APPENDIX D
AIR QUALITY DATA

Parenthetical URBEMIS2007 (Version 9.2.4) Assumptions
City of South Gate General Plan Update
Date: March 2009

LAND USES

Scenario		Land Use Type	Unit Type	Trip Rate
Existing	2035 Buildout			
14,825	17,582	Single Family Housing	Dwelling Units	7.93
4,955	5,831	Apartments[1]	Dwelling Units	5.48
4,928	5,834	Residential Condo/Townhouse[2]	Dwelling Units	5.52
142	156	Elementary School	1,000 square feet	14.49
102	114	Junior High School	1,000 square feet	13.78
132	145	High School	1,000 square feet	12.89
47	52	Community/Adult College	1,000 square feet	27.49
166	166	City park	Acres	1.59
1,041	1,249	Shopping Center[3]	1,000 square feet	42.94
411	443	Civic/Institutional/Office[3]	1,000 square feet	27.92
265	280	General Light Industrial	1,000 square feet	6.97
663	703	General heavy Industrial	1,000 square feet	1.50

Notes:
1 – Composed of Intermediate and High Density Units.
2 – Composed of Medium Density Units.
3 – Included within the "Regional Shopping Center" Land Use Category.

AREA AND MOBILE SOURCES

URBEMIS 2007 area source and operational defaults rates have been utilized. Default rates have not been modified.

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate Existing.urb924

Project Name: South Gate Existing

Project Location: South Coast AQMD

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

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1,545.72	364.56	838.32	0.03	2.49	2.47	455,274.13

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1,933.92	2,330.22	21,771.78	17.47	2,815.41	551.41	1,701,901.89

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3,479.64	2,694.78	22,610.10	17.50	2,817.90	553.88	2,157,176.02

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	27.48	356.88	159.53	0.00	0.68	0.67	454,180.62
Hearth - No Summer Emissions							
Landscape	120.96	7.68	678.79	0.03	1.81	1.80	1,093.51
Consumer Products	1,267.52						
Architectural Coatings	129.76						
TOTALS (lbs/day, unmitigated)	1,545.72	364.56	838.32	0.03	2.49	2.47	455,274.13

Area Source Changes to Defaults

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	973.54	1,146.06	10,869.77	8.59	1,378.60	270.21	836,750.88
Apartments low rise	237.25	264.71	2,510.60	1.98	318.41	62.41	193,264.69
Condo/townhouse general	237.39	265.18	2,515.14	1.99	318.99	62.52	193,614.59
Elementary school	16.13	21.05	191.46	0.16	25.74	5.03	15,438.12
Junior high school	11.06	14.38	130.79	0.11	17.58	3.44	10,545.98
High school	13.10	17.02	153.32	0.13	20.80	4.07	12,449.47
Junior college (2 yrs)	9.39	12.78	114.52	0.10	15.61	3.05	9,333.30
City park	3.18	2.61	23.39	0.02	3.19	0.62	1,906.64
Regnl shop. center	317.28	439.05	3,922.61	3.28	536.09	104.78	320,408.62
Government (civic center)	84.50	114.78	1,034.00	0.86	140.25	27.42	83,961.72
General light industry	16.73	20.15	188.18	0.15	24.69	4.83	14,890.24
General heavy industry	14.37	12.45	118.00	0.10	15.46	3.03	9,337.64
TOTALS (lbs/day, unmitigated)	1,933.92	2,330.22	21,771.78	17.47	2,815.41	551.41	1,701,901.89

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2008 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	1,764.67	7.93	dwelling units	14,825.00	117,562.25	796,343.15
Apartments low rise	99.33	5.48	dwelling units	4,955.00	27,153.40	183,931.70
Condo/townhouse general	102.00	5.52	dwelling units	4,928.00	27,202.56	184,264.70
Elementary school		14.49	1000 sq ft	142.00	2,057.58	14,876.30
Junior high school		13.78	1000 sq ft	102.00	1,405.56	10,162.20
High school		12.89	1000 sq ft	132.00	1,701.48	12,020.96
Junior college (2 yrs)		27.49	1000 sq ft	47.00	1,292.03	9,021.60
City park		1.59	acres	166.00	263.94	1,842.96
Regnl shop. center		42.94	1000 sq ft	1,041.00	44,700.54	309,908.84
Government (civic center)		27.92	1000 sq ft	411.00	11,475.12	81,071.72
General light industry		6.97	1000 sq ft	265.00	1,847.05	14,268.46
General heavy industry		1.50	1000 sq ft	663.00	994.50	8,935.58
					237,656.01	1,626,648.17

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	1.7	97.9	0.4
Light Truck < 3750 lbs	7.4	4.1	91.8	4.1
Light Truck 3751-5750 lbs	22.9	0.9	99.1	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	78.6	21.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	11.1	77.8	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	8.7	4.0	6.5	9.3	5.4	6.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate Existing.urb924

Project Name: South Gate Existing

Project Location: South Coast AQMD

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

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	5,296.77	685.43	10,895.64	30.12	1,665.53	1,603.39	894,691.27

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2,016.27	2,809.57	21,397.97	14.63	2,815.41	551.41	1,545,558.94

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	7,313.04	3,495.00	32,293.61	44.75	4,480.94	2,154.80	2,440,250.21

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	27.48	356.88	159.53	0.00	0.68	0.67	454,180.62
Hearth	3,872.01	328.55	10,736.11	30.12	1,664.85	1,602.72	440,510.65
Landscaping - No Winter Emissions							
Consumer Products	1,267.52						
Architectural Coatings	129.76						
TOTALS (lbs/day, unmitigated)	5,296.77	685.43	10,895.64	30.12	1,665.53	1,603.39	894,691.27

Area Source Changes to Defaults

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	1,006.14	1,381.93	10,675.71	7.20	1,378.60	270.21	760,211.50
Apartments low rise	237.82	319.18	2,465.77	1.66	318.41	62.41	175,586.36
Condo/townhouse general	238.13	319.76	2,470.24	1.67	318.99	62.52	175,904.25
Elementary school	17.45	25.38	187.84	0.13	25.74	5.03	14,008.30
Junior high school	11.94	17.34	128.32	0.09	17.58	3.44	9,569.26
High school	14.11	20.52	150.85	0.11	20.80	4.07	11,294.10
Junior college (2 yrs)	10.38	15.40	112.85	0.08	15.61	3.05	8,466.20
City park	2.68	3.15	23.05	0.02	3.19	0.62	1,729.50
Regnl shop. center	354.28	529.18	3,868.86	2.74	536.09	104.78	290,622.18
Government (civic center)	93.46	138.38	1,017.37	0.72	140.25	27.42	76,169.63
General light industry	17.36	24.31	183.22	0.13	24.69	4.83	13,518.85
General heavy industry	12.52	15.04	113.89	0.08	15.46	3.03	8,478.81
TOTALS (lbs/day, unmitigated)	2,016.27	2,809.57	21,397.97	14.63	2,815.41	551.41	1,545,558.94

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2008 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	1,764.67	7.93	dwelling units	14,825.00	117,562.25	796,343.15
Apartments low rise	99.33	5.48	dwelling units	4,955.00	27,153.40	183,931.70
Condo/townhouse general	102.00	5.52	dwelling units	4,928.00	27,202.56	184,264.70
Elementary school		14.49	1000 sq ft	142.00	2,057.58	14,876.30
Junior high school		13.78	1000 sq ft	102.00	1,405.56	10,162.20
High school		12.89	1000 sq ft	132.00	1,701.48	12,020.96
Junior college (2 yrs)		27.49	1000 sq ft	47.00	1,292.03	9,021.60
City park		1.59	acres	166.00	263.94	1,842.96
Regnl shop. center		42.94	1000 sq ft	1,041.00	44,700.54	309,908.84
Government (civic center)		27.92	1000 sq ft	411.00	11,475.12	81,071.72
General light industry		6.97	1000 sq ft	265.00	1,847.05	14,268.46
General heavy industry		1.50	1000 sq ft	663.00	994.50	8,935.58
					237,656.01	1,626,648.17

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	1.7	97.9	0.4
Light Truck < 3750 lbs	7.4	4.1	91.8	4.1
Light Truck 3751-5750 lbs	22.9	0.9	99.1	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	78.6	21.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	11.1	77.8	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	8.7	4.0	6.5	9.3	5.4	6.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate Existing.urb924

Project Name: South Gate Existing

Project Location: South Coast AQMD

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

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	330.91	68.83	286.43	0.37	21.11	20.34	86,281.24

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	357.94	454.41	3,950.62	3.02	513.83	100.62	301,086.21

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	688.85	523.24	4,237.05	3.39	534.94	120.96	387,367.45

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	5.01	65.13	29.12	0.00	0.12	0.12	82,887.96
Hearth	48.82	2.30	133.43	0.36	20.66	19.89	3,193.71
Landscape	22.08	1.40	123.88	0.01	0.33	0.33	199.57
Consumer Products	231.32						
Architectural Coatings	23.68						
TOTALS (tons/year, unmitigated)	330.91	68.83	286.43	0.37	21.11	20.34	86,281.24

