Economy (CAFE) standards, emissions from vehicles will be reduced further from “business as usual” levels. The SDCGHGI assumed a 20% reduction in vehicle emissions due to

¹ Architectural Energy Corporation. 2007. *2008 Update to the California Energy Efficiency Standards for Residential and Nonresidential Buildings*. Prepared for the California Energy Commission. November 7.

² CAPCOA. 2010. *Quantifying Greenhouse Gas Mitigation Measures*. August.

implementation of the Pavley/CAFE standards and a 10% reduction in vehicle emissions due to the LCFS.

In addition to the measures identified in Table 7, indirect emissions from electricity use would be further reduced due to implementation of the renewable portfolio standard. ARB has adopted regulations that will require full implementation of the renewable portfolio standard, which requires 33% of electricity to be generated from renewable resources. Based on the SDCGHGI, this measure would reduce GHG emissions from electricity use by approximately 27 percent.

The results of the updated GHG inventory for emissions with implementation of GHG reduction measures are presented in Table 4 in this memorandum. As shown in Table 4, project operational GHG emissions will meet the DPLU's revised guideline to reduce operational emissions by more than 28.3%. The Project would therefore be consistent with the goals of AB 32 within San Diego County, and would not result in a significant impact on global climate.

Table 4 SUMMARY OF ESTIMATED GREENHOUSE GAS EMISSIONS WITH GHG REDUCTION MEASURES			
Emission Source	Annual Emissions (Metric tons/year)		
	CO₂	CH₄	N₂O
Emissions			
Electricity Use Emissions	8,651	0.066	0.036
Natural Gas Use Emissions	1,406	0.16	0.0027
Water Consumption Emissions	308	0.0023	0.0013
Vehicle Emissions	14,462	1.20	2.59
Amortized Construction Emissions	75	-	-
Total	24,902	1.43	2.63
Global Warming Potential Factor	1	21	310
CO ₂ Equivalent Emissions	24,902	30	815
TOTAL CO₂ Equivalent Emissions	25,747		
Business As Usual CO₂ Equivalent Emissions	36,914		
Percent Reduction from Business As Usual	30.25%		

Table 5 provides a summary of the GHG reduction measures and their contribution to reductions for the Otay Crossings Project.

Table 5		
Summary of Emission Reductions with Implementation of GHG Reduction Measures		
Transportation Emissions		
Business as Usual, CO₂e		21,843
Reductions due to Statewide Measures		
Measure	Percent Reduction	Emissions Reduction
Pavley Motor Vehicle Standards	20%	4,369
Low Carbon Fuel Standard	10%	2,184
Total Reductions		6,553
Net Transportation Emissions		15,290

Operational Emissions		
Business as Usual, CO₂e		14,996
Reductions due to Project Design Features and Statewide Measures		
Measure	Percent Reduction	Emissions Reduction
Renewable Portfolio Standard (33% renewables)	27% (electricity and embodied energy of water)	3,633
Meet 2008 Title 24 Standards	8.59% for electricity and 8.63% for natural gas	948
Reduce water usage by 10%	10% water use	34
Total Reductions		4,615
Net Operational Emissions		10,381

As shown in Tables 4 and 5, the project would meet the requirements of the County Department of Planning and Land Use and of AB 32 by reducing emissions by more than 28.3% below "business as usual" levels.



Table A-1
 Electricity Greenhouse Gas Emissions
 Business As Usual
 Otay Crossings Commerce Park

Electricity

Land Use	1,000 Sqft	Usage Rate ^a		
		(kWh/sq.ft/yr)	(KWh/year)	MWh/year
Project				
Distribution Centers	2000.0	12.95	25,900,000	25900.00
Retail	250.0	13.55	3,387,500	3387.50
Industrial	250.0	12.95	3,237,500	3237.50
Total Project			32,525,000	32525.00

GHG	lbs/MWh ^b	lbs	metric tons	CO ₂ E
Project				
CO ₂	878.71	28580042.75	12963.67875	12963.67875
CH ₄	0.0067	217.9175	0.098845635	2.075758328
N ₂ O	0.0037	120.3425	0.054586395	16.92178253
				12982.68

^b Emission factors for CO₂, CH₄, and N₂O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.1, January 2009

Table A-2
 Natural Gas Greenhouse Gas Emissions
 Business As Usual
 Otay Crossings Commerce Park

Natural Gas

<u>Land Use</u>	<u>1,000 Sqft</u>	<u>Usage Rate^c (cu.ft/sq.ft/mo)</u>	<u>Total Natural Gas Usage (cu.ft/mo)</u>	<u>Total Natural Gas Usage (cu.ft/year)</u>	<u>Total Natural Gas Usage (MMBTU/year)</u>
Project					
Distribution Center:	2000.0	2.0	4,000,000	48,000,000	48,960
Retail	250.0	2.9	725,000	8,700,000	8,874
Industrial	250.0	2.0	500,000	6,000,000	6,120
Total Project			5,225,000	62,700,000	63,954

GHG	Kg/MMBtu^b	Kg	metric tons	CO₂E (Metric Tons)
Project				
CO₂	53.06	3,393,399.24	1,539.22	1,539.22
CH₄	0.0059	377.33	0.17	3.59
N₂O	0.0001	6.40	0.0029	0.90

1543.71

^b Emission factors for CO₂, CH₄, and N₂O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.1, January 2009

Table A-3
 Water Use Greenhouse Gas Emissions
 Business As Usual
 Otay Crossings Commerce Park

Water - Business As Usual

Land Use	Usage Rate			
	GPD	(kWh\million gal)	(KWh\year)	MWh\year
Project	298000	10800	1,174,716	1174.72
Total Project			1,174,716	1174.72

GHG	lbs/MWh ^b	lbs	metric tons	CO ₂ E
Project				
CO ₂	878.71	1032234.696	468.2134004	468.2134004
CH ₄	0.0067	7.8705972	0.00357004	0.074970838
N ₂ O	0.0037	4.3464492	0.001971515	0.611169522
				468.90

^b Emission factors for CO₂, CH₄, and N₂O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.1, January 2009

Table A-4
 Electricity Greenhouse Gas Emissions
 with GHG Reduction Measures
 Otay Crossings Commerce Park

Electricity

Land Use	1,000 Sqft	Usage Rate ^a		
		(kWh/sq.ft\yr)	(KWh\year)	MWh\year
Project				
Distribution Centers	2000.0	11.84	23,675,190	23675.19
Retail	250.0	12.39	3,096,514	3096.51
Industrial	250.0	11.84	2,959,399	2959.40
Total Project			29,731,103	29731.10

GHG	lbs/MWh ^b	lbs	metric tons	CO ₂ E
Project				
CO ₂	641.4583	19071262.47	8650.572085	8650.572085
CH ₄	0.004891	145.4148223	0.065959	1.385139002
N ₂ O	0.002701	80.30370785	0.036425119	11.29178703
				8663.25

^b Emission factors for CO₂, CH₄, and N₂O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.1, January 2009

Table A-5
 Natural Gas Greenhouse Gas Emissions
 with GHG Reduction Measures
 Otay Crossings Commerce Park

Natural Gas

<u>Land Use</u>	<u>1,000 Sqft</u>	<u>Usage Rate^c (cu.ft/sq.ft/mo)</u>	<u>Total Natural Gas Usage (cu.ft/mo)</u>	<u>Total Natural Gas Usage (cu.ft/year)</u>	<u>Total Natural Gas Usage (MMBTU/year)</u>
Project					
Distribution Center:	2000.0	1.8	3,654,800	43,857,600	44,735
Retail	250.0	2.6	662,433	7,949,190	8,108
Industrial	250.0	1.8	456,850	5,482,200	5,592
Total Project			4,774,083	57,288,990	58,435

GHG	Kg/MMBtu^b	Kg	metric tons	CO₂E (Metric Tons)
Project				
CO₂	53.06	3,100,548.89	1,406.38	1,406.38
CH₄	0.0059	344.77	0.16	3.28
N₂O	0.0001	5.84	0.0027	0.82

1410.49

^b Emission factors for CO₂, CH₄, and N₂O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.1, January 2009

Table A-6
 Water Use Greenhouse Gas Emissions
 with GHG Reduction Measures
 Otay Crossings Commerce Park

Water

Land Use	Usage Rate			
	GPD	(kWh\million gal)	(KWh\year)	MWh\year
Project	268200	10800	1,057,244	1057.24
Total Project			1,057,244	1057.24

GHG	lbs/MWh ^b	lbs	metric tons	CO ₂ E
Project				
CO ₂	641.4583	678178.1955	307.6162041	307.6162041
CH ₄	0.004891	5.17098236	0.002345516	0.049255841
N ₂ O	0.002701	2.855617124	0.001295285	0.401538376
				308.07

^b Emission factors for CO₂, CH₄, and N₂O were derived from the California Climate Action Registry General Reporting Protocol; Version 3.1, January 2009

OTAY CROSSINGS COMMERCE PARK

APPENDIX D

AIR QUALITY TECHNICAL REPORT

to the

DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT

EIR 93-19-006Q, TM 5405RPL⁷
SCH No. 2006041039

Lead Agency:

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, California 92123
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MAY 2010

Air Quality Technical Report

for the

Otay Crossings Commerce Park
DPLU Project No. TM 5405RPL7, Log No. 93-19-006Q

Submitted To:

Helix Environmental Planning, Inc.
7578 El Cajon Blvd., Suite 200
La Mesa, CA 91941

Prepared By:



Scientific Resources Associated
1328 Kaimalino Lane
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December 14, 2009

Prepared By: _____

A handwritten signature in black ink, which appears to read "Valorie L. Thompson". The signature is written in a cursive, flowing style and is positioned above a horizontal line that serves as a signature line.

Valorie L. Thompson, Ph.D.
Principal

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1.0 Introduction

This report presents an assessment of potential air quality impacts associated with the proposed Otay Crossings Commerce Park in the southwestern portion of the unincorporated County of San Diego contained within Subarea 2 of the East Otay Mesa Specific Plan Area. Development of the Specific Plan Area, including the project site, was programmatically evaluated in the East Otay Mesa Specific Plan Final EIR (SCH No. 92101099) prepared by the County of San Diego in 1994.

The Otay Crossings Commerce Park project is a Tentative Map (TM) and Preliminary Grading Plan (Tract 5405) for 311.5 acres of land designated for Mixed Industrial, Rural Residential and State Route (i.e., SR-11). The proposed project would subdivide the 311.5-acre property into 56 industrial lots and three open space lots ranging in size from 0.9 net acre to 59.1 net acres. About three quarters of the lots would be less than 4 acres in size, and all but two lots would have an area of less than 9 acres. The 59 lots would be divided and recorded in five separate units. Approximately 285.5 acres would be placed in lots (including FHWA/Caltrans/GSA ROW), while 20.4 acres would contain internal on-site public streets, and the construction of half-widths up to the center lines of Otay Mesa Road, Alta Road and Airway Road immediately adjacent to the site would occupy 5.6 acres. An additional 23.5 to 25.4 acres would consist of off-site roadway and utility improvements. Traffic improvements required for project mitigation would result in additional 12.2 acres of grading offsite in addition to the 23.5 to 25.4 acres for offsite roadway and utility improvements proposed by the applicant. Of the area placed in lots, 47.1 acres would be contained in open space easements (in the three northeast corners of the project site and along its southern boundary by placing them in separate open space lots. Although the ultimate route and POE location are still being determined by FHWA/Caltrans/GSA, the preliminary ROW for SR-11 and the potential location for the POE has been mapped on three of the 59 proposed lots, covering approximately 84.0 acres of the site.

These planned uses will be implemented through various discretionary permits as described in Sections 1.5 and 3.0 of the East Otay Mesa Specific Plan. Thus the analysis in this Air Quality Technical Report covers site preparation up through site grading. The evaluation specifically addresses the potential for air emissions during construction and after full buildout of the project, including an assessment of the potential for CO “hot spots” which form due to traffic associated with the proposed project, as well as cumulative impacts. Building construction, paving, and other construction requirements will be addressed in the future as the site is developed.

2.0 Existing Conditions

Climate and Meteorology

The project site is located in the San Diego Air Basin (SDAB). The climate of the SDAB is dominated by a semi-permanent high pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. Figure 1 provides a graphic representation of the prevailing winds in the project vicinity, as measured at the MCAS Miramar Monitoring Station (the most representative meteorological monitoring station for the site). The high pressure cell also creates two types of temperature inversions that may act to degrade local air quality.

Subsidence inversions occur during the warmer months as descending air associated with the Pacific high pressure cell comes into contact with cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone, commonly known as smog.

