

Appendices

Appendix D: Air Quality Modeling Output



Appendices

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URBEMIS 2002 For Windows 7.5.0

File Name: C:\Program Files\URBEMIS 2002 For Windows\Projects2k2\Platinum Triangle.urb
 Project Name: Platinum Triangle
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	473.56	115.22	48.74	0.00	0.22
OPERATIONAL (VEHICLE) EMISSION ESTIMATES					
OPERATIONAL (VEHICLE) EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	496.30	446.56	5,184.20	11.49	1,973.16
SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES					
SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	969.86	561.78	5,232.93	11.49	1,973.38

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SUMMARY REPORT
 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	473.47	115.20	47.91	0.00	0.22
OPERATIONAL (VEHICLE) EMISSION ESTIMATES					
OPERATIONAL (VEHICLE) EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	440.45	638.35	4,818.28	10.31	1,973.16
SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES					
SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	913.91	753.55	4,866.19	10.31	1,973.38

URBEMIS 2002 For Windows 7.5.0

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 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)	ROG	NOx	CO	SO2	PM10
Source					
Natural Gas	8.70	115.20	47.91	-	0.22
Wood Stoves	0.00	0.00	0.00	0.00	0.00

Fireplaces	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	464.77	-	-	-	-
TOTALS(lbs/day,unmitigated)	473.47	115.20	47.91	0.00	0.22

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments high rise	134.19	182.61	1,413.90	3.05	568.05
Retail	192.40	285.02	2,132.26	4.48	869.63
General office building	113.86	170.72	1,272.11	2.78	535.48
TOTAL EMISSIONS (lbs/day)	440.45	638.35	4,818.28	10.31	1,973.16

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2025 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments high rise	5.91 trips / dwelling units	9,500.00	56,173.50
Retail	45.64 trips / 1000 sq. ft.	2,254.00	102,879.33
General office building	15.12 trips / 1000 sq. ft.	3,265.00	49,366.80

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.50	0.00	100.00	0.00
Light Truck < 3,750 lbs	15.70	0.00	99.40	0.60
Light Truck 3,751- 5,750	16.50	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.50	0.00	98.70	1.30
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	40.00	60.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.00	0.00	90.00	10.00

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Retail				2.0	1.0	97.0
General office building				35.0	17.5	47.5

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Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The wood stove option switch changed from on to off.

The fireplace option switch changed from on to off.
 The landscape year changed from 2004 to 2020.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2025.
 The double counting internal work trip limit changed from to 11234.7.
 The double counting shopping trip limit changed from to 9667.98322.
 The double counting other trip limit changed from to 24154.605.

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 Triangle.urb
 Project Name: Platinum Triangle
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	8.70	115.20	47.91	-	0.22
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.09	0.02	0.83	0.00	0.00
Consumer Prdcts	464.77	-	-	-	-
TOTALS(lbs/day,unmitigated)	473.56	115.22	48.74	0.00	0.22

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments high rise	180.46	127.53	1,536.71	3.44	568.05
Retail	191.83	199.92	2,248.90	4.97	869.63
General office building	124.01	119.12	1,398.59	3.08	535.48
TOTAL EMISSIONS (lbs/day)	496.30	446.56	5,184.20	11.49	1,973.16

Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2025 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Apartments high rise	5.91 trips / dwelling units	9,500.00	56,173.50
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Light Truck < 3,750 lbs	15.70	0.00	99.40	0.60
Light Truck 3,751- 5,750	16.50	0.00	100.00	0.00
Med Truck 5,751- 8,500	7.50	0.00	98.70	1.30
Lite-Heavy 8,501-10,000	1.00	0.00	80.00	20.00
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.90	0.00	22.20	77.80
Heavy-Heavy 33,001-60,000	0.80	0.00	0.00	100.00

Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.50	40.00	60.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	2.00	0.00	90.00	10.00

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Retail				2.0	1.0	97.0
General office building				35.0	17.5	47.5

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