Area Source Changes to Defaults

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	179.66	223.50	1,971.93	1.48	251.59	49.31	148,050.89
Apartments low rise	43.33	51.62	455.46	0.34	58.11	11.39	34,195.37
Condo/townhouse general	43.37	51.72	456.28	0.34	58.22	11.41	34,257.28
Elementary school	3.02	4.10	34.72	0.03	4.70	0.92	2,730.48
Junior high school	2.07	2.80	23.72	0.02	3.21	0.63	1,865.22
High school	2.45	3.32	27.83	0.02	3.80	0.74	2,201.74
Junior college (2 yrs)	1.77	2.49	20.80	0.02	2.85	0.56	1,650.58
City park	0.55	0.51	4.25	0.00	0.58	0.11	337.19
Regnl shop. center	60.15	85.61	712.61	0.57	97.84	19.12	56,662.56
Government (civic center)	15.97	22.38	187.69	0.15	25.60	5.00	14,848.99
General light industry	3.09	3.93	34.04	0.03	4.51	0.88	2,634.04
General heavy industry	2.51	2.43	21.29	0.02	2.82	0.55	1,651.87
TOTALS (tons/year, unmitigated)	357.94	454.41	3,950.62	3.02	513.83	100.62	301,086.21

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2008 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

3/6/2009 11:46:54 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	1,764.67	7.93	dwelling units	14,825.00	117,562.25	796,343.15
Apartments low rise	99.33	5.48	dwelling units	4,955.00	27,153.40	183,931.70
Condo/townhouse general	102.00	5.52	dwelling units	4,928.00	27,202.56	184,264.70
Elementary school		14.49	1000 sq ft	142.00	2,057.58	14,876.30
Junior high school		13.78	1000 sq ft	102.00	1,405.56	10,162.20
High school		12.89	1000 sq ft	132.00	1,701.48	12,020.96
Junior college (2 yrs)		27.49	1000 sq ft	47.00	1,292.03	9,021.60
City park		1.59	acres	166.00	263.94	1,842.96
Regnl shop. center		42.94	1000 sq ft	1,041.00	44,700.54	309,908.84
Government (civic center)		27.92	1000 sq ft	411.00	11,475.12	81,071.72
General light industry		6.97	1000 sq ft	265.00	1,847.05	14,268.46
General heavy industry		1.50	1000 sq ft	663.00	994.50	8,935.58
					237,656.01	1,626,648.17

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	1.7	97.9	0.4
Light Truck < 3750 lbs	7.4	4.1	91.8	4.1
Light Truck 3751-5750 lbs	22.9	0.9	99.1	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	78.6	21.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	11.1	77.8	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	8.7	4.0	6.5	9.3	5.4	6.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate 2035.urb924

Project Name: South Gate 2035

Project Location: South Coast AQMD

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

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1,777.91	430.99	990.18	0.04	2.95	2.92	538,291.35

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	712.47	619.80	7,354.89	23.96	3,837.05	746.38	2,369,771.07

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2,490.38	1,050.79	8,345.07	24.00	3,840.00	749.30	2,908,062.42

3/19/2009 10:34:28 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	32.49	421.92	188.31	0.00	0.81	0.80	537,000.21
Hearth - No Summer Emissions							
Landscape	143.21	9.07	801.87	0.04	2.14	2.12	1,291.14
Consumer Products	1,500.39						
Architectural Coatings	101.82						
TOTALS (lbs/day, unmitigated)	1,777.91	430.99	990.18	0.04	2.95	2.92	538,291.35

Area Source Changes to Defaults

3/19/2009 10:34:28 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	372.07	318.93	3,837.37	12.35	1,969.15	383.38	1,220,206.73
Apartments low rise	93.78	76.26	917.57	2.95	470.85	91.67	291,768.54
Condo/townhouse general	93.83	76.30	918.04	2.95	471.09	91.72	291,918.65
Elementary school	4.82	4.51	51.90	0.17	28.21	5.48	17,285.41
Junior high school	3.37	3.13	36.07	0.12	19.61	3.81	12,012.71
High school	3.95	3.65	41.54	0.14	22.79	4.42	13,938.02
Junior college (2 yrs)	2.82	2.76	31.24	0.11	17.23	3.34	10,524.48
City park	0.98	0.51	5.77	0.02	3.18	0.62	1,943.25
Regnl shop. center	102.81	102.89	1,160.45	3.96	641.72	124.44	391,811.97
Government (civic center)	24.62	24.15	274.89	0.93	150.83	29.26	92,235.75
General light industry	4.86	4.14	49.10	0.16	26.03	5.06	16,034.10
General heavy industry	4.56	2.57	30.95	0.10	16.36	3.18	10,091.46
TOTALS (lbs/day, unmitigated)	712.47	619.80	7,354.89	23.96	3,837.05	746.38	2,369,771.07

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

3/19/2009 10:34:28 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	5,860.76	9.57	dwelling units	17,582.28	168,262.41	1,139,775.89
Apartments low rise	364.44	6.90	dwelling units	5,831.00	40,233.90	272,536.39
Condo/townhouse general	364.62	6.90	dwelling units	5,834.00	40,254.60	272,676.61
Elementary school		14.49	1000 sq ft	156.00	2,260.44	16,342.98
Junior high school		13.78	1000 sq ft	114.00	1,570.92	11,357.75
High school		12.89	1000 sq ft	145.00	1,869.05	13,204.84
Junior college (2 yrs)		27.49	1000 sq ft	52.00	1,429.48	9,981.34
City park		1.59	acres	166.00	263.94	1,842.96
Regnl shop. center		42.94	1000 sq ft	1,249.00	53,632.06	371,831.07
Government (civic center)		27.92	1000 sq ft	443.00	12,368.56	87,383.88
General light industry		6.97	1000 sq ft	280.00	1,951.60	15,076.11
General heavy industry		1.50	1000 sq ft	703.00	1,054.50	9,474.68
					325,151.46	2,221,484.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.0	0.0	100.0	0.0
Light Truck < 3750 lbs	7.4	0.0	100.0	0.0
Light Truck 3751-5750 lbs	24.4	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.8	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	66.7	33.3

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.7	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.5	32.0	68.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.4	0.0	92.9	7.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	8.7	4.0	6.5	9.3	5.4	6.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate 2035.urb924

Project Name: South Gate 2035

Project Location: South Coast AQMD

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

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6,218.07	810.91	12,896.87	35.65	1,971.53	1,897.97	1,058,541.19

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	731.54	741.63	6,983.76	20.11	3,837.05	746.38	2,146,636.90

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6,949.61	1,552.54	19,880.63	55.76	5,808.58	2,644.35	3,205,178.09

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	32.49	421.92	188.31	0.00	0.81	0.80	537,000.21
Hearth	4,583.37	388.99	12,708.56	35.65	1,970.72	1,897.17	521,540.98
Landscaping - No Winter Emissions							
Consumer Products	1,500.39						
Architectural Coatings	101.82						
TOTALS (lbs/day, unmitigated)	6,218.07	810.91	12,896.87	35.65	1,971.53	1,897.97	1,058,541.19

Area Source Changes to Defaults

3/19/2009 10:34:40 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	380.27	381.62	3,644.58	10.35	1,969.15	383.38	1,105,723.41
Apartments low rise	93.46	91.25	871.47	2.48	470.85	91.67	264,393.97
Condo/townhouse general	93.51	91.30	871.92	2.48	471.09	91.72	264,530.00
Elementary school	5.11	5.40	49.11	0.15	28.21	5.48	15,643.86
Junior high school	3.56	3.75	34.13	0.10	19.61	3.81	10,871.89
High school	4.15	4.37	39.39	0.12	22.79	4.42	12,611.68
Junior college (2 yrs)	3.04	3.30	29.66	0.09	17.23	3.34	9,521.91
City park	0.81	0.61	5.48	0.02	3.18	0.62	1,758.13
Regnl shop. center	112.10	123.09	1,102.24	3.31	641.72	124.44	354,463.87
Government (civic center)	26.65	28.90	260.65	0.78	150.83	29.26	83,458.59
General light industry	4.97	4.96	46.22	0.14	26.03	5.06	14,519.80
General heavy industry	3.91	3.08	28.91	0.09	16.36	3.18	9,139.79
TOTALS (lbs/day, unmitigated)	731.54	741.63	6,983.76	20.11	3,837.05	746.38	2,146,636.90

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

3/19/2009 10:34:40 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	5,860.76	9.57	dwelling units	17,582.28	168,262.41	1,139,775.89
Apartments low rise	364.44	6.90	dwelling units	5,831.00	40,233.90	272,536.39
Condo/townhouse general	364.62	6.90	dwelling units	5,834.00	40,254.60	272,676.61
Elementary school		14.49	1000 sq ft	156.00	2,260.44	16,342.98
Junior high school		13.78	1000 sq ft	114.00	1,570.92	11,357.75
High school		12.89	1000 sq ft	145.00	1,869.05	13,204.84
Junior college (2 yrs)		27.49	1000 sq ft	52.00	1,429.48	9,981.34
City park		1.59	acres	166.00	263.94	1,842.96
Regnl shop. center		42.94	1000 sq ft	1,249.00	53,632.06	371,831.07
Government (civic center)		27.92	1000 sq ft	443.00	12,368.56	87,383.88
General light industry		6.97	1000 sq ft	280.00	1,951.60	15,076.11
General heavy industry		1.50	1000 sq ft	703.00	1,054.50	9,474.68
					325,151.46	2,221,484.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.0	0.0	100.0	0.0
Light Truck < 3750 lbs	7.4	0.0	100.0	0.0
Light Truck 3751-5750 lbs	24.4	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.8	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	66.7	33.3