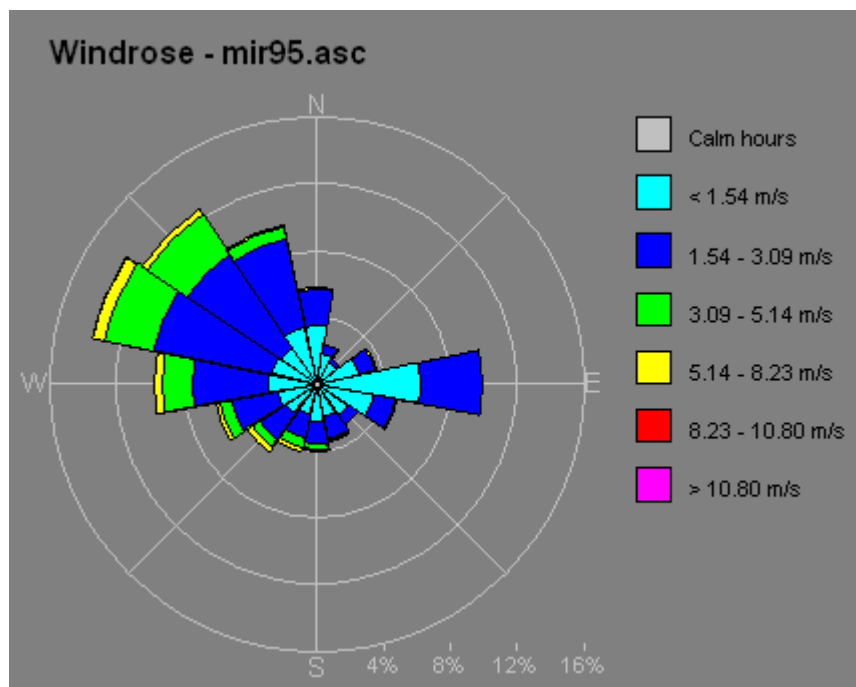


Figure 1. Wind Rose – MCAS Miramar Monitoring Station

Regulatory Setting

Air quality is defined by ambient air concentrations of specific pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several pollutants (called “criteria” pollutants). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

In September 1997, the EPA promulgated 8-hour O₃ and 24-hour and annual PM_{2.5} national standards (particulate matter less than 2.5 microns in diameter). However, due to a lawsuit in May 1999, the United States District Court rescinded these standards and the EPA’s authority to enforce them. Subsequent to an appeal of this decision by the EPA, the United States Supreme

Court upheld these standards in February 2001. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants. The EPA is moving forward to develop policies to implement these standards.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. The California Air Resources Board (ARB) has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. In December 2002, the San Diego Air Pollution Control District (APCD) submitted a maintenance plan for the 1-hour NAAQS for O₃ and requested redesignation from a serious O₃ nonattainment area to attainment. As of July 28, 2003, the San Diego Air Basin has been reclassified as an attainment area for the 1-hour NAAQS for O₃. On April 15, 2004, the SDAB was designated a basic nonattainment area for the 8-hour NAAQS for O₃. The SDAB is in attainment for the NAAQS for all other criteria pollutants. The SDAB is currently classified as a nonattainment area under the CAAQS for O₃ and PM₁₀.

The ARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The ARB is responsible for the development, adoption, and enforcement of the state’s motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The APCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County.

The APCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991, and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, and most recently in 2004. The RAQS outlines APCD's plans and control measures designed to attain the state air quality standards for O₃. The APCD has also developed the air basin's input to the SIP, which is required under the Federal Clean Air Act for areas that are out of attainment of air quality standards. The SIP includes the APCD's plans and control measures for attaining the O₃ NAAQS. The SIP is also updated on a triennial basis. The latest SIP update was submitted by the ARB to the EPA in 1998. The attainment schedule in the SIP called for the SDAB to attain the NAAQS for O₃ by 1999. The San Diego APCD has determined that the SDAB has achieved its O₃ attainment goal, and has applied to the EPA for redesignation as an O₃ attainment area. As of July 28, 2003, the SDAB has been redesignated as an O₃ attainment area for the one-hour NAAQS for ozone; however, as discussed below, the SDAB has been designated as a basic nonattainment area for the new 8-hour NAAQS for ozone.

The RAQS relies on information from ARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The ARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County as part of the development of the County's General Plan. As such, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project would propose development which is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project might be in conflict with the RAQS and SIP, and might have a potentially significant impact on air quality.

The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin.

The SIP also includes rules and regulations that have been adopted by the APCD to control emissions from stationary sources. These SIP-approved rules may be used as a guideline to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the NAAQS for O₃.

Table 1 presents a summary of the ambient air quality standards adopted by the federal and California Clean Air Acts.

Table 1
 AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS		NATIONAL STANDARDS		
		Concentration	Method	Primary	Secondary	Method
Ozone	1 hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	0.12 ppm (235 µg/m ³)	0.12 ppm (235 µg/m ³)	Ethylene Chemiluminescence
	8 hour	0.070 ppm ¹ (137 µg/m ³)		0.075 ppm (147 µg/m ³)	0.075 ppm (147 µg/m ³)	
Carbon Monoxide	8 hours	9.0 ppm (10 mg/m ³)	Non-Dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
Nitrogen Dioxide (NO ₂)	Annual Average	0.030 ppm (56 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	0.053 ppm (100 µg/m ³)	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 µg/m ³)		--	--	
Sulfur Dioxide (SO ₂)	Annual Average	--	Ultraviolet Fluorescence	0.03 ppm (80 µg/m ³)	--	Pararosaniline
	24 hours	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)	--	
	3 hours	--		--	0.5 ppm (1300 µg/m ³)	
	1 hour	0.25 ppm (655 µg/m ³)		--	--	
Respirable Particulate Matter (PM ₁₀)	24 hours	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	150 µg/m ³	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		--	--	
Fine Particulate Matter (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15 µg/m ³	--	Inertial Separation and Gravimetric Analysis
	24 hours	--		35 µg/m ³	--	
Sulfates	24 hours	25 µg/m ³	Ion Chromatography	--	--	--
Lead	30-day Average	1.5 µg/m ³	Atomic Absorption	--	--	Atomic Absorption
	Calendar Quarter	--		1.5 µg/m ³	1.5 µg/m ³	
	3-month Rolling Average	--		0.15 µg/m ³	0.15 µg/m ³	
Hydrogen Sulfide Vinyl Chloride	24 hours	0.010 ppm (26 µg/m ³)	Gas Chromatography	--	--	--

ppm= parts per million

µg/m³ = micrograms per cubic meter

mg/m³ = milligrams per cubic meter

Source: California Air Resources Board 2009

Background Air Quality

The APCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest ambient monitoring stations to the project site are the Otay Mesa-Paseo International station and the Chula Vista station (which is the nearest station that measures PM_{2.5}). Because the Otay Mesa monitoring station is located in areas where there is substantial traffic congestion and near the International Border with Mexico, it is likely that pollutant concentrations measured at those monitoring stations are higher than concentrations that would be observed or measured in the Project area, and would thus provide a conservative estimate of background ambient air quality. Ambient concentrations of pollutants over the last three years are presented in Table 2.

Air quality has shown improvement in the SDAB such that the 8-hour federal ozone standard has not been exceeded at the Otay Mesa monitoring station during the period from 2004 through 2006. Due to measured exceedances at other monitoring stations, however, the SDAB was classified as nonattainment for the 8-hour NAAQS for O₃. The Otay Mesa monitoring station regularly experiences exceedances of the 24-hour and annual CAAQS for PM₁₀. The data from the monitoring stations indicate that air quality is in attainment of all other standards.

Table 2
Ambient Background Concentrations
(ppm unless otherwise indicated)

Pollutant	Averaging Time	2004	2005	2006	Most Stringent Ambient Air Quality Standard	Monitoring Station
Ozone	8 hour	0.077	0.069	0.068	0.070	Otay Mesa
	1 hour	0.095	0.112	0.087	0.09	Otay Mesa
PM ₁₀	Annual	51.7 µg/m ³	49.8 µg/m ³	53.7 µg/m ³	20 µg/m ³	Otay Mesa
	24 hour	138 µg/m ³	155 µg/m ³	133 µg/m ³	50 µg/m ³	Otay Mesa
PM _{2.5}	Annual	12.2 µg/m ³	11.8 µg/m ³	11.2 µg/m ³	12 µg/m ³	Chula Vista
	24 hour	32.7 µg/m ³	34.3 µg/m ³ ²	30.2 µg/m ³	35 µg/m ³	Chula Vista
NO ₂	Annual	0.023	0.024	0.024	0.030	Otay Mesa
	1 hour	0.125	0.109	0.097	0.18	Otay Mesa
CO	8 hour	4.11	3.70	3.36	9.0	Otay Mesa
	1 hour	6.9	7.9	5.1	20	Otay Mesa
SO ₂	Annual	0.006	0.005	0.003	80	Otay Mesa
	24 hour	0.015	0.013	0.007	105	Otay Mesa
	3 hour	0.028	0.031	0.021	1300 ¹	Otay Mesa
	1 hour	0.045	0.040	0.045	655	Otay Mesa

¹Secondary NAAQS

Source: www.arb.ca.gov/aqd/aqd.htm (Measurements of all pollutants at Otay Mesa station, except PM_{2.5})
www.epa.gov/air/data/monvals.html (1-hour and 3-hour SO₂ and 1-hour CO)

3.0 Thresholds of Significance

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the State CEQA Guidelines which provides guidance that a project would have a significant environmental impact if it would:

1. Conflict or obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP);
2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase of PM₁₀ or exceed quantitative thresholds for O₃ precursors, oxides of nitrogen (NO_x) and volatile organic compounds (VOCs);
4. Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations.

5. Create objectionable odors affecting a substantial number of people.

As stated above, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS and SIP. Also, projects that are consistent with the SIP rules (i.e., the federally-approved rules and regulations adopted by the APCD) are consistent with the SIP. Thus projects would be required to conform with measures adopted in the RAQS (including use of low-VOC architectural coatings, use of low-NO_x water heaters, and compliance with rules and regulations governing stationary sources) and would also be required to comply with all applicable rules and regulations adopted by the APCD.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM₁₀ or exceed quantitative thresholds for O₃ precursors, oxides of nitrogen (NO_x) and volatile organic compounds (VOCs), project emissions may be evaluated based on the quantitative emission thresholds established by the San Diego APCD. As part of its air quality permitting process, the APCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Since the APCD does not have AQIA thresholds for emissions of VOCs, the use of the threshold for VOCs from the CEQA Air Quality Handbook for the South Coast Air Quality Management District (SCAQMD), which has stricter standards for emissions of VOCs than San Diego, is appropriate. The screening thresholds are included in the table below.

Table 3
SCREENING-LEVEL CRITERIA FOR AIR QUALITY IMPACTS

Pollutant	Total Emissions		
Construction Emissions			
	Lb. per Day		
Respirable Particulate Matter (PM ₁₀)	100		
Fine Particulate Matter (PM _{2.5})	55		
Oxides of Nitrogen (NO _x)	250		
Oxides of Sulfur (SO _x)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	75		
Operational Emissions			
	Lb. Per Hour	Lb. per Day	Tons per Year
Respirable Particulate Matter (PM ₁₀)	---	100	15
Fine Particulate Matter (PM _{2.5})	---	55	10
Oxides of Nitrogen (NO _x)	25	250	40
Oxides of Sulfur (SO _x)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	75	13.7

In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the State and Federal Ambient Air Quality Standards, including appropriate background levels. For nonattainment pollutants (ozone, with ozone precursors NO_x and VOCs) and PM₁₀, if emissions exceed the thresholds shown in Table 3, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or

Hazardous Air Pollutants (HAPs). In San Diego County, the County Department of Planning and Land Use identifies an excess cancer risk level of 1 in 1 million or less for projects that do not implement Toxics Best Available Control Technology (T-BACT), and an excess cancer risk level of 10 in 1 million or less for projects that do implement T-BACT. The significance threshold for non-cancer health effects is a health hazard index of one or less. These significance thresholds are consistent with the San Diego Air Pollution Control District's Rule 1210 requirements for stationary sources. If a project has the potential to result in emissions of any TAC or HAP which result in a cancer risk of greater than 1 in 1 million without T-BACT, 10 in 1 million with T-BACT, or health hazard index of one or more, the project would be deemed to have a potentially significant impact.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (Preschool-12th Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within 1 mile and results in a health risk greater than the risk significance thresholds discussed above would be deemed to have a potentially significant impact.

Section 6318 of the San Diego County Zoning Ordinance requires all commercial and industrial uses "be operated as not to emit matter causing unpleasant odors which is perceptible by the average person at or beyond any lot line of the lot containing said uses." Section 6318 goes on to further provide specific dilution standards that must be met "at or beyond any lot line of the lot containing the uses." APCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

The impacts associated with construction and operation of the Otay Crossings Commerce Park project were evaluated for significance based on these significance criteria.

4.0 Impacts

The proposed Otay Crossings Commerce Park and East Otay Mesa Specific Plan Amendment would include both construction and operational impacts. Construction impacts would include emissions associated with the construction stage of the project, and would be relatively short-term in nature. Operational impacts would include emissions associated with the project after construction and full buildout is complete, including traffic, and would continue for the life of the project.