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.7	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.5	32.0	68.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.4	0.0	92.9	7.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	8.7	4.0	6.5	9.3	5.4	6.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate 2035.urb924

Project Name: South Gate 2035

Project Location: South Coast AQMD

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

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	382.38	81.38	338.65	0.44	25.00	24.08	102,018.67

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	131.19	120.55	1,319.69	4.13	700.26	136.21	418,909.23

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	513.57	201.93	1,658.34	4.57	725.26	160.29	520,927.90

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	5.93	77.00	34.37	0.00	0.15	0.15	98,002.54
Hearth	57.91	2.72	157.94	0.43	24.46	23.54	3,780.50
Landscape	26.14	1.66	146.34	0.01	0.39	0.39	235.63
Consumer Products	273.82						
Architectural Coatings	18.58						
TOTALS (tons/year, unmitigated)	382.38	81.38	338.65	0.44	25.00	24.08	102,018.67

Area Source Changes to Defaults

3/19/2009 10:34:49 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Single family housing	68.40	62.02	688.59	2.13	359.37	69.97	215,723.33
Apartments low rise	17.10	14.83	164.65	0.51	85.93	16.73	51,582.47
Condo/townhouse general	17.10	14.84	164.74	0.51	85.97	16.74	51,609.01
Elementary school	0.90	0.88	9.30	0.03	5.15	1.00	3,054.73
Junior high school	0.63	0.61	6.46	0.02	3.58	0.69	2,122.92
High school	0.73	0.71	7.45	0.02	4.16	0.81	2,463.00
Junior college (2 yrs)	0.53	0.54	5.61	0.02	3.14	0.61	1,859.73
City park	0.17	0.10	1.04	0.00	0.58	0.11	343.38
Regnl shop. center	19.33	20.01	208.24	0.68	117.11	22.71	69,233.68
Government (civic center)	4.62	4.70	49.30	0.16	27.53	5.34	16,299.08
General light industry	0.89	0.81	8.79	0.03	4.75	0.92	2,834.10
General heavy industry	0.79	0.50	5.52	0.02	2.99	0.58	1,783.80
TOTALS (tons/year, unmitigated)	131.19	120.55	1,319.69	4.13	700.26	136.21	418,909.23

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

3/19/2009 10:34:49 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Single family housing	5,860.76	9.57	dwelling units	17,582.28	168,262.41	1,139,775.89
Apartments low rise	364.44	6.90	dwelling units	5,831.00	40,233.90	272,536.39
Condo/townhouse general	364.62	6.90	dwelling units	5,834.00	40,254.60	272,676.61
Elementary school		14.49	1000 sq ft	156.00	2,260.44	16,342.98
Junior high school		13.78	1000 sq ft	114.00	1,570.92	11,357.75
High school		12.89	1000 sq ft	145.00	1,869.05	13,204.84
Junior college (2 yrs)		27.49	1000 sq ft	52.00	1,429.48	9,981.34
City park		1.59	acres	166.00	263.94	1,842.96
Regnl shop. center		42.94	1000 sq ft	1,249.00	53,632.06	371,831.07
Government (civic center)		27.92	1000 sq ft	443.00	12,368.56	87,383.88
General light industry		6.97	1000 sq ft	280.00	1,951.60	15,076.11
General heavy industry		1.50	1000 sq ft	703.00	1,054.50	9,474.68
					325,151.46	2,221,484.50

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.0	0.0	100.0	0.0
Light Truck < 3750 lbs	7.4	0.0	100.0	0.0
Light Truck 3751-5750 lbs	24.4	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.8	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	66.7	33.3

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.7	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.5	32.0	68.0	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.4	0.0	92.9	7.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	8.7	4.0	6.5	9.3	5.4	6.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Junior high school				20.0	10.0	70.0
High school				10.0	5.0	85.0
Junior college (2 yrs)				5.0	2.5	92.5
City park				5.0	2.5	92.5

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Regnl shop. center				2.0	1.0	97.0
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\South Gate Construction2.urb924

Project Name: South Gate Construction

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (tons/year unmitigated)	69.68	18.05	46.28	0.06	119.93	0.84	120.77	25.08	0.76	25.84	6,259.25
2010 TOTALS (tons/year mitigated)	69.68	18.05	46.28	0.06	17.98	0.84	18.82	3.79	0.76	4.55	6,259.25
Percent Reduction	0.00	0.00	0.00	0.00	85.01	0.00	84.42	84.89	0.00	82.40	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010	69.68	18.05	46.28	0.06	119.93	0.84	120.77	25.08	0.76	25.84	6,259.25

Demolition 01/01/2010-02/28/2010	0.11	0.95	0.56	0.00	0.00	0.05	0.05	0.00	0.04	0.04	86.93
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.11	0.95	0.54	0.00	0.00	0.05	0.05	0.00	0.04	0.04	84.72
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22
Mass Grading 03/01/2010-03/30/2010	0.21	1.91	0.92	0.00	59.84	0.08	59.93	12.50	0.07	12.57	178.09
Mass Grading Dust	0.00	0.00	0.00	0.00	59.84	0.00	59.84	12.50	0.00	12.50	0.00
Mass Grading Off Road Diesel	0.21	1.91	0.89	0.00	0.00	0.08	0.08	0.00	0.07	0.07	174.76
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
Fine Grading 04/01/2010-04/30/2010	0.21	1.91	0.92	0.00	59.84	0.08	59.93	12.50	0.07	12.57	178.09
Fine Grading Dust	0.00	0.00	0.00	0.00	59.84	0.00	59.84	12.50	0.00	12.50	0.00
Fine Grading Off Road Diesel	0.21	1.91	0.89	0.00	0.00	0.08	0.08	0.00	0.07	0.07	174.76
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
Trenching 05/01/2010-05/31/2010	0.04	0.37	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	37.83
Trenching Off Road Diesel	0.04	0.37	0.17	0.00	0.00	0.02	0.02	0.00	0.02	0.02	36.01
Trenching Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82
Asphalt 06/01/2010-06/30/2010	0.48	1.39	0.58	0.00	0.01	0.07	0.07	0.00	0.06	0.06	177.23
Paving Off-Gas	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.04	0.21	0.12	0.00	0.00	0.02	0.02	0.00	0.02	0.02	15.61
Paving On Road Diesel	0.09	1.18	0.45	0.00	0.01	0.05	0.05	0.00	0.04	0.05	160.43
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19

Building 07/01/2010-12/12/2010	2.18	11.44	41.91	0.05	0.23	0.54	0.77	0.08	0.48	0.57	5,468.45
Building Off Road Diesel	0.24	1.36	0.84	0.00	0.00	0.10	0.10	0.00	0.09	0.09	132.17
Building Vendor Trips	0.71	8.07	6.37	0.01	0.05	0.34	0.39	0.02	0.31	0.33	1,492.56
Building Worker Trips	1.23	2.00	34.70	0.04	0.18	0.11	0.29	0.06	0.09	0.15	3,843.72
Coating 12/13/2010-12/31/2010	66.44	0.07	1.20	0.00	0.01	0.00	0.01	0.00	0.00	0.01	132.63
Architectural Coating	66.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.07	1.20	0.00	0.01	0.00	0.01	0.00	0.00	0.01	132.63

Phase Assumptions

Phase: Demolition 1/1/2010 - 2/28/2010 - Default Demolition Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 1088.07

Maximum Daily Acreage Disturbed: 272.02

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Plate Compactors (8 hp) operating at a 0.43 load factor for 8 hours per day

3 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

6 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 3/1/2010 - 3/30/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1088.07

Maximum Daily Acreage Disturbed: 272.02

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

2 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Plate Compactors (8 hp) operating at a 0.43 load factor for 8 hours per day

3 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

6 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 5/1/2010 - 5/31/2010 - Default Trenching Description

Off-Road Equipment:

4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 6/1/2010 - 6/30/2010 - Default Paving Description

Acres to be Paved: 272.02

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 7/1/2010 - 12/12/2010 - Default Building Construction Description

Off-Road Equipment:

5/19/2009 9:09:09 AM

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 12/13/2010 - 12/31/2010 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010	69.68	18.05	46.28	0.06	17.98	0.84	18.82	3.79	0.76	4.55	6,259.25
Demolition 01/01/2010-02/28/2010	0.11	0.95	0.56	0.00	0.00	0.05	0.05	0.00	0.04	0.04	86.93
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.11	0.95	0.54	0.00	0.00	0.05	0.05	0.00	0.04	0.04	84.72
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22

Mass Grading 03/01/2010-03/30/2010	0.21	1.91	0.92	0.00	4.17	0.08	4.25	0.87	0.07	0.95	178.09
Mass Grading Dust	0.00	0.00	0.00	0.00	4.17	0.00	4.17	0.87	0.00	0.87	0.00
Mass Grading Off Road Diesel	0.21	1.91	0.89	0.00	0.00	0.08	0.08	0.00	0.07	0.07	174.76
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
Fine Grading 04/01/2010-04/30/2010	0.21	1.91	0.92	0.00	13.57	0.08	13.65	2.83	0.07	2.91	178.09
Fine Grading Dust	0.00	0.00	0.00	0.00	13.57	0.00	13.57	2.83	0.00	2.83	0.00
Fine Grading Off Road Diesel	0.21	1.91	0.89	0.00	0.00	0.08	0.08	0.00	0.07	0.07	174.76
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
Trenching 05/01/2010-05/31/2010	0.04	0.37	0.19	0.00	0.00	0.02	0.02	0.00	0.02	0.02	37.83
Trenching Off Road Diesel	0.04	0.37	0.17	0.00	0.00	0.02	0.02	0.00	0.02	0.02	36.01
Trenching Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.82
Asphalt 06/01/2010-06/30/2010	0.48	1.39	0.58	0.00	0.01	0.07	0.07	0.00	0.06	0.06	177.23
Paving Off-Gas	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.04	0.21	0.12	0.00	0.00	0.02	0.02	0.00	0.02	0.02	15.61
Paving On Road Diesel	0.09	1.18	0.45	0.00	0.01	0.05	0.05	0.00	0.04	0.05	160.43
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
Building 07/01/2010-12/12/2010	2.18	11.44	41.91	0.05	0.23	0.54	0.77	0.08	0.48	0.57	5,468.45
Building Off Road Diesel	0.24	1.36	0.84	0.00	0.00	0.10	0.10	0.00	0.09	0.09	132.17
Building Vendor Trips	0.71	8.07	6.37	0.01	0.05	0.34	0.39	0.02	0.31	0.33	1,492.56
Building Worker Trips	1.23	2.00	34.70	0.04	0.18	0.11	0.29	0.06	0.09	0.15	3,843.72

Coating 12/13/2010-12/31/2010	66.44	0.07	1.20	0.00	0.01	0.00	0.01	0.00	0.00	0.01	132.63
Architectural Coating	66.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.04	0.07	1.20	0.00	0.01	0.00	0.01	0.00	0.00	0.01	132.63

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 4/1/2010 - 4/30/2010 - Default Fine Site Grading/Excavation Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

The following mitigation measures apply to Phase: Mass Grading 3/1/2010 - 3/30/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stablizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

FORECASTED EMISSIONS BY SUMMARY CATEGORY REPORT

2006 Almanac Data

Carbon Monoxide Projected Emission Inventory

LOS ANGELES COUNTY

REPORT TYPE: GROWN AND CONTROLLED
SEASON: ANNUAL AVERAGE
BASE YEAR: 2005

All emissions are represented in Tons per Day and reflect the most current data provided to ARB
Download this data as a comma delimited file.
Download more detail data as a comma delimited file.

STATIONARY SOURCES	
SUMMARY CATEGORY NAME	**2005**
FUEL COMBUSTION	
ELECTRIC UTILITIES	13.867
COGENERATION	0.322
OIL AND GAS PRODUCTION (COMBUSTION)	0.379
PETROLEUM REFINING (COMBUSTION)	13.624
MANUFACTURING AND INDUSTRIAL	5.684
FOOD AND AGRICULTURAL PROCESSING	0.570
SERVICE AND COMMERCIAL	5.560
OTHER (FUEL COMBUSTION)	1.401
*** TOTAL FUEL COMBUSTION**	41.406
WASTE DISPOSAL	
SEWAGE TREATMENT	0.000
LANDFILLS	0.170
INCINERATORS	0.695
OTHER (WASTE DISPOSAL)	0.000
*** TOTAL WASTE DISPOSAL**	0.865
CLEANING AND SURFACE COATINGS	
LAUNDERING	0.004
DEGREASING	0.000
COATINGS AND RELATED PROCESS SOLVENTS	0.012
PRINTING	0.000
ADHESIVES AND SEALANTS	0.000
OTHER (CLEANING AND SURFACE COATINGS)	0.138
*** TOTAL CLEANING AND SURFACE COATINGS**	0.153
PETROLEUM PRODUCTION AND MARKETING	
OIL AND GAS PRODUCTION	0.009
PETROLEUM REFINING	8.275
PETROLEUM MARKETING	0.420
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.000
*** TOTAL PETROLEUM PRODUCTION AND MARKETING**	8.704

INDUSTRIAL PROCESSES	
CHEMICAL	0.034
FOOD AND AGRICULTURE	0.000
MINERAL PROCESSES	0.369
METAL PROCESSES	0.024
WOOD AND PAPER	0.000
GLASS AND RELATED PRODUCTS	0.016
ELECTRONICS	0.000
OTHER (INDUSTRIAL PROCESSES)	0.674
*** TOTAL INDUSTRIAL PROCESSES**	1.117
**** TOTAL STATIONARY SOURCES**	52.246
AREAWIDE SOURCES	
SUMMARY CATEGORY NAME	**2005**
SOLVENT EVAPORATION	
CONSUMER PRODUCTS	0.000
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.000
PESTICIDES/FERTILIZERS	0.000
ASPHALT PAVING / ROOFING	0.000
*** TOTAL SOLVENT EVAPORATION**	0.000
MISCELLANEOUS PROCESSES	
RESIDENTIAL FUEL COMBUSTION	27.251
FARMING OPERATIONS	0.000
CONSTRUCTION AND DEMOLITION	0.000
PAVED ROAD DUST	0.000
UNPAVED ROAD DUST	0.000
FUGITIVE WINDBLOWN DUST	0.000
FIRES	1.881
MANAGED BURNING AND DISPOSAL	4.784
COOKING	0.000
OTHER (MISCELLANEOUS PROCESSES)	0.000
*** TOTAL MISCELLANEOUS PROCESSES**	33.916
**** TOTAL AREAWIDE SOURCES**	33.916
MOBILE SOURCES	
SUMMARY CATEGORY NAME	**2005**
ON-ROAD MOTOR VEHICLES	
LIGHT DUTY PASSENGER (LDA)	860.379
LIGHT DUTY TRUCKS - 1 (LDT1)	257.771
LIGHT DUTY TRUCKS - 2 (LDT2)	268.515
MEDIUM DUTY TRUCKS (MDV)	136.588
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	26.100
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	7.976
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	43.855
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	56.652
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.379
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.368
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	5.096

HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	21.920
MOTORCYCLES (MCY)	25.379
HEAVY DUTY DIESEL URBAN BUSES (UB)	2.559
HEAVY DUTY GAS URBAN BUSES (UB)	13.272
SCHOOL BUSES (SB)	1.913
MOTOR HOMES (MH)	22.481
*** TOTAL ON-ROAD MOTOR VEHICLES**	1751.203
OTHER MOBILE SOURCES	
AIRCRAFT	39.605
TRAINS	3.497
SHIPS AND COMMERCIAL BOATS	11.019
RECREATIONAL BOATS	77.776
OFF-ROAD RECREATIONAL VEHICLES	26.919
OFF-ROAD EQUIPMENT	390.296
FARM EQUIPMENT	1.914
FUEL STORAGE AND HANDLING	0.000
*** TOTAL OTHER MOBILE SOURCES**	551.026
**** TOTAL MOBILE SOURCES**	2302.229
GRAND TOTAL FOR LOS ANGELES	2388.391

* Emissions from natural sources are excluded.

See NATURAL Sources

FORECASTED EMISSIONS BY SUMMARY CATEGORY REPORT

2006 Almanac Data

Oxides of Nitrogen Projected Emission Inventory

LOS ANGELES COUNTY

REPORT TYPE: GROWN AND CONTROLLED
SEASON: ANNUAL AVERAGE
BASE YEAR: 2005

All emissions are represented in Tons per Day and reflect the most current data provided to ARB
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Download more detail data as a comma delimited file.

STATIONARY SOURCES	
SUMMARY CATEGORY NAME	**2005**
FUEL COMBUSTION	
ELECTRIC UTILITIES	3.787
COGENERATION	0.354
OIL AND GAS PRODUCTION (COMBUSTION)	0.582
PETROLEUM REFINING (COMBUSTION)	6.884
MANUFACTURING AND INDUSTRIAL	8.381
FOOD AND AGRICULTURAL PROCESSING	0.769
SERVICE AND COMMERCIAL	8.011
OTHER (FUEL COMBUSTION)	5.182
*** TOTAL FUEL COMBUSTION**	33.951
WASTE DISPOSAL	
SEWAGE TREATMENT	0.000
LANDFILLS	0.328
INCINERATORS	1.234
OTHER (WASTE DISPOSAL)	0.000
*** TOTAL WASTE DISPOSAL**	1.562
CLEANING AND SURFACE COATINGS	
LAUNDERING	0.017
DEGREASING	0.000
COATINGS AND RELATED PROCESS SOLVENTS	0.013
PRINTING	0.000
ADHESIVES AND SEALANTS	0.000
OTHER (CLEANING AND SURFACE COATINGS)	0.109
*** TOTAL CLEANING AND SURFACE COATINGS**	0.139
PETROLEUM PRODUCTION AND MARKETING	
OIL AND GAS PRODUCTION	0.026
PETROLEUM REFINING	4.742
PETROLEUM MARKETING	0.017
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.000
*** TOTAL PETROLEUM PRODUCTION AND MARKETING**	4.785