Construction

The proposed Otay Crossings Commerce Park and East Otay Mesa Specific Plan Amendment involves the subdivision of the project site and site preparation through preliminary grading. Individual tenants, land uses or specific building projects have not yet been identified and emissions associated with finish construction will therefore be evaluated on a project-specific basis at the time the applicant(s) propose site plans and/or major use permits for individual lots.

Emissions from site preparation through grading phase were evaluated based on the methodologies recommended in the South Coast Air Quality Management District's CEQA Air Quality Handbook (SCAQMD 1993). Emission factors from the California Air Resources Board's OFFROAD model (ARB 2007) were used to estimate emissions from heavy equipment. Emissions of fugitive dust were estimated based on methodologies recommended in the URBEMIS2007 model (Rimpo and Associates 2007), and in the SCAQMD's CEQA Air Quality Handbook for earthmoving activities. Table 4 presents a summary of the construction phases by unit and crew and equipment needs for the grading and site preparation activities defined by the project applicant. As noted below in Table 4, grading and earthwork activities would only occur during grading phases 1 and 2. Buildings would be constructed on site as lots are sold and developed, therefore, emissions from the site preparation and grading phase of the project would represent a worst-case scenario for maximum daily emissions.

Table 4
Construction Phases and Equipment/Crew Requirements
Grading and Site Preparation

Construction Activity	Duration, days	Equipment	Number
<i>Grading Phase 1 and Development Unit 1</i>			
Clear and Grub	7	D-8 Dozer	2
		966 Loader	2
		Roll-Off Truck (10 wheeler)	1
Remove/Recompact	41	D-9 Dozer	2
		637 Scraper	8
		Water Truck	2
		Panter/BG	1
		834 Rubber Tired Compactor	1
Rock Removal	20	966 Loader	1
		769C Rock Trucks	2
		Water Truck	2
		D-9 Dozer	2
		450 Hitachi Breaker	1
Mass Excavation	40	637 Scraper	8
		D-9 Dozer	2
		834 Rubber Tired Compactor	1
		4,000 Gallon Water Truck	4
		Panter/BG	1
Finish Grade	18	140 H Motor Grader	3
		Water Truck	2
		627E Scraper	2
		966 Loader	3
<i>Development Unit 2</i>			
Finish Grade	7	140 H Motor Grader	3
		Water Truck	2
		627E Scraper	2
		966 Loader	3
<i>Development Unit 3</i>			
Finish Grade	16	140 H Motor Grader	3
		Water Truck	2
		627E Scraper	2
		966 Loader	3
<i>Grading Phase 2 and Development Unit 4</i>			
Mass Excavation	33	637 Scraper	8
		D-9 Dozer	2
		834 Rubber Tired Compactor	1
		4,000 Gallon Water Truck	4
		Panter/BG	1
Finish Grade	18	140 H Motor Grader	3
		Water Truck	2
		627E Scraper	2
		966 Loader	3
<i>Development Unit 5</i>			
Finish Grade	10	140 H Motor Grader	3
		Water Truck	2
		627E Scraper	2
		966 Loader	3

To estimate emissions associated with construction worker commutes, the EMFAC2007 model (CARB 2007) was used. The EMFAC2007 model is the latest version of the Caltrans emission factor model for on-road traffic. Construction worker traffic was conservatively assumed to be comprised of light duty trucks (i.e., small trucks, SUVs, and vans). For estimating emission factors associated with light duty trucks, it was assumed that these vehicles would be a mix of non-catalytic, catalytic, and diesel vehicles as indicated in the EMFAC2007 outputs. For conservative purposes, emission factors representing the vehicle mix for 2010 (i.e., the year Phase 1 of grading is projected to commence) were used to estimate emissions; based on the results of the EMFAC2007 model for subsequent years, emissions would decrease on an annual basis from 2010 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC2007 model, including requirements for use of low-sulfur diesel fuel. Vehicle speed was assumed to be 33 miles per hour, based on a speed limit of 45 miles per hour on access roads, and utilizing the recommended average cruise speed in Appendix B of the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol, Table B.10, Average Cruise Speed as a Function of Arterial Classification and Free-Flow Speed, for a principal arterial, suburban. The average vehicle miles traveled was assumed to be approximately 44 miles round trip, based on the average distance that would be traveled from downtown San Diego to the project site. It was assumed that 50 construction workers would be on site at any one time.

Units 1 through 3 will be mass graded during the initial construction for Unit 1. Units 4 and 5 will be mass graded during Grading Phase 2 and the initial construction for Unit 4. To estimate fugitive dust emissions associated with site grading, it was assumed that 25% of the entire project area for each unit could be graded in a single day. The total and maximum daily acreages assumed for each construction unit are as follows:

- Unit 1: 160.35 acres total, maximum grading of 40 acres/day
- Unit 2: 131.56 acres total, maximum grading of 32.89 acres/day

Fugitive dust emissions were estimated using the emission factor for PM₁₀ emissions from the URBEMIS2007 model of 10 lbs/acre/day. Assuming a maximum of 40 acres would be graded in

a single day (during Grading Phase 1 or concurrent grading of Phase 1 and Phase 2), the maximum uncontrolled daily PM₁₀ emissions would be as much as 400 lbs/day.

In accordance with the San Diego County Grading Ordinance, Section 87.428, dust control measures must be implemented for all grading projects taking place in the County of San Diego.

The Grading Ordinance requires that:

“All clearing and grading shall be carried out with dust control measures adequate to prevent creation of a nuisance to persons or public or private property. Clearing, grading or improvement plans shall require that measures such as the following be undertaken to achieve this result: watering, application of surfactants, shrouding, control of vehicle speeds, paving of access areas, or other operational or technological measures to reduce dispersion of dust.”

These measures constitute best management practices for dust control. The SCAQMD’s Air Quality Handbook, Table 11-4, provides control efficiencies to estimate the efficiency of the dust control measures required by the Grading Ordinance. Best management practices to reduce the amount of fugitive dust generated from construction of the proposed project, include the following:

- Multiple applications of water during grading between dozer/scrapper passes (a minimum of three times per day)
- Paving, chip sealing or chemical stabilization of internal roadways after completion of grading
- Use of sweepers or water trucks to remove “track-out” at any point of public street access
- Termination of grading if winds exceed 25 mph
- Stabilization of dirt storage piles by chemical binders, tarps, fencing or other erosion control

The East Otay Mesa Specific Plan Final EIR also lists similar construction mitigation measures directed at controlling dust. These measures will be a requirement of projects implemented within the Specific Plan Area:

- Minimize the area being graded at any one time
- Water the construction area to minimize fugitive dust
- Halt grading during periods of high winds (greater than 20 mph)
- Stabilize graded areas (pave roads, hydroseed open areas, etc.) as soon as practical.
- Limit vehicles speeds on unpaved surfaces to 10 mph
- Cover trucks hauling dirt for cut and fill operations.

Although it was assumed that all of the above dust control measures would be implemented, to model the most conservative construction estimates, only application of water during grading was taken into consideration when applying a control efficiency on particulate emissions. It was assumed that a control efficiency of 61% would be achieved based on the URBEMIS2007 control efficiency for watering the site a minimum of three times daily. For conservative purposes, the other control measures were not accounted for in the mitigated emission calculations. With implementation of these dust control measures, maximum daily emissions of fugitive dust during grading would be approximately 156 lbs/day.

To estimate maximum daily and total annual emissions, it was assumed that grading and site preparation for Units 1 through 3 could occur simultaneously, and that grading and site preparation for Units 4 and 5 would follow. It was also assumed, as a worst-case assumption, that all of the construction activities defined for Grading Phase 1 could occur simultaneously in different parts of the site; i.e., clearing and grubbing could occur in one portion of the site while mass excavation, removal and recompaction of overburden, rock removal, and finish grade could occur on other portions of the site. Table 5 provides a summary of the emission estimates for each individual unit of construction for the proposed project. Refer to Appendix A for detailed emission calculations.

Table 5 MAXIMUM DAILY ESTIMATED CONSTRUCTION EMISSIONS Grading and Site Preparation						
Emission Source	CO	VOCs	NO_x	SO_x	PM₁₀	PM_{2.5}
lbs/day						
Grading Phase 1 and Development Unit 1						
Fugitive Dust – Mass Grading	-	-	-	-	156.00	32.76
Heavy Equipment Exhaust	365.64	94.92	900.33	0.76	24.05	21.40
Worker Travel – Vehicle Emissions	14.45	0.64	1.33	0.02	0.17	0.09
TOTAL	380.09	95.56	901.66	0.78	180.22	4.25
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>
Development Unit 2						
Heavy Equipment Exhaust	37.31	12.90	129.02	0.14	4.83	4.30
Worker Travel – Vehicle Emissions	14.45	0.64	1.33	0.02	0.17	0.09
TOTAL	51.76	13.54	130.35	0.16	5.00	4.39
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Development Unit 3						
Heavy Equipment Exhaust	37.31	12.90	129.02	0.14	4.83	4.30
Worker Travel – Vehicle Emissions	14.45	0.64	1.33	0.02	0.17	0.09
TOTAL	51.76	13.54	130.35	0.16	5.00	4.39
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Grading Phase 2 and Development Unit 4						
Fugitive Dust - Grading	-	-	-	-	128.27	26.94
Heavy Equipment Exhaust	162.28	43.33	414.04	0.42	16.37	14.57
Worker Travel – Vehicle Emissions	14.45	0.64	1.33	0.02	0.17	0.09
TOTAL	176.73	43.97	415.37	0.44	144.81	31.60
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>

Table 5 MAXIMUM DAILY ESTIMATED CONSTRUCTION EMISSIONS Grading and Site Preparation						
Emission Source	CO	VOCs	NO_x	SO_x	PM₁₀	PM_{2.5}
lbs/day						
<i>Development Unit 5</i>						
Heavy Equipment Exhaust	37.31	12.90	129.02	0.14	4.83	4.30
Worker Travel – Vehicle Emissions	14.45	0.64	1.33	0.02	0.17	0.09
TOTAL	51.76	13.54	130.35	0.16	5.00	4.39
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>
<i>Maximum Daily Construction, Grading Phase 1 (Units 1 through 3)</i>						
Fugitive Dust - Grading	-	-	-	-	156.00	32.76
Heavy Equipment Exhaust	440.16	120.71	1158.36	0.99	45.44	40.45
Worker Travel – Vehicle Emissions	43.35	1.92	3.99	0.06	0.51	0.27
TOTAL	483.51	122.63	1162.35	1.05	201.95	73.48
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>

During the maximum daily construction scenario for the site grading and preparation phase, emissions of VOCs, NO_x, PM₁₀, and PM_{2.5} would be above the screening-level thresholds. Measures could be employed to reduce emissions from heavy construction equipment and heavy-duty trucks, including the following:

- Limit hours of construction operations
- Minimize idling times for construction equipment
- Use of alternatively-fueled (low-sulfur diesel) or catalyst-equipped diesel construction equipment

In addition, the East Otay Mesa Specific Plan Final EIR contains similar construction mitigation directed at minimizing equipment emissions, including:

- Minimize simultaneous operation of multiple construction equipment units
- Use low pollutant emitting construction equipment
- Use electrical construction equipment

- Use catalytic reduction for gasoline-powered equipment
- Use injection timing retard for diesel-powered equipment

Limiting hours of construction operations to reduce impacts below the level of significance would not be a feasible mitigation measure as hours would need to be reduced five-fold (down to 1.5 to 2 hours per day) to reduce emissions of VOCs and NO_x below the screening-level threshold. Reduction of construction hours would not be cost-effective or allow construction of the project to proceed within schedule or budget.

The project applicant does agree to minimize idling times for construction equipment. Minimization of idling times would be included as a requirement in the construction contract, taking into account the idling requirements for startup of heavy equipment as well as idle time at midday for 30 minutes while mechanics check all equipment for liquid level as per engine manufacturers requirements. This measure would reduce emissions of criteria pollutants but would not reduce emissions below a level of significance.

The ARB has implemented a program under Title 13, California Code of Regulations, Sections 2281-2285 and Title 17, California Code of Regulations, Section 93114 that will require sellers of diesel fuel to meet a 15 ppm sulfur limit for all vehicular diesel sold in California. This requirement also applies to non-vehicular diesel fuel with the exception of locomotive and marine vessel fuels, which are regulated by other requirements. The low-sulfur diesel fuel requirement will reduce emissions of particulate matter from all diesel sources. The project will be constructed using low-sulfur diesel fuel because construction would commence after the fuel is required. This requirement would not reduce emissions below significant levels because the exceedances of particulate thresholds are due to fugitive dust generated during grading, and VOCs and NO_x emissions, which are also above the screening-level threshold, are not reduced through the use of low-sulfur diesel fuel.

In accordance with County of San Diego Department of Planning and Land Use requirements, the project will require ten percent of the construction fleet to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or ARB certified Tier

I, II, or III equipment. Ten percent was determined to be a reasonable requirement based on the amount of contractors whose fleets have already been retrofit and engines repowered as a result of the local and neighboring Carl Moyer Programs. With use of ten percent of the construction fleet retrofit and/or repowered, the project would mitigate emissions to the extent feasible.

Use of alternatively-fueled or catalyst-equipped diesel construction equipment and minimization of idling times would not reduce the emissions of VOCs and NO_x below the screening-level threshold; it should be noted that low-sulfur diesel fuel will be a requirement for use in all diesel-powered equipment from 2007 and beyond and will be used in construction equipment. Implementing the mitigation from the East Otay Mesa Specific Plan Final EIR would also not result in a substantial reduction of VOCs and NO_x emissions because they are similar measures.

Even with application of best management practices to control emissions of fugitive dust, emissions of PM₁₀ and PM_{2.5} during construction would exceed the stated significance thresholds. There are no additional feasible mitigation measures to reduce emissions below the level of significance. Because the construction phase of the project is short term in nature, criteria pollutants emissions during construction would constitute a significant but temporary impact on the ambient air quality.

To evaluate whether project construction could pose a significant impact to nearby sensitive receptors, an evaluation of diesel exhaust particulate matter was conducted. Diesel exhaust particulate matter is known to the state of California as carcinogenic compounds. The risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of chronic exposure, which is defined in the California Office of Environmental Health Hazard Assessment (OEHHA) guidelines, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2003a) as 24 hours per day, 7 days per week, 365 days per year, for 70 years. Diesel exhaust particulate matter would be emitted during construction due to the operation of heavy equipment at the site. Because diesel exhaust particulate matter is considered to be carcinogenic, long-term exposure to diesel exhaust emissions have the potential to result in adverse health impacts.

To assess whether there is a potential for a significant impact associated with exposure to diesel exhaust particulate matter, a health risk evaluation was conducted on the particulate emissions. The amount of diesel particulate varies with the project schedule and construction phasing. It was assumed that the emissions associated with Units 1 through 3 would occur simultaneously, and that the emissions associated with Units 4 and 5 would also occur simultaneously.

The construction heavy equipment sources were represented as five separate point sources; one point source was located at each of the development units. Emissions were allocated to these sources based on the estimated emission rates for each unit under construction. The emission sources were represented as a point source 10 feet high, with a stack diameter of 6 inches, a stack exit temperature of 300 F, and a stack exit velocity of 1 meters/second, which is considered to be a minimum stack velocity. It was assumed that the equipment would operate for 8 hours per day, 6 days per week.

The nearest existing receptors were located based on the site map, information regarding nearby receptors from the noise analysis, and aerial photographs for the project area. Three individual receptors were identified in the project vicinity: two receptors (homes) are located along Otay Mesa Road approximately 6,500 feet west of the project site and represent two residential structures; and one residential receptor is located approximately 5,900 feet to the north on Kuebler Ranch Road. The source and receptor configuration is shown in Figure 2. The risk evaluation was conducted to assess the potential for an unacceptable risk at these existing receptors due to exposure to diesel particulate emissions from heavy construction equipment during construction. The residential receptors identified are the closest residences, but they are located more than one mile from the site. No other sensitive receptors are located in the project vicinity.

The U.S. EPA's approved air dispersion model, ISCST3 (U.S. EPA 1999), was used to estimate the downwind impacts at the closest receptors to the construction site. The model was run using preprocessed meteorological data from the MCAS Miramar surface meteorological monitoring station and the MCAS Miramar upper air meteorological monitoring station for 1995. MCAS Miramar is the closest meteorological monitoring station for which pre-processed surface

meteorological data are available from the San Diego Air Pollution Control District, and is considered by the District to represent general wind patterns for the inland areas of San Diego County. Risk were estimated using the Office of Environmental Health Hazard Assessment (OEHHA)'s unit risk factor of $3 \times 10^{-4} (\mu\text{g}/\text{m}^3)^{-1}$ for diesel particulate, which is an upper-bound cancer risk estimate based on 70 years of exposure. The equation to calculate risk is as follows:

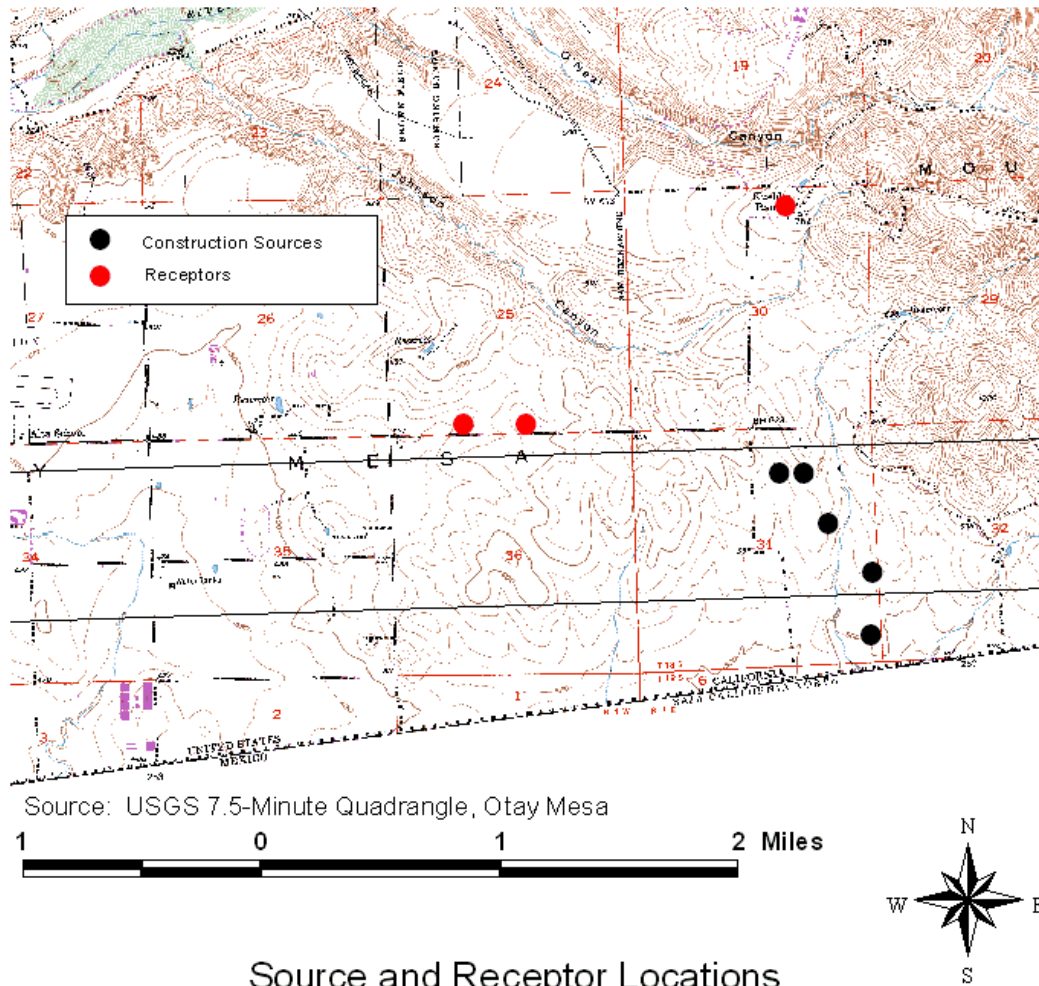
$$\text{Risk} = \text{Predicted ground level concentration } (\mu\text{g}/\text{m}^3) \times \text{Unit Risk Factor } (\mu\text{g}/\text{m}^3)^{-1}$$

The risk predicted using this equation is then compared to a risk level of 1 in 1 million, or 0.000001. If the risk predicted using this equation is above 0.000001, the risk would be above the County of San Diego's significance threshold.

Because the unit risk factor is based on 70 years (25550 days) of exposure for 24 hours per day, 365 days per year, the results of the analysis were scaled to account for exposure for the duration of each individual construction phase, as shown in the example calculation below.

$$\text{Risk} = \text{Excess cancer risk for 70 years} \times (\text{days of construction per phase}/25550 \text{ days}).$$

Based on the above equation, the maximum excess cancer risk predicted would be 0.00508 in a million, or 0.00000000508. This value is below the County of San Diego's significance threshold of 1 in 1 million (or 0.000001). The risk associated with exposure to diesel particulate from construction of the project is therefore not significant. Results of the risk evaluation and risk calculations are included in Appendix A.



Source and Receptor Locations
Health Risk Assessment

SRA Scientific Resources Associated Figure 2

The project could produce objectionable odors, which would result from volatile organic compounds, ammonia, carbon dioxide, hydrogen sulfide, methane, alcohols, aldehydes, amines, carbonyls, esters, disulfides dust and endotoxins from the construction phase of the project. However, these substances, if present at all, would only be in trace amounts (less than $1 \mu\text{g}/\text{m}^3$). Subsequently, no significant odor impacts are expected to affect surrounding receptors. Moreover, the effects of objectionable odors are localized to the immediate surrounding area and will not contribute to a cumulatively considerable odor. A list of past, present and future projects within the surrounding area were evaluated and none of these projects create objectionable odors.

Operational Impacts

Because specific tenants, buildings or uses are not known at this time, emissions associated with specific industrial park operations were not evaluated. Emission sources associated with light and heavy industrial uses would be subject to the permitting requirements of the SDAPCD and would be required to comply with SDAPCD Rules and Regulations governing the emissions of air contaminants. As such, these sources would not be allowed to emit pollutants that would cause a significant impact on the ambient air quality.

The main operational impacts associated with the Otay Crossings Commerce Park project would include impacts associated with traffic. Minor emissions would be associated with energy use. Project-generated traffic was addressed in the Traffic Impact Study, The Otay Crossings Commerce Park (Darnell & Associates 2008). Based on the Traffic Impact Study, at full buildout the project would generate 21,279 daily trips in the Existing plus Project (Units 1 through 5) scenario. Once the SR-11 facility is constructed, the lots being used as a Truck Parking Facility (Unit 5) will no longer be utilized as it will be located within the right-of-way for the future SR-11 and the project will generate 18,768 daily trips.

Based on projections for the Otay Mesa area the existing truck mix along Otay Mesa Road (SR-905) is 1.1 percent medium-duty trucks and 5.4 percent heavy trucks. This truck mix is based on truck mix estimates provided for the noise analysis by Caltrans along SR-905 west of Old Otay

Mesa Road. For existing plus project conditions and near-term conditions, the project noise analysis assumed a truck mix of 5 percent medium-duty trucks and 10 percent heavy-duty trucks. This same truck mix was used for future conditions to evaluate the potential air emissions impacts associated with project-related traffic.

To estimate emissions associated with project-related traffic, the EMFAC2007 model (CARB 2007) was used. The EMFAC2007 model is the latest version of the Caltrans emission factor model for on-road traffic. For conservative purposes, emission factors representing the vehicle mix for 2012 were used to estimate emissions for the Existing plus Project scenario; based on the results of the EMFAC2007 model for subsequent years, emissions would decrease on an annual basis from 2012 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the EMFAC2007 model. Emission factors representing the vehicle mix for 2030 were used to estimate emissions for project buildout. Vehicle speed was assumed to be 33 miles per hour, based on an average free-flow speed of 45 miles per hour in the project area, and utilizing the recommended average cruise speed in Appendix B of the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol, Table B.10, Average Cruise Speed as a Function of Arterial Classification and Free-Flow Speed, for a principal arterial, suburban. The average vehicle miles traveled was assumed to be approximately 5.82 miles, based on the average trip length recorded by the San Diego Association of Governments (SANDAG).

Operational impacts associated with energy use were estimated using the URBEMIS2007 model (Rimpo 2007). URBEMIS2007 outputs are provided in Appendix A.

The results of the emission calculations, in lbs/day and tons/year, are summarized in Tables 6a (Existing plus Project) and 6b (Buildout), along with emissions associated with area sources and a comparison with the screening-level thresholds. The EMFAC2007 model outputs are presented in Appendix A.