INDUSTRIAL PROCESSES	
CHEMICAL	0.090
FOOD AND AGRICULTURE	0.001
MINERAL PROCESSES	1.186
METAL PROCESSES	0.031
WOOD AND PAPER	0.000
GLASS AND RELATED PRODUCTS	0.025
ELECTRONICS	0.000
OTHER (INDUSTRIAL PROCESSES)	1.113
*** TOTAL INDUSTRIAL PROCESSES**	2.445
**** TOTAL STATIONARY SOURCES**	42.882
AREAWIDE SOURCES	
SUMMARY CATEGORY NAME	**2005**
SOLVENT EVAPORATION	
CONSUMER PRODUCTS	0.000
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.000
PESTICIDES/FERTILIZERS	0.000
ASPHALT PAVING / ROOFING	0.000
*** TOTAL SOLVENT EVAPORATION**	0.000
MISCELLANEOUS PROCESSES	
RESIDENTIAL FUEL COMBUSTION	17.000
FARMING OPERATIONS	0.000
CONSTRUCTION AND DEMOLITION	0.000
PAVED ROAD DUST	0.000
UNPAVED ROAD DUST	0.000
FUGITIVE WINDBLOWN DUST	0.000
FIRES	0.047
MANAGED BURNING AND DISPOSAL	0.197
COOKING	0.000
OTHER (MISCELLANEOUS PROCESSES)	0.000
*** TOTAL MISCELLANEOUS PROCESSES**	17.244
**** TOTAL AREAWIDE SOURCES**	17.244
MOBILE SOURCES	
SUMMARY CATEGORY NAME	**2005**
ON-ROAD MOTOR VEHICLES	
LIGHT DUTY PASSENGER (LDA)	76.615
LIGHT DUTY TRUCKS - 1 (LDT1)	21.866
LIGHT DUTY TRUCKS - 2 (LDT2)	32.990
MEDIUM DUTY TRUCKS (MDV)	19.117
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	4.076
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	1.655
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	5.217
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	9.776
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	3.547
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	3.115
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	34.246

HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	128.822
MOTORCYCLES (MCY)	0.765
HEAVY DUTY DIESEL URBAN BUSES (UB)	12.553
HEAVY DUTY GAS URBAN BUSES (UB)	1.754
SCHOOL BUSES (SB)	2.675
MOTOR HOMES (MH)	2.238
*** TOTAL ON-ROAD MOTOR VEHICLES**	361.027
OTHER MOBILE SOURCES	
AIRCRAFT	13.233
TRAINS	17.366
SHIPS AND COMMERCIAL BOATS	79.086
RECREATIONAL BOATS	4.057
OFF-ROAD RECREATIONAL VEHICLES	0.194
OFF-ROAD EQUIPMENT	94.085
FARM EQUIPMENT	1.913
FUEL STORAGE AND HANDLING	0.000
*** TOTAL OTHER MOBILE SOURCES**	209.934
**** TOTAL MOBILE SOURCES**	570.961
GRAND TOTAL FOR LOS ANGELES	631.087

* Emissions from natural sources are excluded.

See NATURAL Sources

FORECASTED EMISSIONS BY SUMMARY CATEGORY REPORT

2006 Almanac Data

Oxides of Sulfur Projected Emission Inventory

LOS ANGELES COUNTY

REPORT TYPE: GROWN AND CONTROLLED
SEASON: ANNUAL AVERAGE
BASE YEAR: 2005

All emissions are represented in Tons per Day and reflect the most current data provided to ARB
Download this data as a comma delimited file.
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STATIONARY SOURCES	
SUMMARY CATEGORY NAME	**2005**
FUEL COMBUSTION	
ELECTRIC UTILITIES	0.270
COGENERATION	0.010
OIL AND GAS PRODUCTION (COMBUSTION)	0.004
PETROLEUM REFINING (COMBUSTION)	3.121
MANUFACTURING AND INDUSTRIAL	1.511
FOOD AND AGRICULTURAL PROCESSING	0.016
SERVICE AND COMMERCIAL	0.483
OTHER (FUEL COMBUSTION)	0.434
*** TOTAL FUEL COMBUSTION**	5.849
WASTE DISPOSAL	
SEWAGE TREATMENT	0.000
LANDFILLS	0.276
INCINERATORS	0.090
OTHER (WASTE DISPOSAL)	0.000
*** TOTAL WASTE DISPOSAL**	0.366
CLEANING AND SURFACE COATINGS	
LAUNDERING	0.000
DEGREASING	0.000
COATINGS AND RELATED PROCESS SOLVENTS	0.000
PRINTING	0.000
ADHESIVES AND SEALANTS	0.000
OTHER (CLEANING AND SURFACE COATINGS)	0.005
*** TOTAL CLEANING AND SURFACE COATINGS**	0.006
PETROLEUM PRODUCTION AND MARKETING	
OIL AND GAS PRODUCTION	0.000
PETROLEUM REFINING	11.989
PETROLEUM MARKETING	0.001
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.000
*** TOTAL PETROLEUM PRODUCTION AND MARKETING**	11.990

INDUSTRIAL PROCESSES	
CHEMICAL	0.739
FOOD AND AGRICULTURE	0.000
MINERAL PROCESSES	0.988
METAL PROCESSES	0.015
WOOD AND PAPER	0.000
GLASS AND RELATED PRODUCTS	0.058
ELECTRONICS	0.000
OTHER (INDUSTRIAL PROCESSES)	0.382
*** TOTAL INDUSTRIAL PROCESSES**	2.183
**** TOTAL STATIONARY SOURCES**	20.394
AREAWIDE SOURCES	
SUMMARY CATEGORY NAME	**2005**
SOLVENT EVAPORATION	
CONSUMER PRODUCTS	0.000
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.000
PESTICIDES/FERTILIZERS	0.000
ASPHALT PAVING / ROOFING	0.000
*** TOTAL SOLVENT EVAPORATION**	0.000
MISCELLANEOUS PROCESSES	
RESIDENTIAL FUEL COMBUSTION	0.234
FARMING OPERATIONS	0.000
CONSTRUCTION AND DEMOLITION	0.000
PAVED ROAD DUST	0.000
UNPAVED ROAD DUST	0.000
FUGITIVE WINDBLOWN DUST	0.000
FIRES	0.000
MANAGED BURNING AND DISPOSAL	0.021
COOKING	0.000
OTHER (MISCELLANEOUS PROCESSES)	0.000
*** TOTAL MISCELLANEOUS PROCESSES**	0.255
**** TOTAL AREAWIDE SOURCES**	0.255
MOBILE SOURCES	
SUMMARY CATEGORY NAME	**2005**
ON-ROAD MOTOR VEHICLES	
LIGHT DUTY PASSENGER (LDA)	0.531
LIGHT DUTY TRUCKS - 1 (LDT1)	0.117
LIGHT DUTY TRUCKS - 2 (LDT2)	0.176
MEDIUM DUTY TRUCKS (MDV)	0.101
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	0.016
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	0.004
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	0.005
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	0.003
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.023
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.020
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.363

HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	1.293
MOTORCYCLES (MCY)	0.001
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.130
HEAVY DUTY GAS URBAN BUSES (UB)	0.003
SCHOOL BUSES (SB)	0.025
MOTOR HOMES (MH)	0.008
*** TOTAL ON-ROAD MOTOR VEHICLES**	2.819
OTHER MOBILE SOURCES	
AIRCRAFT	0.594
TRAINS	1.736
SHIPS AND COMMERCIAL BOATS	27.850
RECREATIONAL BOATS	0.059
OFF-ROAD RECREATIONAL VEHICLES	0.019
OFF-ROAD EQUIPMENT	0.271
FARM EQUIPMENT	0.014
FUEL STORAGE AND HANDLING	0.000
*** TOTAL OTHER MOBILE SOURCES**	30.542
**** TOTAL MOBILE SOURCES**	33.361
GRAND TOTAL FOR LOS ANGELES	54.010

* Emissions from natural sources are excluded.

See NATURAL Sources

FORECASTED EMISSIONS BY SUMMARY CATEGORY REPORT

2006 Almanac Data

Reactive Organic Gases Projected Emission Inventory

LOS ANGELES COUNTY

REPORT TYPE: GROWN AND CONTROLLED
SEASON: ANNUAL AVERAGE
BASE YEAR: 2005

All emissions are represented in Tons per Day and reflect the most current data provided to ARB
Download this data as a comma delimited file.
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STATIONARY SOURCES	
SUMMARY CATEGORY NAME	**2005**
FUEL COMBUSTION	
ELECTRIC UTILITIES	1.563
COGENERATION	0.077
OIL AND GAS PRODUCTION (COMBUSTION)	0.814
PETROLEUM REFINING (COMBUSTION)	1.307
MANUFACTURING AND INDUSTRIAL	1.554
FOOD AND AGRICULTURAL PROCESSING	0.067
SERVICE AND COMMERCIAL	1.738
OTHER (FUEL COMBUSTION)	0.707
*** TOTAL FUEL COMBUSTION**	7.828
WASTE DISPOSAL	
SEWAGE TREATMENT	0.123
LANDFILLS	0.058
INCINERATORS	0.059
OTHER (WASTE DISPOSAL)	0.458
*** TOTAL WASTE DISPOSAL**	0.699
CLEANING AND SURFACE COATINGS	
LAUNDERING	0.075
DEGREASING	11.214
COATINGS AND RELATED PROCESS SOLVENTS	21.242
PRINTING	3.482
ADHESIVES AND SEALANTS	1.194
OTHER (CLEANING AND SURFACE COATINGS)	0.361
*** TOTAL CLEANING AND SURFACE COATINGS**	37.569
PETROLEUM PRODUCTION AND MARKETING	
OIL AND GAS PRODUCTION	1.907
PETROLEUM REFINING	4.679
PETROLEUM MARKETING	16.406
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.004
*** TOTAL PETROLEUM PRODUCTION AND MARKETING**	22.995

INDUSTRIAL PROCESSES	
CHEMICAL	5.665
FOOD AND AGRICULTURE	1.783
MINERAL PROCESSES	0.234
METAL PROCESSES	0.036
WOOD AND PAPER	0.102
GLASS AND RELATED PRODUCTS	0.015
ELECTRONICS	0.016
OTHER (INDUSTRIAL PROCESSES)	1.188
*** TOTAL INDUSTRIAL PROCESSES**	9.040
**** TOTAL STATIONARY SOURCES**	78.130
AREAWIDE SOURCES	
SUMMARY CATEGORY NAME	**2005**
SOLVENT EVAPORATION	
CONSUMER PRODUCTS	70.365
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	25.647
PESTICIDES/FERTILIZERS	1.711
ASPHALT PAVING / ROOFING	0.423
*** TOTAL SOLVENT EVAPORATION**	98.146
MISCELLANEOUS PROCESSES	
RESIDENTIAL FUEL COMBUSTION	1.995
FARMING OPERATIONS	0.452
CONSTRUCTION AND DEMOLITION	0.000
PAVED ROAD DUST	0.000
UNPAVED ROAD DUST	0.000
FUGITIVE WINDBLOWN DUST	0.000
FIRES	0.151
MANAGED BURNING AND DISPOSAL	0.485
COOKING	1.189
OTHER (MISCELLANEOUS PROCESSES)	0.000
*** TOTAL MISCELLANEOUS PROCESSES**	4.272
**** TOTAL AREAWIDE SOURCES**	102.418
MOBILE SOURCES	
SUMMARY CATEGORY NAME	**2005**
ON-ROAD MOTOR VEHICLES	
LIGHT DUTY PASSENGER (LDA)	89.279
LIGHT DUTY TRUCKS - 1 (LDT1)	23.248
LIGHT DUTY TRUCKS - 2 (LDT2)	23.441
MEDIUM DUTY TRUCKS (MDV)	12.801
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	4.607
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	1.265
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	5.585
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	4.667
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.110
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.115
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.764

HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	4.567
MOTORCYCLES (MCY)	3.324
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.568
HEAVY DUTY GAS URBAN BUSES (UB)	1.218
SCHOOL BUSES (SB)	0.181
MOTOR HOMES (MH)	0.698
*** TOTAL ON-ROAD MOTOR VEHICLES**	176.437
OTHER MOBILE SOURCES	
AIRCRAFT	4.957
TRAINS	0.962
SHIPS AND COMMERCIAL BOATS	4.523
RECREATIONAL BOATS	15.259
OFF-ROAD RECREATIONAL VEHICLES	1.368
OFF-ROAD EQUIPMENT	37.457
FARM EQUIPMENT	0.261
FUEL STORAGE AND HANDLING	7.766
*** TOTAL OTHER MOBILE SOURCES**	72.553
**** TOTAL MOBILE SOURCES**	248.990
GRAND TOTAL FOR LOS ANGELES	429.537

* Emissions from natural sources are excluded.

See NATURAL Sources

FORECASTED EMISSIONS BY SUMMARY CATEGORY REPORT

2006 Almanac Data

Particulate Matter < 10 Microns Projected Emission Inventory

LOS ANGELES COUNTY

REPORT TYPE: GROWN AND CONTROLLED
SEASON: ANNUAL AVERAGE
BASE YEAR: 2005

All emissions are represented in Tons per Day and reflect the most current data provided to ARB
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Download more detail data as a comma delimited file.

STATIONARY SOURCES	
SUMMARY CATEGORY NAME	**2005**
FUEL COMBUSTION	
ELECTRIC UTILITIES	1.157
COGENERATION	0.029
OIL AND GAS PRODUCTION (COMBUSTION)	0.022
PETROLEUM REFINING (COMBUSTION)	1.689
MANUFACTURING AND INDUSTRIAL	0.638
FOOD AND AGRICULTURAL PROCESSING	0.076
SERVICE AND COMMERCIAL	1.001
OTHER (FUEL COMBUSTION)	0.215
*** TOTAL FUEL COMBUSTION**	4.828
WASTE DISPOSAL	
SEWAGE TREATMENT	0.000
LANDFILLS	0.411
INCINERATORS	0.075
OTHER (WASTE DISPOSAL)	0.021
*** TOTAL WASTE DISPOSAL**	0.507
CLEANING AND SURFACE COATINGS	
LAUNDERING	0.000
DEGREASING	0.000
COATINGS AND RELATED PROCESS SOLVENTS	0.242
PRINTING	0.187
ADHESIVES AND SEALANTS	0.000
OTHER (CLEANING AND SURFACE COATINGS)	0.064
*** TOTAL CLEANING AND SURFACE COATINGS**	0.493
PETROLEUM PRODUCTION AND MARKETING	
OIL AND GAS PRODUCTION	0.002
PETROLEUM REFINING	1.079
PETROLEUM MARKETING	0.026
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.000
*** TOTAL PETROLEUM PRODUCTION AND MARKETING**	1.107

INDUSTRIAL PROCESSES	
CHEMICAL	0.388
FOOD AND AGRICULTURE	0.102
MINERAL PROCESSES	2.414
METAL PROCESSES	0.196
WOOD AND PAPER	2.759
GLASS AND RELATED PRODUCTS	0.250
ELECTRONICS	0.001
OTHER (INDUSTRIAL PROCESSES)	0.302
*** TOTAL INDUSTRIAL PROCESSES**	6.412
**** TOTAL STATIONARY SOURCES**	13.347
AREAWIDE SOURCES	
SUMMARY CATEGORY NAME	**2005**
SOLVENT EVAPORATION	
CONSUMER PRODUCTS	0.000
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.000
PESTICIDES/FERTILIZERS	0.000
ASPHALT PAVING / ROOFING	0.012
*** TOTAL SOLVENT EVAPORATION**	0.012
MISCELLANEOUS PROCESSES	
RESIDENTIAL FUEL COMBUSTION	4.059
FARMING OPERATIONS	0.302
CONSTRUCTION AND DEMOLITION	25.618
PAVED ROAD DUST	74.592
UNPAVED ROAD DUST	19.471
FUGITIVE WINDBLOWN DUST	0.736
FIRES	0.290
MANAGED BURNING AND DISPOSAL	0.705
COOKING	7.259
OTHER (MISCELLANEOUS PROCESSES)	0.000
*** TOTAL MISCELLANEOUS PROCESSES**	133.031
**** TOTAL AREAWIDE SOURCES**	133.043
MOBILE SOURCES	
SUMMARY CATEGORY NAME	**2005**
ON-ROAD MOTOR VEHICLES	
LIGHT DUTY PASSENGER (LDA)	4.575
LIGHT DUTY TRUCKS - 1 (LDT1)	0.860
LIGHT DUTY TRUCKS - 2 (LDT2)	1.604
MEDIUM DUTY TRUCKS (MDV)	0.681
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	0.080
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	0.022
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	0.026
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	0.021
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.035
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.037
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.868

HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	2.646
MOTORCYCLES (MCY)	0.034
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.232
HEAVY DUTY GAS URBAN BUSES (UB)	0.019
SCHOOL BUSES (SB)	0.098
MOTOR HOMES (MH)	0.029
*** TOTAL ON-ROAD MOTOR VEHICLES**	11.867
OTHER MOBILE SOURCES	
AIRCRAFT	0.174
TRAINS	0.535
SHIPS AND COMMERCIAL BOATS	5.449
RECREATIONAL BOATS	1.546
OFF-ROAD RECREATIONAL VEHICLES	0.052
OFF-ROAD EQUIPMENT	6.182
FARM EQUIPMENT	0.128
FUEL STORAGE AND HANDLING	0.000
*** TOTAL OTHER MOBILE SOURCES**	14.067
**** TOTAL MOBILE SOURCES**	25.934
GRAND TOTAL FOR LOS ANGELES	172.324

* Emissions from natural sources are excluded.