Table 6a TOTAL OPERATIONAL EMISSIONS Existing plus Project						
	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
	Lbs/day					
Energy Use	0.68	0.06	0.81	-	0.00	0.00
Vehicular Emissions	1391.17	164.57	235.52	1.19	14.64	9.95
TOTAL	1391.85	164.63	236.34	1.19	14.64	9.95
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	Tons/year					
Energy Use	0.12	0.01	0.15	-	0.00	0.00
Vehicular Emissions	253.89	30.03	42.98	0.22	2.67	1.82
TOTAL	254.01	30.04	43.13	0.22	2.67	1.82
Screening-Level Thresholds	100	10	40	100	15	10
<i>Above Thresholds?</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>

Table 6b TOTAL OPERATIONAL EMISSIONS Buildout						
	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
	Lbs/day					
Energy Use	0.68	0.06	0.81	-	0.00	0.00
Vehicular Emissions	558.14	83.61	82.76	1.19	13.05	8.36
TOTAL	558.82	83.67	83.57	1.19	13.05	8.36
Screening-Level Thresholds	550	75	250	250	100	55
<i>Above Thresholds?</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
	Tons/year					
Energy Use	0.64	0.01	0.15	-	0.00	0.00
Vehicular Emissions	101.86	15.26	15.10	0.22	2.38	1.53
TOTAL	102.50	15.27	15.25	0.22	2.38	1.53
Screening-Level Thresholds	100	10	40	100	15	10
<i>Above Thresholds?</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Based on the estimates of the emissions associated with project operations, the emissions of CO, NO_x, and VOCs would be above the screening-level thresholds in the Existing plus Project scenario, and emissions of CO and VOCs would be above the screening-level thresholds under Buildout conditions. Emissions are mainly associated with vehicular traffic emissions. Because the emissions are mainly associated with project-related traffic, there are no feasible mitigation measures that would substantially reduce the emissions associated with project operations to below a level of significance. The East Otay Mesa Specific Plan Final EIR identifies facilities

measures to be implemented by the individual developments in the Specific Plan Area and transportation mitigation to be implemented by the County to reduce vehicle emissions. The facilities measures include incorporating bike storage facilities and shuttle services. The transportation measures include transit funding, transportation control measures and travel reduction programs, among other measures. The project-level emissions are consistent with the overall vehicle trips projected in the East Otay Mesa Specific Plan because the land uses proposed for the Otay Crossings Commerce Park are consistent with the Specific Plan, and have therefore been accounted for in the RAQS and the SIP. Emissions would, therefore, be consistent with the previous analysis and would not represent a significant increase over projected emissions for the Specific Plan area. Also, because vehicular emissions decrease over time with phase-out of older vehicles and implementation of increasingly stringent emission controls, emissions at project full buildout would decrease, but would remain above the screening-level thresholds for CO and VOCs.

To further evaluate whether the project would result in a significant impact, an assessment to evaluate whether emissions of CO, which are above the screening-level thresholds, would cause a ground-level exceedance of the NAAQS or CAAQS for CO.

Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO “hot spots.” To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO “hot spots” was conducted. The Traffic Impact Analysis evaluated whether or not there would be a decrease in the level of service at the roadways and/or intersections affected by the proposed project. The potential for CO “hot spots” was evaluated based on the results of the Traffic Impact Analysis. The Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) should be followed to determine whether a CO “hot spot” is likely to form due to Project-generated traffic. In accordance with the Protocol, CO “hot spots” are typically evaluated when (a) the level of service (LOS) of an intersection or roadway decreases to a LOS E or worse; (b) signalization and/or channelization is added to an intersection; and (c) sensitive receptors such as residences, schools, hospitals, etc. are located in the vicinity of the affected intersection or roadway segment.

According to the land use plan for the East Otay Mesa Specific Plan, the area to the north of Old Otay Mesa Road west of Alta Road, in which three residences currently exist, is designated for development as a technology business park. Thus, the three sensitive receptors that are currently located along the road will likely no longer be present for the future conditions. There would, therefore, be no sensitive receptors in the vicinity of affected roadways or intersections and therefore, in accordance with the Caltrans protocol, modeling to evaluate the potential for CO “hot spots” would not be required.

The Traffic Impact Study evaluated 23 intersections in the project vicinity to evaluate the LOS during existing, Existing plus Project, and Buildout conditions. According to the Traffic Impact Study, degradations in LOS were predicted for the Existing plus Project and Buildout for the cumulative scenario. The analysis in the East Otay Mesa Specific Plan Final EIR, which concluded that long-term CO emissions during build out of the Specific Plan Area would not be significant since the Circulation Element of the Specific Plan would assume the addition of travel lanes which would improve LOS. The East Otay Mesa Specific Plan therefore concluded that no ambient air quality impacts would be expected. The Traffic Impact Study proposes mitigation for all impacted intersections and therefore does not predict a degradation in LOS for the Buildout condition associated with the Otay Crossings Commerce Park project, and as there are no planned sensitive receptors that would be affected by CO “hot spots”, the air quality impacts associated with traffic would not change from those impacts evaluated in the East Otay Mesa Specific Plan EIR, and no new significant impacts have been identified for the Otay Crossings Commerce Park project.

Vehicular traffic may result in emissions of toxic air contaminants (TACs). Based on the County of San Diego’s requirements, a quantitative evaluation of the potential for risks associated with exposure to diesel particulate emissions generated by vehicles accessing the site was performed. Emissions of diesel particulate matter from medium- and heavy-duty trucks were evaluated based on EMFAC2007 outputs for the Buildout scenario, as this scenario best represents long-term impacts. Based on the assumed vehicle mix of 5 percent medium-duty trucks and 10 percent heavy-duty trucks, there are approximately 733 truck trips per day out of 21,2798 total

PCE trips that would be attributable to diesel medium-duty trucks, and approximately 1,465 trips per day out of 21,279 total PCE trips that would be attributable to diesel heavy-duty trucks. The risk assessment evaluated impacts from traffic traveling along the major routes to and from the site, including Old Otay Mesa Road, the proposed new State Route 11, Airway Road, Siempre Viva Road, and Alta Road. Emission calculations are included in Appendix A.

Potential impacts to sensitive receptors were evaluated based on the South Coast Air Quality Management District's "Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions" (SCAQMD 2003). According to the Guidance, the ISCST3 model should be used to estimate impacts associated with diesel particulate exhaust emissions. The Guidance recommends the use of multiple adjacent volume sources to represent emission sources (i.e., lanes of travel) along the roadway; therefore, to model the potential impacts associated with emissions of diesel particulate, a series of volume sources was placed along the major truck routes from the project, including the proposed SR 11, Old Otay Mesa Road, Alta Road, Airway Road, and Siempre Viva Road. Emissions were represented by a series of 64 volume sources. Each of 64 volume sources was assumed to be 20 meters (65.6 feet) x 20 meters (65.6 feet), and was assumed to be at ground level. Emissions were divided among the volume sources in accordance with the project traffic per segment (assuming the maximum project-related in a segment applies to the entire length of the roadway to the major connectors, SR-905 and SR-125) and were calculated assuming trucks operate for an average of 250 days per year.

HARP (OEHHA 2003b) was used to estimate the high-end incremental cancer risks associated with exposure to diesel particulate from trucks. The high-end excess cancer risk was calculated based on guidance from the Office of Environmental Health Hazard Assessment (OEHHA 2003a), using the residential exposure scenario at the nearest sensitive receptor (located at Kuebler Ranch Road). The risks were calculated based on 70 years of exposure. The maximum residential incremental cancer risk at the nearest sensitive receptor associated with exposure to diesel particulate from project-generated truck trips was estimated to be 0.798 in a million. The use of low-sulfur diesel fuel will be mandated by 2007. Increasingly stringent emission

requirements and phase-out of older vehicles can be considered to be T-BACT. Because the project will not own the trucks that will be used for transport, the project cannot dictate additional controls to be used on individual trucks; however, the ARB is reviewing diesel emission standards and may implement state-wide requirements to further reduce emissions. No other feasible measures are available to reduce on-road private vehicle diesel emissions. The maximum worker incremental cancer risk level of 3.76 in a million is below the County's significant risk threshold of 10 in a million with implementation of T-BACT. Impacts that are farther from the roadway would be lower as concentrations decrease with increasing distance from the roads. Additionally, the land within the East Otay Mesa Specific Plan Area adjacent to the source roads is planned for industrial development, which would not contain sensitive receptors.

It should be noted that other agencies use less conservative measures to evaluate potential significance and potential risks. For example, the EPA bases risk management decisions for risks between 1 in 1 million and 100 in 1 million on feasibility and cost effectiveness criteria. In the EPA's Office of Solid Waste and Emergency Response (OSWER) Directive 9355.0-30 (U.S. EPA 1991), EPA indicates that when cumulative carcinogenic risk based on a reasonable maximum exposure is less than 100 in a million, and non-cancer hazard is less than 1.0, further action (i.e., risk reduction or cleanup) is not generally warranted unless there are adverse environmental impacts. Actual risks to individuals would be likely to be lower.

Odors

During construction, diesel equipment operating at the site could generate some nuisance odors; however, due to the distance of sensitive receptors to the project site and the temporary nature of construction, odors associated with project construction would not be significant.

The project could produce objectionable odors, which would result from volatile organic compounds, ammonia, carbon dioxide, hydrogen sulfide, methane, alcohols, aldehydes, amines, carbonyls, esters, disulfides dust and endotoxins from the construction and operational phases. However, these substances, if present at all, would only be in trace amounts (less than 1 $\mu\text{g}/\text{m}^3$).

Specific industrial uses are not known at this time; however, the project's emissions would be consistent with land uses in the surrounding area. Also, as discussed above, it is likely that the existing residential receptors will not be present upon development of the East Otay Mesa area, which identifies the area to the north of Old Otay Mesa Road and west of Alta Road for technology business park use. Subsequently, no long-term odor impacts are expected to significantly affect surrounding sensitive receptors. Moreover, the affects of objectionable odors are localized to the immediate surrounding area and will not contribute to a cumulatively considerable odor.

5.0 Cumulative Impacts

In analyzing cumulative impacts from a proposed project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SDAB is listed as "non-attainment" for the State AAQS. A project that has a significant impact on air quality with regard to emissions of PM₁₀, NO_x and/or VOCs as determined by the screening criteria outlined above would have a significant cumulative effect. In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of screening levels identified above, and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions.

As stated above, projects that propose development that is consistent with the growth anticipated by the general plans and SANDAG's growth forecasts would be consistent with the RAQS and SIP. Also, projects that are consistent with the SIP rules (i.e., the federally-approved rules and regulations adopted by the APCD) are consistent with the SIP. Thus projects would be required to conform with measures adopted in the RAQS (including use of low-VOC architectural coatings, use of low-NO_x water heaters, and compliance with rules and regulations governing stationary sources) and would also be required to comply with all applicable rules and regulations adopted by the APCD.

Because the Otay Crossings Commerce Park project does not represent a land use change from the project evaluated in the East Otay Mesa Specific Plan, and the project's emissions were therefore evaluated and considered within the East Otay Mesa Specific Plan, the project would be consistent with the RAQS and SIP. Emissions associated with the Otay Crossings Commerce Park project are accounted for and considered in the emissions budget for the East Otay Mesa Specific Plan Area. The RAQS have assumptions built into them, however, which presume that projects will not exceed the screening level thresholds. Therefore, because the project's emissions of ozone precursors would exceed the screening-level thresholds prior to build-out in 2030, the project would not be consistent with the RAQS, and would result in a cumulatively considerable impact on the ambient air quality.

With regard to past and present projects, the background ambient air quality, as measured at the monitoring stations maintained and operated by the San Diego Air Pollution Control District, measures the concentrations of pollutants from existing sources. Past and present project impacts are therefore included in the background ambient air quality data.

PM₁₀ and PM_{2.5} emissions associated with construction generally result in near-field impacts. As shown in the construction emissions evaluation above in Section 2.0, the emissions of PM₁₀ and PM_{2.5} are above the screening-level thresholds during site preparation and grading of Units 1 through 3 of the Otay Crossings Commerce Park project and would therefore result in a temporary cumulatively significant impact.

In general, impacts associated with fugitive dust from construction are generally localized and would effect the area within approximately one-quarter mile of the project site. Two projects are within one-quarter mile of the Otay Crossings Commerce Park project: the Auto Storage, Wrecking, and Recycling facility located at the corner of Alta Road and Old Otay Mesa Road, and the Aaron Construction Auto Auction Park, located at the same corner. These facilities, while likely to require minimal construction due to the nature of their business, could be constructed at the same time as the Otay Crossings Commerce Park project. Because the project's emissions of fugitive dust are above the screening-level thresholds, and due to the

presence of other proposed projects within the project's immediate vicinity, there is a potential for a cumulatively significant, if temporary, impact associated with fugitive dust emissions from construction. There are, however, no sensitive receptors located within the immediate project vicinity.

With regard to cumulative impacts associated with ozone precursors, in general, provided a project is consistent with the community and general plans, it has been accounted for in the ozone attainment demonstration contained within the SIP and would not cause a cumulatively significant impact on the ambient air quality for ozone. Because the Otay Crossings Commerce Park is consistent with the land use assumptions contained in the East Otay Mesa Specific Plan approved by the County of San Diego in 1994, and because emissions associated with the project are lower than emissions projected for the entire East Otay Mesa Specific Plan Area, emissions associated with the project would not result in a cumulatively significant impact on the ambient air quality. However, because the project's emissions of ozone precursors exceed the screening-level thresholds during the initial operation of the prior (i.e., prior to buildout in 2030), the project would result in a temporary cumulative impact for emissions of ozone precursors. PM₁₀ emissions would result in a direct, if temporary, impact on the ambient air quality during construction of the project and would therefore result in a cumulatively significant, but temporary impact. Operational emissions of PM₁₀ would not exceed the screening-level thresholds and would therefore not be considered to cause a cumulatively significant impact in the long term.