See NATURAL Sources

FORECASTED EMISSIONS BY SUMMARY CATEGORY REPORT

2006 Almanac Data

Particulate Matter < 2.5 Microns Projected Emission Inventory

LOS ANGELES COUNTY

REPORT TYPE: GROWN AND CONTROLLED
SEASON: ANNUAL AVERAGE
BASE YEAR: 2005

All emissions are represented in Tons per Day and reflect the most current data provided to ARB
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STATIONARY SOURCES	
SUMMARY CATEGORY NAME	**2005**
FUEL COMBUSTION	
ELECTRIC UTILITIES	1.155
COGENERATION	0.027
OIL AND GAS PRODUCTION (COMBUSTION)	0.022
PETROLEUM REFINING (COMBUSTION)	1.660
MANUFACTURING AND INDUSTRIAL	0.636
FOOD AND AGRICULTURAL PROCESSING	0.075
SERVICE AND COMMERCIAL	1.000
OTHER (FUEL COMBUSTION)	0.202
*** TOTAL FUEL COMBUSTION**	4.777
WASTE DISPOSAL	
SEWAGE TREATMENT	0.000
LANDFILLS	0.266
INCINERATORS	0.064
OTHER (WASTE DISPOSAL)	0.021
*** TOTAL WASTE DISPOSAL**	0.350
CLEANING AND SURFACE COATINGS	
LAUNDERING	0.000
DEGREASING	0.000
COATINGS AND RELATED PROCESS SOLVENTS	0.168
PRINTING	0.180
ADHESIVES AND SEALANTS	0.000
OTHER (CLEANING AND SURFACE COATINGS)	0.062
*** TOTAL CLEANING AND SURFACE COATINGS**	0.410
PETROLEUM PRODUCTION AND MARKETING	
OIL AND GAS PRODUCTION	0.002
PETROLEUM REFINING	0.867
PETROLEUM MARKETING	0.025
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.000
*** TOTAL PETROLEUM PRODUCTION AND MARKETING**	0.893

INDUSTRIAL PROCESSES	
CHEMICAL	0.362
FOOD AND AGRICULTURE	0.010
MINERAL PROCESSES	1.042
METAL PROCESSES	0.136
WOOD AND PAPER	1.658
GLASS AND RELATED PRODUCTS	0.246
ELECTRONICS	0.001
OTHER (INDUSTRIAL PROCESSES)	0.222
*** TOTAL INDUSTRIAL PROCESSES**	3.677
**** TOTAL STATIONARY SOURCES**	10.108
AREAWIDE SOURCES	
SUMMARY CATEGORY NAME	**2005**
SOLVENT EVAPORATION	
CONSUMER PRODUCTS	0.000
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.000
PESTICIDES/FERTILIZERS	0.000
ASPHALT PAVING / ROOFING	0.011
*** TOTAL SOLVENT EVAPORATION**	0.011
MISCELLANEOUS PROCESSES	
RESIDENTIAL FUEL COMBUSTION	3.957
FARMING OPERATIONS	0.067
CONSTRUCTION AND DEMOLITION	5.324
PAVED ROAD DUST	12.595
UNPAVED ROAD DUST	4.128
FUGITIVE WINDBLOWN DUST	0.157
FIRES	0.273
MANAGED BURNING AND DISPOSAL	0.669
COOKING	4.293
OTHER (MISCELLANEOUS PROCESSES)	0.000
*** TOTAL MISCELLANEOUS PROCESSES**	31.464
**** TOTAL AREAWIDE SOURCES**	31.475
MOBILE SOURCES	
SUMMARY CATEGORY NAME	**2005**
ON-ROAD MOTOR VEHICLES	
LIGHT DUTY PASSENGER (LDA)	2.670
LIGHT DUTY TRUCKS - 1 (LDT1)	0.517
LIGHT DUTY TRUCKS - 2 (LDT2)	1.066
MEDIUM DUTY TRUCKS (MDV)	0.463
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	0.037
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	0.010
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	0.014
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	0.013
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.025
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.028
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.757

HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	2.222
MOTORCYCLES (MCY)	0.023
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.207
HEAVY DUTY GAS URBAN BUSES (UB)	0.011
SCHOOL BUSES (SB)	0.088
MOTOR HOMES (MH)	0.016
*** TOTAL ON-ROAD MOTOR VEHICLES**	8.167
OTHER MOBILE SOURCES	
AIRCRAFT	0.172
TRAINS	0.492
SHIPS AND COMMERCIAL BOATS	5.256
RECREATIONAL BOATS	1.170
OFF-ROAD RECREATIONAL VEHICLES	0.040
OFF-ROAD EQUIPMENT	5.519
FARM EQUIPMENT	0.117
FUEL STORAGE AND HANDLING	0.000
*** TOTAL OTHER MOBILE SOURCES**	12.766
**** TOTAL MOBILE SOURCES**	20.933
GRAND TOTAL FOR LOS ANGELES	62.516

* Emissions from natural sources are excluded.

See NATURAL Sources

Emissions From Natural Gas Consumed By Land Uses

Land Use	*Amount*	Cubic feet per unit/square feet/customer per month	CO_2 1.20E-01	N_2O 2.20E-06	CH_4 2.30E-06
Residential					
Dwelling Units	24,277	2.92E+09	283,555.36	5.20	5.43
NonResidential					
Commercial/Indutsrial	1,070	1.47E+11	629,844.80	11.55	12.07
TOTAL - pounds per day	**--**	**--**	**913,400.16**	**16.75**	**17.51**
TOTAL - tons per year	**--**	**--**	**166,695.5292**	**3.0561**	**3.1950**
TOTAL - metric tons per year	**--**	**--**	**1.51E+05**	**2.77E+00**	**2.90E+00**

	CO2	N2O	CH4
metric tons per year	151,223.63	2.77	2.90
metric tons CO2eq per year	151,223.63	859.45	60.87

Notes:

1. Usage rate; based on Sempra Utilities data from Raimi and Associates, South Gate Greenhouse Gas Inventory, 2008.
2. GHG Emissions factors from EPA, Table 1.4-2 of AP 42, Fifth Edition, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, 1998.
2. Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Emissions From Electricity Consumed By Land Uses

Land Use	*Amount*	kilowatt-hours per year[1]	*CO* 2.00E-04	*ROG* 1.00E-05	*NO_X* 1.15E-03	*SO_X* 1.20E-04	*PM_{10}* 4.00E-05	*CO_2* 0.772	*N_2O* 6.59E-06	*CH_4* 4.04E-05
Residential (Dwelling Units)	24,277	5626.5	74.85	3.74	430.37	44.91	14.97	288,906.81	2.47	15.11
Food Store (SF)		53.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Restaurant (SF)		47.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hospitals (SF)		21.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail (SF)	12,416,480	13.55	92.19	4.61	530.08	55.31	18.44	355,846.11	3.04	18.61
College/University (SF)		11.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High School (SF)		10.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Elementary School (SF)		5.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office (SF)		12.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel/Motel (SF)		9.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warehouse (SF)	24,175,540	4.35	57.62	2.88	331.34	34.57	11.52	222,428.21	1.90	11.63
Miscellaneous (SF)		10.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blank			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL - pounds per day	**--**	**--**	**0.22**	**11.23**	**1291.79**	**134.79**	**44.93**	**867181.14**	**7.40**	**45.35**
TOTAL - tons per year	**--**	**--**	**0.04**	**2.05**	**235.75**	**24.60**	**8.20**	**158260.56**	**1.35**	**8.28**
TOTAL - metric tons per year	**--**	**--**	**3.72E-02**	**1.86E+00**	**2.14E+02**	**2.23E+01**	**7.44E+00**	**1.44E+05**	**1.23E+00**	**7.51E+00**

	CO2	N2O	CH4
metric tons per year	143,571.56	1.23	7.51
metric tons CO2eq per year	143,571.56	379.93	157.66

Notes:

1. Usage rate; based on SCE data from Raimi and Associates, South Gate Greenhouse Gas Inventory, 2008.

2. Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Source:

South Coast Air Quality Management District, *CEQA Air Quality Handbook* , November 1993, Table A9-11.

Source for greenhouse gas emissions rates:

U.S. Energy Information Administration, *Domestic Electricity Emissions Factors 1999-2002* , October 2007. http://www.eia.doe.gov/oiaf/1605/techassist.html

Water Consumption Indirect Emissions

Existing Scenario

Project Demand	Acre Feet per year	Electricity Usage kwh/year
Local	10,447	3,050,524
State Water Project	-	-
Total	10,447	3,050,524

	CO	*ROG*	*NO_X*	*SO_X*	*PM_{10}*	*CO_2*	*N_2O*	*CH_4*
	2.00E-04	**1.00E-05**	**1.15E-03**	**1.20E-04**	**4.00E-05**	**0.772**	**6.59E-06**	**4.04E-05**
total pounds per year	6.10E+02	3.05E+01	3.51E+03	3.66E+02	1.22E+02	2.36E+06	2.01E+01	1.23E+02
total tons per year	3.05E-01	1.53E-02	1.75E+00	1.83E-01	6.10E-02	1.18E+03	1.01E-02	6.16E-02
total metric tons per year	2.77E-01	1.38E-02	1.59E+00	1.66E-01	5.53E-02	1.07E+03	9.12E-03	5.59E-02
total metric tons of CO2eq p	**--**	**--**	**--**	**--**	**--**	1.07E+03	2.83E+00	1.17E+00

Notes:
Energy Factor: State Water Project is 2,200 kWh per AF; Groundwater is 262 kWh per AF
Energy Factors based upon: California Energy Commission, Water Energy Use in California, website:
Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator;
Source: City of South Gate, *Urban Water Management Plan* , 2007.