The planned or reasonably foreseeable projects were generally accounted for in the Traffic Impact Study, and were therefore considered in the evaluation of CO "hot spots." Based on the CO "hot spots" discussion, a cumulative impact associated with traffic emissions is not anticipated.

6.0 Conclusions and Recommendations

In summary, the proposed project would result in emissions of air pollutants for both the construction phase and operational phase of the project. The air quality impact analysis evaluated the potential for adverse impacts to the ambient air quality due to construction and operational emissions. Construction emissions would include emissions associated with fugitive dust, heavy construction equipment and construction workers commuting to and from the site. The emissions associated with construction are above the significance criteria for the maximum construction scenario and would therefore pose a significant, but temporary, impact on the ambient air quality during construction. Measures that are incorporated into the project description to reduce impacts associated with construction include the following:

- A minimum of 3 applications of water during grading between dozer/scrapper passes
- Paving, chip sealing or chemical stabilization of internal roadways after completion of grading
- Use of sweepers or water trucks to remove “track-out” at any point of public street access
- Termination of grading if winds exceed 25 mph
- Stabilization of dirt storage piles by chemical binders, tarps, fencing or other erosion control
- Hydroseeding of graded lots
- Reduction of idling times for construction equipment

In accordance with County of San Diego Department of Planning and Land Use requirements, the project will require ten percent of the construction fleet to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or ARB certified Tier I, II, or III equipment. Ten percent was determined to be a reasonable requirement based on the amount of contractors whose fleets have already been retrofit and engines repowered as a result of the local and neighboring Carl Moyer Programs. With use of ten percent of the construction fleet retrofit and/or repowered, the project would mitigate emissions to the extent feasible.

These measures constitute best management practices for dust control and feasible measures to reduce impacts from construction equipment exhaust and are functional equivalents to the construction mitigation measures directed at fugitive dust that are required by the East Otay Mesa Specific Plan Final EIR.

In addition, the East Otay Mesa Specific Plan Final EIR contains similar construction mitigation directed at minimizing equipment emissions, including:

- Minimize simultaneous operation of multiple construction equipment units
- Use low pollutant emitting construction equipment
- Use electrical construction equipment
- Use catalytic reduction for gasoline-powered equipment
- Use injection timing retard for diesel-powered equipment

Despite implementation of these measures to reduce emissions associated with construction, the construction impacts from fugitive dust and ozone precursors would remain significant but temporary in nature.

Operational emissions would be associated with traffic accessing the Otay Crossings Commerce Park, and with other sources of emissions including energy use. Because specific industrial uses are not known at this time, specific emissions estimates could not be made. Projects with air emissions would be required to comply with the San Diego Air Pollution Control District's Rules and Regulations and, as appropriate, would be required to obtain an Authority to Construct and Permit to Operate prior to commencing operations. Furthermore, the Rules and Regulations require a demonstration that new sources would not result in a significant impact on the ambient air quality or result in a significant incremental health risk.

Based on the estimates of the emissions associated with project operations, the emissions of CO, NO_x, and VOCs would be above the screening-level thresholds for the Existing plus Project scenario. Emissions are mainly associated with vehicular traffic emissions. Because the emissions are mainly associated with project-related traffic, there are no feasible mitigation measures that would substantially reduce the emissions associated with project operations to below a level of significance. The East Otay Mesa Specific Plan Final EIR identifies facilities measures to be implemented by the individual developments in the Specific Plan Area and transportation mitigation to be implemented by the County to reduce vehicle emissions. The facilities measures include incorporating bike storage facilities and shuttle services. The transportation measures include transit funding, transportation control measures and travel

reduction programs, among other measures. The project-level emissions are consistent with the overall vehicle trips projected in the East Otay Mesa Specific Plan because the land uses proposed for the Otay Crossings Commerce Park are consistent with the Specific Plan, and have therefore been accounted for in the RAQS and the SIP. Emissions would, therefore, be consistent with the previous analysis and would not represent a significant increase over projected emissions for the Specific Plan area. Also, because vehicular emissions decrease over time with phase-out of older vehicles and implementation of increasingly stringent emission controls, emissions at project full buildout (long term, assumed to be 2030) would be below the screening-level thresholds for all pollutants.

The project could result in odors during construction and operation; however, because the project is located in an area that is proposed for industrial development, there are no sensitive receptors that would be adversely affected by minor odor impacts.

7.0 References

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Appendix A
Emission Calculations
Modeling Outputs

Table A-2
Construction Worker Commute Emissions
Clay Crossings Commerce Park

Construction Phase	Vehicle Class	No. of Workers per Construction Phase	Speed (mph)	VMT (mi/veh/cls-day)	CO		NO _x		VOCs					SO _x		PM ₁₀				PM _{2.5}				CO ₂		CH ₄		Emissions, lbs/day												Emissions, tons/year											
					Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/hr)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	Hot-Soak (g/hr)	Resting Loss (g/hr)	Evaporative (g/hr)	Diurnal Evaporative (g/hr)	Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	Tire Wear (g/m)	Brake Wear (g/m)	Running Exhaust (g/m)	Start-Up (g/startup)	Tire Wear (g/m)	Brake Wear (g/m)	Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	CO	NO _x	VOCs	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CO	NO _x	VOCs	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄							
Site Preparation and Grading	Light-duty truck, cabover	50	33	44	2737	10,688	0.262	0.525	0.05	0.763	0.191	0.025	0.046	0.053	0.004	0.002	0.013	0.016	0.008	0.012	0.011	0.015	0.002	0.009	399,659	203,899	0.029	0.043	14.45	1.33	0.64	0.02	0.17	0.09	1860.86	0.13	1.81	0.17	0.08	0.50	0.02	0.01	245.11	0.02							

Assume startup after 8 hours
Assume 45 minutes trip time total
2010 Emission Factors from EMFAC2007

Table A-3
 Construction Health Risk Calculations
 Otay Crossings Commerce Park

Phase	Total Days	lbs/year	grams/sec	Impact ug/m3	Risk	Maximum Impacts in ug/m3 at MEI (based on 1 gram/second emission rate)					
						All Source	Source 1	Source 2	Source 3	Source 4	Source 5
1	126	87.44742	0.001258	2.17E-03	3.21E-09	8.63738	3.75624	1.74091	1.78712	0.81215	0.54096
2	7	33.80479	0.000486	8.40E-04	6.90E-11						
3	16	77.26809	0.001111	1.92E-03	3.61E-10						
4	51	87.117	0.001253	2.16E-03	1.30E-09						
5	10	48.29256	0.000695	1.20E-03	1.41E-10						
Risk, Phases 1-3					3.64E-09						
Risk, Phases 4 and 5					1.44E-09						
Total Risk					5.08E-09						

Table A-4
 Project-Related Near-Term Traffic Emissions
 Clay Crossings Commerce Park

Vehicle Class	Number of Daily Trips	Speed (mph)	VMT (mi/vehic-le/day)	CO		NO _x		VOCs						SO _x		PM10				PM2.5				CO ₂		CH ₄		Emissions, lbs/day										Emissions, tons/year									
				Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Hot-Soak (gsoak)	Resting Loss (gref)	Running Evaporat-ive (gmi)	Durnal Evaporat-ive (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Tire Wear (gmi)	Brake Wear (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Tire Wear (gmi)	Brake Wear (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10	PM2.5	CO ₂	CH ₄	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10					
All	21279	33	5.82	2,847	13,085	3,700	0.020	0.116	1.113	0.188	0.001	0.042	0.056	0.004	0.000	0.028	0.021	0.009	0.013	0.026	0.02	0.002	0.005	421.567	184.985	0.007	0.064	1391.17	236.52	164.07	1.1899	7.61	14.64	9.95	#####	10.37	263.89	42.88	30.03	0.2164	1.3952	2.6712					

2012 emission factors
 Assume 40 minute operating time

Table A-4
Project-Related Near-Term Traffic Emissions
Clay Crossings Commerce Park

Vehicle Class	Number of Daily Trips	Speed (mph)	VMT (mi/vehic-le-day)	Emissions, lbs/day															Emissions, tons/year																										
				CO		NO _x		VOCs					SO _x		PM ₁₀			PM _{2.5}			CO ₂		CH ₄		Emissions, lbs/day																				
				Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Hot-Soak (g/30)	Resting Loss (g/hr)	Running Exhaust (g/mi)	Diurnal Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Tire Wear (g/mi)	Brake Wear (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM ₁₀	PM _{2.5}	CO ₂	CH ₄
				1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.013	0.02	0.021	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034			
All Trips	1172	33	5.82	1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034							
MBV SR II	161	33	5.82	1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034							
MBV SR II	582	33	5.82	1.495	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.59	1.78	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0346	895.2473	0.0092									
MBV Van/Micro Bus	101	33	5.82	1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034							
MBV Van/Micro Bus	301	33	5.82	1.495	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.59	1.78	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0346	895.2473	0.0092									
MBV Van/Micro Bus	301	33	5.82	1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034							
MBV Van/Micro Bus	301	33	5.82	1.495	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.59	1.78	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0346	895.2473	0.0092									
MBV Van/Micro Bus	301	33	5.82	1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034							
MBV Van/Micro Bus	301	33	5.82	1.495	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.59	1.78	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0346	895.2473	0.0092									
MBV Van/Micro Bus	71	33	5.82	1.152	0.244	0.244	0.344	0.042	0.416	0.123	0.012	0.042	0.034	0.004	0.002	0.002	0.002	0.005	418.764	192.21	0.012	0.021	558.14	82.78	83.61	1.1802	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	2.3808	1.5251	#####	0.8034							
MBV Van/Micro Bus	71	33	5.82	1.495	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	1.41	4.85	0.63	0.0168	0.18	0.24	0.19	1752.07	0.02	0.26	0.89	0.12	0.0031	0.0325	0.0437	0.0338	316.7520	0.0029									

Table A-4
Project-Related Near Term Traffic Emissions
Clay Crossings Commerce Park

Vehicle Class	Number of Daily Trips	Speed (mph)	VMT (mi/vehic le/day)	CO		NO _x		VOCs						SO _x				PM10				PM2.5				CO2		CH4		Emissions, lbs/day												Emissions, tons/year											
				Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Hot-Soak (gsoak)	Resting Loss (gloss)	Running Evaporat (gmi)	Durnal Evapora (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Tire Wear (gmi)	Brake Wear (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Tire Wear (gmi)	Brake Wear (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10	PM2.5	CO2	CH4	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10											
All	21279	33	5.92	1.156	4.158	0.244	0.344	0.048	0.416	0.121	0.019	0.022	0.034	0.004	0.000	0.022	0.022	0.009	0.013	0.02	0.021	0.002	0.005	418.764	192.24	0.012	0.024	558.14	82.76	83.61	1.1893	13.05	8.38	#####	4.40	101.86	15.10	15.26	0.2164	2.3803													
Trucks																																																					
MDT SR 11	344	33	0.124	1.192	1.166	0.109		0.198	0.026	0.042	0.056	0.014	0.128		0.012	0.013	0.118		0.003	0.005	1505		0.005				0.11	0.11	1.32	0.0013	0.01	0.01	0.01	141.67	0.00	0.02	0.02	0.24	0.0002	0.0022	0.0022												
MDT SR 11	699	33	0.124	1.659	5.164	0.375		0.198	0.026	0.042	0.056	0.018	0.191		0.006	0.028	0.176		0.009	0.012	1863.736		0.017				0.28	0.97	2.68	0.0034	0.04	0.05	0.04	356.87	0.00	0.05	0.18	0.48	0.0006	0.0066	0.0066												
MDT Clay Mtns Rd	103	33	0.124	1.192	1.166	0.109		0.198	0.026	0.042	0.056	0.014	0.128		0.012	0.013	0.118		0.003	0.005	1505		0.005				0.03	0.03	0.39	0.0004	0.00	0.00	0.00	42.20	0.00	0.01	0.01	0.07	0.0001	0.0007	0.0007												

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth							
Landscape							
Consumer Products							
Architectural Coatings							
TOTALS (lbs/day, unmitigated)	0.06	0.81	0.68	0.00	0.00	0.00	966.44

Area Source Changes to Defaults

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name:
Project Name: Otay Crossings Energy Use
Project Location: California State-wide
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.01	0.15	0.12	0.00	0.00	0.00	176.38

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.01	0.15	0.12	0.00	0.00	0.00	176.38

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.15	0.12	0.00	0.00	0.00	176.38
Hearth							
Landscape							
Consumer Products							
Architectural Coatings							
TOTALS (tons/year, unmitigated)	0.01	0.15	0.12	0.00	0.00	0.00	176.38

Area Source Changes to Defaults

**Construction Health Risk Calculations – ISCST3 Input Files are on file with the
County DPLU**

**Operational Health Risk Calculations – ISCST3 Input Files are on file with the
County DPLU**

HARP Outputs – Operational Health Risk Assessment, Residential Receptor

This file: c:\HARPEXpress\Rep_Can_70yr_Inh_AllRec_AllSrc_AllCh_ByRec_Site.txt

Created by HARP Version 1.0 Build 21.17.36
Uses ISC Version
Uses BPIP Version
Creation date: 8/1/2005 3:57:35 PM

EXCEPTION REPORT

(there have been no changes or exceptions)

INPUT FILES:

Source-Receptor file: c:\HARPEXpress\OTAYX8.mta
Averaging period adjustment factors file: not applicable
Emission rates file: none
Site parameters file: c:\HARPEXpress\demo.sit

Screening mode is OFF

Exposure duration: 70 year (adult resident)
Analysis method: 80th Percentile Point Estimate (inhalation pathway only)
Health effect: Cancer Risk
Receptor(s): All
Sources(s): All
Chemicals(s): All

SITE PARAMETERS

Inhalation only. Site parameters not applicable.

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m ³)
0001	9901	DieselExhPM	Diesel engine exhaust, particulate matter	0.000E+00

EMISSIONS DATA SOURCE:

CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR1 PRO=STK1 STK=1 NAME=Facility 1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m ³)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR2 PRO=STK2 STK=1 NAME=Facility 1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR3 PRO=STK3 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR4 PRO=STK4 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR5 PRO=STK5 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=pr6 PRO=STK6 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR7 PRO=STK7 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR8 PRO=STK8 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR9 PRO=STK9 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR10 PRO=STK10 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR11 PRO=STK11 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	

SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	

9901	DieselExhPM		1		0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK31 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK32 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK33 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK34 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK35 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK36 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK37 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK38 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK39 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2.833	*	

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK50 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK51 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK52 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK53 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK54 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK55 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK56 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK57 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK58 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK59	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	2.833	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK60	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	2.833	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK61	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK62	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK63	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK64	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							

CANCER RISK REPORT

REC	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
0001	3.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-07

HARP Outputs – Operational Health Risk Assessment, Occupational Receptor

This file: c:\HARPEXpress\Rep_Can_WRK_Avg_AllRec_AllSrc_AllCh_ByRec_Site.txt

Created by HARP Version 1.0 Build 21.17.36
Uses ISC Version
Uses BPIP Version
Creation date: 7/19/2005 2:31:10 PM

EXCEPTION REPORT

(there have been no changes or exceptions)

INPUT FILES:

Source-Receptor file: c:\HARPEXpress\OTAYX.mta
Averaging period adjustment factors file: not applicable
Emission rates file: none
Site parameters file: c:\HARPEXpress\demo.sit

Screening mode is OFF

Exposure duration: Standard work schedule (49 wks/yr, 5 days/wk, 8 hrs/day, 40 yrs)
Analysis method: Point estimate
Health effect: Cancer Risk
Receptor(s): All
Sources(s): All
Chemicals(s): All

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s)	0.05
-----------------------	------

DRINKING WATER

Water surface area (m ²)	1001
Water volume (L)	10000000
Volume changes per year	1
Fraction of drinking water from contaminated source	1

FISH

Water surface area (m ²)	1000
--------------------------------------	------

Water volume (L)	10000000
Volume changes per year	1
Fraction of ingested fish from contaminated source	1

PASTURE

ANIMALS' WATER	
Water surface area (m^2)	1000
Water volume (L)	10000000
Volume changes per year	1
Fraction of beef cows' water from pasture source	1
Fraction of dairy cows' water from pasture source	1

ANIMALS' FEED	
Fraction of cows' feed from grazing	1

HUMAN INGESTION	
Fraction of ingested beef from contaminated source	1
Fraction of ingested dairy from contaminated source	1

HOME GROWN PRODUCE

HUMAN INGESTION	
Fraction of ingested leafy vegetable from home grown source	0.15
Fraction of ingested exposed vegetable from home grown source	0.15
Fraction of ingested protected vegetable from home grown source	0.15
Fraction of ingested root vegetable from home grown source	0.15

PIGS, CHICKENS AND EGGS

HUMAN INGESTION	
Fraction of ingested pig from home grown source	1
Fraction of ingested chicken from home grown source	1
Fraction of ingested egg from home grown source	1

ANIMALS' FEED
 Fraction of pigs' feed
 from home grown crop 0.1
 Fraction of chickens' feed
 from home grown crop 0.05

SOIL INGESTION
 Fraction of pigs' feed
 eaten off the ground 0.1
 Fraction of chickens' feed
 eaten off the ground 0.05

PIG FEED COMPOSITION
 Fraction of feed that is
 exposed vegetable 0.25
 Fraction of feed that is
 leafy vegetable 0.25
 Fraction of feed that is
 protected vegetable 0.25
 Fraction of feed that is
 root vegetable 0.25

CHICKEN FEED COMPOSITION
 Fraction of feed that is
 exposed vegetable 0.25
 Fraction of feed that is
 leafy vegetable 0.25
 Fraction of feed that is
 protected vegetable 0.25
 Fraction of feed that is
 root vegetable 0.25

DERMAL ABSORPTION

*** Pathway enabled ***

SOIL INGESTION

*** Pathway enabled ***

MOTHER'S MILK

*** Pathway enabled ***

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m ³)
0001	9901	DieseExhPM	Diesel engine exhaust, particulate matter	0.000E+00

EMISSIONS DATA SOURCE:
 CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m ³)	AVRG (lbs/yr)	MAX (lbs/hr)	EMS (lbs/yr)
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	

EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR9	PRO=STK9	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR10	PRO=STK10	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR11	PRO=STK11	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR12	PRO=STK12	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR13	PRO=STK13	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR14	PRO=STK14	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK15	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2	0.002375		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK16	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	6.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK17	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	6.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK18	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK19 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK20 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK21 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK22 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK23 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK24 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK25 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK26 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK27 STK=1 NAME=Facility 1 EMS (lbs/yr)						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	

SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	

9901	DieselExhPM		1		0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK47 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK48 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK49 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK50 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK51 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK52 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK53 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK54 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK55 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK56	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK57	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK58	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK59	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK60	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK61	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK62	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK63	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK64	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					

CANCER RISK REPORT

REC	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
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Appendix A
Emission Calculations
Modeling Outputs

Table A-2
Construction Worker Commute Emissions
Clay Crossings Commerce Park

Construction Phase	Vehicle Class	No. of Workers per Construction Phase	Speed (mph)	VMT (mi/veh/cls-day)	CO		NO _x		VOCs					SO _x		PM ₁₀				PM _{2.5}				CO ₂		CH ₄		Emissions, lbs/day												Emissions, tons/year											
					Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	Hot-Soak (g/hr)	Resting Loss (g/hr)	Evaporative (g/hr)	Diurnal Evaporative (g/hr)	Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	Tire Wear (g/m)	Brake Wear (g/m)	Running Exhaust (g/m)	Start-Up (g/startup)	Tire Wear (g/m)	Brake Wear (g/m)	Running Exhaust (g/m)	Start-Up (g/startup)	Running Exhaust (g/m)	Start-Up (g/startup)	CO	NO _x	VOCs	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CO	NO _x	VOCs	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄							
Site Preparation and Grading	Light-duty truck, cabover	50	33	44	2737	10,688	0.262	0.525	0.05	0.763	0.191	0.025	0.048	0.053	0.004	0.002	0.013	0.016	0.008	0.012	0.011	0.015	0.002	0.009	399,659	203,899	0.029	0.043	14.45	1.33	0.64	0.02	0.17	0.09	1860.86	0.13	1.81	0.17	0.08	0.50	0.02	0.01	245.11	0.02							

Assume startup after 8 hours
Assume 45 minutes trip time total
2010 Emission Factors from EMFAC2007

Table A-3
 Construction Health Risk Calculations
 Otay Crossings Commerce Park

Phase	Total Days	lbs/year	grams/sec	Impact ug/m3	Risk	Maximum Impacts in ug/m3 at MEI (based on 1 gram/second emission rate)					
						All Source	Source 1	Source 2	Source 3	Source 4	Source 5
1	126	87.44742	0.001258	2.17E-03	3.21E-09	8.63738	3.75624	1.74091	1.78712	0.81215	0.54096
2	7	33.80479	0.000486	8.40E-04	6.90E-11						
3	16	77.26809	0.001111	1.92E-03	3.61E-10						
4	51	87.117	0.001253	2.16E-03	1.30E-09						
5	10	48.29256	0.000695	1.20E-03	1.41E-10						
Risk, Phases 1-3					3.64E-09						
Risk, Phases 4 and 5					1.44E-09						
Total Risk					5.08E-09						

Table A.4
 Project-Related Near-Term Traffic Emissions
 Clay Crossings Commerce Park

Vehicle Class	Number of Daily Trips	Speed (mph)	VMT (mi/vehic fe/day)	Emissions, lbs/day										Emissions, tons/year																												
				CO		NO _x		VOCs				SO _x		PM10				PM2.5				CO ₂		CH ₄		Emissions, lbs/day								Emissions, tons/year								
				Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Hot-Soak (gsoak)	Resting Loss (grefl)	Running Evaporat ive (gmi)	Durnal Evaporat ive (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	Tire Wear (gmi)	Brake Wear (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Tire Wear (gmi)	Brake Wear (gmi)	Running Exhaust (gmi)	Start-Up (gstart)	Running Exhaust (gmi)	Start-Up (gstart)	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10	PM2.5	CO ₂	CH ₄	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10
All	21279	33	5.82	2,847	13,085	3,700	0.020	0.116	1.113	0.188	0.001	0.042	0.056	0.004	0.000	0.008	0.021	0.009	0.013	0.026	0.02	0.002	0.005	623.567	184.985	0.007	0.064	1391.17	236.52	164.57	1.1899	7.61	14.64	9.98	#####	10.37	263.89	42.88	30.61	0.2164	1.3902	2.6712

2012 emission factors
 Assume 40 minute operating time

Table A.4
Project-Related Near-Term Traffic Emissions
Clay Crossings Commerce Park

Vehicle Class	Number of Daily Trips	Speed (mph)	VMT (mi/vehic-le/day)	Emissions, lbs/day																Emissions, tons/year																						
				CO		NO _x		VOCs				SO _x		PM ₁₀				PM _{2.5}				CO ₂		CH ₄		Emissions, lbs/day								Emissions, tons/year								
				Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Hot-Soak (g/1000 ft-lb)	Resting Loss (g/hr)	Running Exhaust (g/mi)	Diurnal Exhaust (g/1000 ft-lb)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Tire Wear (g/mi)	Brake Wear (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up Exhaust (g/mi)	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM ₁₀
All	1170	33	5.82	1.158	5.164	0.244	0.364	0.042	0.416	0.123	0.012	0.042	0.016	0.004	0.002	0.002	0.002	0.013	0.02	0.021	0.002	0.005	418.764	192.281	0.012	0.021	558.16	82.78	83.61	1.882	13.05	8.35	#####	4.40	101.88	15.10	15.25	0.2164	7.3808	1.5251	#####	0.8034
MTV SR-L1	161	33	5.82	1.152	5.164	0.109	0.188	0.028	0.042	0.066	0.014	0.128	0.012	0.013	0.118	0.001	0.006	1.905	0.006	5.27	5.15	1.20	0.0610	0.57	0.68	0.66	8549.28	0.09	0.68	0.34	0.33	0.0113	0.1032	0.1234	0.1016	1213.4840	0.0049					
MTV SR-L1	489	33	5.82	1.492	5.164	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	13.95	13.95	5.00	0.1501	1.68	2.29	1.74	1668.60	0.18	2.42	5.31	1.98	0.0200	0.3880	0.4124	0.3177	3505.828	0.0214					
MTV Van/Med-Bd	101	33	5.82	1.192	5.164	0.109	0.198	0.028	0.042	0.056	0.014	0.128	0.012	0.013	0.118	0.001	0.006	1.905	0.006	1.57	1.53	0.53	0.0184	0.17	0.20	0.17	1980.62	0.01	0.28	0.28	0.10	0.0034	0.0307	0.0367	0.0303	361.6641	0.0012					
MTV Van/Med-Bd	305	33	5.82	1.490	5.164	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.95	1.76	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0846	895.2473	0.0082					
MTV Van-Bd	305	33	5.82	1.192	5.164	0.109	0.198	0.028	0.042	0.056	0.014	0.128	0.012	0.013	0.118	0.001	0.006	1.905	0.006	1.97	1.53	0.53	0.0184	0.17	0.20	0.17	1980.62	0.01	0.28	0.28	0.10	0.0034	0.0307	0.0367	0.0303	361.6641	0.0012					
MTV Van-Bd	305	33	5.82	1.490	5.164	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.95	1.76	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0846	895.2473	0.0082					
MTV Shuttle-Van	101	33	5.82	1.192	5.164	0.109	0.198	0.028	0.042	0.056	0.014	0.128	0.012	0.013	0.118	0.001	0.006	1.905	0.006	1.97	1.53	0.53	0.0184	0.17	0.20	0.17	1980.62	0.01	0.28	0.28	0.10	0.0034	0.0307	0.0367	0.0303	361.6641	0.0012					
MTV Shuttle-Van	305	33	5.82	1.490	5.164	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	3.95	13.95	1.76	0.0474	0.50	0.67	0.52	4905.46	0.04	0.72	2.48	0.32	0.0086	0.0917	0.1225	0.0846	895.2473	0.0082					
MTV Access-Bd	71	33	5.82	1.192	5.164	0.109	0.198	0.028	0.042	0.056	0.014	0.128	0.012	0.013	0.118	0.001	0.006	1.905	0.006	0.56	0.55	0.19	0.0068	0.08	0.07	0.06	707.45	0.00	0.10	0.10	0.03	0.0016	0.0110	0.0158	0.0158	128.1020	0.0014					
MTV Access-Bd	213	33	5.82	1.490	5.164	0.375	0.198	0.028	0.042	0.056	0.018	0.191	0.038	0.028	0.176	0.009	0.012	1863.74	0.017	1.41	4.85	0.63	0.0168	0.18	0.24	0.19	1752.07	0.02	0.26	0.89	0.12	0.0031	0.0225	0.0437	0.0338	316.7520	0.0029					