Mobile Source Emissions Calculations

	Total	Breakdown of		Emission Factor		Total Emis Passenger	Total Emis Delivery	Passnger	Delivery	Total Emissions	
	VMT	Passnger	Delivery	Passnger	Delivery	pounds/day		tons/year		tons/year	metric tons/year
CO	1096135.29	569990.35	526144.94	0.00709228	0.01407778	2615.43	4792.14	477.32	874.57	1351.88	1226.41
NO_X	1096135.29	569990.35	526144.94	0.00071158	0.01577311	262.41	5369.23	47.89	979.89	1027.78	932.38
N_2O[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50.08	45.43
ROG	1096135.29	569990.35	526144.94	0.00074567	0.00206295	274.98	702.24	50.18	128.16	178.34	161.79
SO_X	1096135.29	569990.35	526144.94	0.00001072	0.00002682	3.95	9.13	0.72	1.67	2.39	2.17
PM_{10}	1096135.29	569990.35	526144.94	0.00009067	0.00059956	33.44	204.09	6.10	37.25	43.35	39.33
$PM_{2.5}$	1096135.29	569990.35	526144.94	0.00005834	0.00050174	21.51	170.79	3.93	31.17	35.10	31.84
CH_4	1096135.29	569990.35	526144.94	0.00006707	0.00009703	24.73	33.03	4.51	6.03	10.54	9.56
CO_2	1096135.29	569990.35	526144.94	1.10087435	2.78163459	405970.78	946880.10	74089.67	172805.62	246895.28	223979.62

	CO2	N2O	CH4
metric tons per year	223979.62	45.43	9.56
metric tons CO2eq per year	223,979.62	14,084.84	200.83

Notes:

1. VMT based upon Raimi and Associates, South Gate Greenhouse Gas Inventory, 2008 and SCAG estimates.
2. Emission Factor based upon EMFAC 2007 (version 2.3), *Highest (Most Conservative) Emission Factors fo On-Road Passenger Vehicles and Delivery Trucks*.
3. Breakdown of Passenger and Delivery Trucks assumes 52% auto and 48% truck.
4. Emission Factor for N_2O based upon a conversion ratio of 0.04873 from NO_X to N_2O. Based upon California Air Resources Board: *Estimates of Nitrous Oxide Emissions from Motor Vehicles and the*
5. Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.ht

Emissions From Natural Gas Consumed By Land Uses

Land Use	*Amount*	Cubic feet per unit/square feet/customer per month	CO_2 1.20E-01	N_2O 2.20E-06	CH_4 2.30E-06
Residential					
Dwelling Units	28,815	2.92E+09	336,559.20	6.17	6.45
NonResidential					
Commercial/Indutsrial	1,445	1.47E+11	850,584.80	15.59	16.30
TOTAL - pounds per day	**--**	**--**	**1,187,144.00**	**21.76**	**22.75**
TOTAL - tons per year	**--**	**--**	**216,653.7800**	**3.9720**	**4.1525**
TOTAL - metric tons per year	**--**	**--**	**1.97E+05**	**3.60E+00**	**3.77E+00**

	CO2	N2O	CH4
metric tons per year	196,544.99	3.60	3.77
metric tons CO2eq per year	196,544.99	1,117.03	79.11

Notes:

1. Usage rate; based on Sempra Utilities data from Raimi and Associates, South Gate Greenhouse Gas Inventory, 2008.
2. GHG Emissions factors from EPA, Table 1.4-2 of AP 42, Fifth Edition, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, 1998.
2. Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Emissions From Electricity Consumed By Land Uses

Land Use	*Amount*	kilowatt-hours per year[1]	*CO* 2.00E-04	*ROG* 1.00E-05	*NO_X* 1.15E-03	*SO_X* 1.20E-04	*PM_{10}* 4.00E-05	*CO_2* 0.772	*N_2O* 6.59E-06	*CH_4* 4.04E-05
Residential (Dwelling Units)	24,277	5626.5	74.85	3.74	430.37	44.91	14.97	288,906.81	2.47	15.11
Food Store (SF)		53.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Restaurant (SF)		47.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hospitals (SF)		21.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retail (SF)	13,323,230	13.55	98.92	4.95	568.79	59.35	19.78	381,832.82	3.26	19.97
College/University (SF)		11.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
High School (SF)		10.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Elementary School (SF)		5.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office (SF)		12.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel/Motel (SF)		9.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Warehouse (SF)	24,375,540	4.35	58.10	2.91	334.08	34.86	11.62	224,268.32	1.91	11.73
Miscellaneous (SF)		10.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blank			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL - pounds per day	**--**	**--**	**2.32E-01**	**1.16E+01**	**1.33E+03**	**1.39E+02**	**4.64E+01**	**8.95E+05**	**7.64E+00**	**4.68E+01**
TOTAL - tons per year	**--**	**--**	**4.23E-02**	**2.12E+00**	**2.43E+02**	**2.54E+01**	**8.46E+00**	**1.63E+05**	**1.39E+00**	**8.54E+00**
TOTAL - metric tons per year	**--**	**--**	**3.84E-02**	**1.92E+00**	**2.21E+02**	**2.30E+01**	**7.68E+00**	**1.48E+05**	**1.26E+00**	**7.75E+00**

	CO2	N2O	CH4
metric tons per year	148178.60	1.2649	7.7487
metric tons CO2eq per year	148178.60	392.12	162.72

Notes:

1. Usage rate; based on SCE data from Raimi and Associates, South Gate Greenhouse Gas Inventory, 2008.
2. Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Source:

South Coast Air Quality Management District, *CEQA Air Quality Handbook* , November 1993, Table A9-11.

Source for greenhouse gas emissions rates:

U.S. Energy Information Administration, *Domestic Electricity Emissions Factors 1999-2002* , October 2007. http://www.eia.doe.gov/oiaf/1605/techassist.html

Water Consumption Indirect Emissions

General Plan 2035

Project Demand	Acre Feet per year	Electricity Usage kwh/year
Local	10,447	3,050,524
State Water Project	5,657	12,445,400
Total	16,104	15,495,924

	CO	*ROG*	*NO_X*	*SO_X*	*PM_{10}*	*CO_2*	*N_2O*	*CH_4*
	2.00E-04	**1.00E-05**	**1.15E-03**	**1.20E-04**	**4.00E-05**	**0.772**	**6.59E-06**	**4.04E-05**
total pounds per year	3.10E+03	1.55E+02	1.78E+04	1.86E+03	6.20E+02	1.20E+07	1.02E+02	6.26E+02
total tons per year	1.55E+00	7.75E-02	8.91E+00	9.30E-01	3.10E-01	5.98E+03	5.11E-02	3.13E-01
total metric tons per year	1.41E+00	7.03E-02	8.08E+00	8.43E-01	2.81E-01	5.43E+03	4.63E-02	2.84E-01
total metric tons of CO2eq p	--	--	--	--	--	5.43E+03	1.44E+01	5.96E+00

Notes:
Energy Factor: State Water Project is 2,200 kWh per AF; Groundwater is 262 kWh per AF
Energy Factors based upon: California Energy Commission, Water Energy Use in California, website:
Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator;
Source: City of South Gate, *Urban Water Management Plan* , 2007.

Mobile Source Emissions Calculations

	Total	Breakdown of		Emission Factor		Total Emis Passenger	Total Emis Delivery	Passnger	Delivery	Total Emissions	
	VMT	Passnger	Delivery	Passnger	Delivery	pounds/day		tons/year		tons/year	metric tons/year
CO	2221484.50	1155171.94	1066312.56	0.00709228	0.01407778	5300.56	9711.99	967.35	1772.44	2739.79	2485.50
NO_X	2221484.50	1155171.94	1066312.56	0.00071158	0.01577311	531.81	10881.57	97.06	1985.89	2082.94	1889.61
N_2O[1]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	101.50	92.08
ROG	2221484.50	1155171.94	1066312.56	0.00074567	0.00206295	557.29	1423.19	101.71	259.73	361.44	327.89
SO_X	2221484.50	1155171.94	1066312.56	0.00001072	0.00002682	8.01	18.50	1.46	3.38	4.84	4.39
PM_{10}	2221484.50	1155171.94	1066312.56	0.00009067	0.00059956	67.76	413.62	12.37	75.49	87.85	79.70
$PM_{2.5}$	2221484.50	1155171.94	1066312.56	0.00005834	0.00050174	43.60	346.14	7.96	63.17	71.13	64.53
CH_4	2221484.50	1155171.94	1066312.56	0.00006707	0.00009703	50.13	66.94	9.15	12.22	21.36	19.38
CO_2	2221484.50	1155171.94	1066312.56	1.10087435	2.78163459	822761.38	1918996.20	150153.95	350216.81	500370.76	453928.70

	CO2	N2O	CH4
metric tons per year	453928.70	92.08	19.38
metric tons CO2eq per year	453928.70	28545.07	407.02

Notes:

1. VMT based upon Raimi and Associates, South Gate Greenhouse Gas Inventory, 2008 and SCAG estimates.
2. Emission Factor based upon EMFAC 2007 (version 2.3), *Highest (Most Conservative) Emission Factors fo On-Road Passenger Vehicles and Delivery Trucks*.
3. Breakdown of Passenger and Delivery Trucks assumes 52% auto and 48% truck.
4. Emission Factor for N_2O based upon a conversion ratio of 0.04873 from NO_X to N_2O. Based upon California Air Resources Board: *Estimates of Nitrous Oxide Emissions from Motor Vehicles and the*
5. Conversion from metric tons per year to metric tons of CO2eq per year is based upon the EPA Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.ht