Table A.4
 Project-Related Near Term Traffic Emissions
 Clay Crossings Commerce Park

Vehicle Class	Number of Daily Trips	Speed (mph)	VMT (mi/vehic le-day)	Emissions, lbs/day																												Emissions, tons/year																	
				CO		NO _x		VOCs						SO _x		PM10				PM2.5				CO2		CH4		Emissions, lbs/day										Emissions, tons/year											
				Running Exhaust (g/mi)	Start-Up (g/start)	Running Exhaust (g/mi)	Start-Up (g/start)	Running Exhaust (g/mi)	Start-Up (g/start)	Hot-Soak (g/hour)	Resting Loss (g/hour)	Evaporat ive (g/mi)	Durnal Exhaust (g/mi)	Running Exhaust (g/mi)	Start-Up (g/start)	Running Exhaust (g/mi)	Start-Up (g/start)	Tire Wear (g/mi)	Brake Wear (g/mi)	Running Exhaust (g/mi)	Start-Up (g/start)	Tire Wear (g/mi)	Brake Wear (g/mi)	Running Exhaust (g/mi)	Start-Up (g/start)	Running Exhaust (g/mi)	Start-Up (g/start)	Running Exhaust (g/mi)	Start-Up (g/start)	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10	PM2.5	CO2	CH4	CO	NO _x	VOCs	SO _x	Diesel Exhaust Particulate	PM10					
All	21279	33	5.52	1.152	4.158	0.244	0.334	0.048	0.416	0.123	0.019	0.022	0.034	0.004	0.002	0.022	0.009	0.013	0.02	0.021	0.002	0.005	418.764	192.24	0.012	0.024	558.14	82.76	83.61	1.1893																			
Trucks																																																	
MDT SR 11	344	33	0.124	1.192	1.166	0.109		0.198	0.026	0.042	0.056	0.014		0.128		0.012	0.013	0.118		0.003	0.005	1505		0.005			0.11	0.11	1.32	0.0013	0.01	0.01	0.01	141.67	0.00	0.02	0.02	0.24	0.0002	0.0022	0.0022								
MDT SR 11	689	33	0.124	1.650	5.164	0.375		0.198	0.026	0.042	0.056	0.018		0.191		0.006	0.028	0.176		0.009	0.012	1963.736		0.017			0.28	0.97	2.68	0.0034	0.04	0.05	0.04	350.87	0.00	0.05	0.18	0.48	0.0006	0.0068	0.0068								
MDT Chas. Manly Rd	103	33	0.124	1.192	1.166	0.109		0.198	0.026	0.042	0.056	0.014		0.128		0.012	0.013	0.118		0.003	0.005	1505		0.005			0.03	0.03	0.39	0.0004	0.00	0.00	0.00	42.20	0.00	0.01	0.01	0.07	0.0001	0.0007	0.0007								

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth							
Landscape							
Consumer Products							
Architectural Coatings							
TOTALS (lbs/day, unmitigated)	0.06	0.81	0.68	0.00	0.00	0.00	966.44

Area Source Changes to Defaults

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name:
Project Name: Otay Crossings Energy Use
Project Location: California State-wide
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.01	0.15	0.12	0.00	0.00	0.00	176.38

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	0.01	0.15	0.12	0.00	0.00	0.00	176.38

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.15	0.12	0.00	0.00	0.00	176.38
Hearth							
Landscape							
Consumer Products							
Architectural Coatings							
TOTALS (tons/year, unmitigated)	0.01	0.15	0.12	0.00	0.00	0.00	176.38

Area Source Changes to Defaults

**Construction Health Risk Calculations – ISCST3 Input Files are on file with the
County DPLU**

**Operational Health Risk Calculations – ISCST3 Input Files are on file with the
County DPLU**

HARP Outputs – Operational Health Risk Assessment, Residential Receptor

This file: c:\HARPEXpress\Rep_Can_70yr_Inh_AllRec_AllSrc_AllCh_ByRec_Site.txt

Created by HARP Version 1.0 Build 21.17.36
Uses ISC Version
Uses BPIP Version
Creation date: 8/1/2005 3:57:35 PM

EXCEPTION REPORT

(there have been no changes or exceptions)

INPUT FILES:

Source-Receptor file: c:\HARPEXpress\OTAYX8.mta
Averaging period adjustment factors file: not applicable
Emission rates file: none
Site parameters file: c:\HARPEXpress\demo.sit

Screening mode is OFF

Exposure duration: 70 year (adult resident)
Analysis method: 80th Percentile Point Estimate (inhalation pathway only)
Health effect: Cancer Risk
Receptor(s): All
Sources(s): All
Chemicals(s): All

SITE PARAMETERS

Inhalation only. Site parameters not applicable.

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m ³)
0001	9901	DieselExhPM	Diesel engine exhaust, particulate matter	0.000E+00

EMISSIONS DATA SOURCE:

CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR1 PRO=STK1 STK=1 NAME=Facility 1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m ³)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR2 PRO=STK2 STK=1 NAME=Facility 1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR3 PRO=STK3 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR4 PRO=STK4 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR5 PRO=STK5 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=pr6 PRO=STK6 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR7 PRO=STK7 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR8 PRO=STK8 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR9 PRO=STK9 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR10 PRO=STK10 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR11 PRO=STK11 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2	0.002375

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	

SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	

9901	DieselExhPM		1		0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK31 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK32 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK33 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK34 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK35 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK36 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK37 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK38 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK39 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	1.667	*		

EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK40	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK41	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK42	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK43	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK44	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK45	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	1.667	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK46	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK47	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK48	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM	1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings		CO=*	DEV=PR15	PRO=STK49	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1							

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK50 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK51 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK52 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK53 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK54 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK55 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK56 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK57 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK58 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	2.833	*

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK59	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	2.833	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK60	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	2.833	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK61	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK62	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK63	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*							DEV=PR15	PRO=STK64	STK=1	NAME=Facility 1	EMS (lbs/yr)	
SOURCE MULTIPLIER=1												
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)							
9901	DieselExhPM	1	0	1.25	*							

CANCER RISK REPORT

REC	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
0001	3.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.11E-07

HARP Outputs – Operational Health Risk Assessment, Occupational Receptor

This file: c:\HARPEXpress\Rep_Can_WRK_Avg_AllRec_AllSrc_AllCh_ByRec_Site.txt

Created by HARP Version 1.0 Build 21.17.36
Uses ISC Version
Uses BPIP Version
Creation date: 7/19/2005 2:31:10 PM

EXCEPTION REPORT

(there have been no changes or exceptions)

INPUT FILES:

Source-Receptor file: c:\HARPEXpress\OTAYX.mta
Averaging period adjustment factors file: not applicable
Emission rates file: none
Site parameters file: c:\HARPEXpress\demo.sit

Screening mode is OFF

Exposure duration: Standard work schedule (49 wks/yr, 5 days/wk, 8 hrs/day, 40 yrs)
Analysis method: Point estimate
Health effect: Cancer Risk
Receptor(s): All
Sources(s): All
Chemicals(s): All

SITE PARAMETERS

DEPOSITION

Deposition rate (m/s)	0.05
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DRINKING WATER

Water surface area (m ²)	1001
Water volume (L)	10000000
Volume changes per year	1
Fraction of drinking water from contaminated source	1

FISH

Water surface area (m ²)	1000
--------------------------------------	------

Water volume (L)	10000000
Volume changes per year	1
Fraction of ingested fish from contaminated source	1

PASTURE

ANIMALS' WATER	
Water surface area (m^2)	1000
Water volume (L)	10000000
Volume changes per year	1
Fraction of beef cows' water from pasture source	1
Fraction of dairy cows' water from pasture source	1

ANIMALS' FEED	
Fraction of cows' feed from grazing	1

HUMAN INGESTION	
Fraction of ingested beef from contaminated source	1
Fraction of ingested dairy from contaminated source	1

HOME GROWN PRODUCE

HUMAN INGESTION	
Fraction of ingested leafy vegetable from home grown source	0.15
Fraction of ingested exposed vegetable from home grown source	0.15
Fraction of ingested protected vegetable from home grown source	0.15
Fraction of ingested root vegetable from home grown source	0.15

PIGS, CHICKENS AND EGGS

HUMAN INGESTION	
Fraction of ingested pig from home grown source	1
Fraction of ingested chicken from home grown source	1
Fraction of ingested egg from home grown source	1

ANIMALS' FEED
 Fraction of pigs' feed
 from home grown crop 0.1
 Fraction of chickens' feed
 from home grown crop 0.05

SOIL INGESTION
 Fraction of pigs' feed
 eaten off the ground 0.1
 Fraction of chickens' feed
 eaten off the ground 0.05

PIG FEED COMPOSITION
 Fraction of feed that is
 exposed vegetable 0.25
 Fraction of feed that is
 leafy vegetable 0.25
 Fraction of feed that is
 protected vegetable 0.25
 Fraction of feed that is
 root vegetable 0.25

CHICKEN FEED COMPOSITION
 Fraction of feed that is
 exposed vegetable 0.25
 Fraction of feed that is
 leafy vegetable 0.25
 Fraction of feed that is
 protected vegetable 0.25
 Fraction of feed that is
 root vegetable 0.25

DERMAL ABSORPTION

*** Pathway enabled ***

SOIL INGESTION

*** Pathway enabled ***

MOTHER'S MILK

*** Pathway enabled ***

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m ³)
0001	9901	DieseExhPM	Diesel engine exhaust, particulate matter	0.000E+00

EMISSIONS DATA SOURCE:
 CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m ³)	AVRG (lbs/yr)	MAX (lbs/hr)	EMS (lbs/yr)
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	
EMISSIONS FOR FACILITY FAC=Otay Crossings						
SOURCE MULTIPLIER=1						
9901	DieseExhPM	1	0	2	0.002375	

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR9	PRO=STK9	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR10	PRO=STK10	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR11	PRO=STK11	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR12	PRO=STK12	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR13	PRO=STK13	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR14	PRO=STK14	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK15	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2	0.002375					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK16	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	6.667	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK17	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	6.667	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK18	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK19 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK20 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK21 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK22 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK23 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK24 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK25 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK26 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK27 STK=1 NAME=Facility 1 EMS (lbs/yr)					
SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0	6.667	*

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	6.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	

SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						
SOURCE MULTIPLIER=1						
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)	
9901	DieselExhPM	1	0	1.667	*	

9901	DieselExhPM		1		0	2.833	*	
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK47 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK48 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK49 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK50 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK51 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK52 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK53 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK54 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=* DEV=PR15 PRO=STK55 STK=1 NAME=Facility 1 EMS (lbs/yr)								
SOURCE MULTIPLIER=1								
CAS	ABBREV		MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)		
9901	DieselExhPM		1	0	2.833	*		

EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK56	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK57	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK58	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK59	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK60	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	2.833	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK61	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK62	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK63	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					
EMISSIONS FOR FACILITY FAC=Otay Crossings CO=*						DEV=PR15	PRO=STK64	STK=1	NAME=Facility 1	EMS (lbs/yr)
SOURCE MULTIPLIER=1										
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)					
9901	DieselExhPM	1	0	1.25	*					

CANCER RISK REPORT

REC	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
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Table with 16 columns of scientific notation values (E-07 or E-08) and a final column with values ranging from 1.17E-07 to 1.67E-07. Each row contains a unique ID in the first column and 15 data points in the remaining columns.

