Appendix C:
Air Quality Worksheets

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URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP Existing.urb
Project Name: Pasadena General Plan Update Existing Conditions
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)	2,808.65	902.49	914.87	16.49	2.77

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	10,348.81	9,699.68	109,140.03	79.37	7,234.30

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	13,157.46	10,602.16	110,054.90	95.86	7,237.07

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URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP Existing.urb
Project Name: Pasadena General Plan Update Existing Conditions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	21,140.86	1,104.21	20,664.75	32.13	2,780.98

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	9,917.32	14,087.51	108,830.67	71.88	7,234.30

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	31,058.17	15,191.73	129,495.42	104.01	10,015.28

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ExistingOutput

URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP Existing.urb
Project Name: Pasadena General Plan Update Existing Conditions
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)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	67.93	895.36	374.26	-	1.68
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	18,394.78	208.85	20,290.48	32.13	2,779.30
Landscaping - No winter emissions					
Consumer Prdcts	2,678.15	-	-	-	-
TOTALS(lbs/day,unmitigated)	21,140.86	1,104.21	20,664.75	32.13	2,780.98

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	3,044.07	4,658.84	35,331.80	24.73	2,482.42
Apartments low rise	310.55	474.46	3,598.19	2.52	252.81
Condo/townhouse general	214.54	326.36	2,475.05	1.73	173.90
Elementary school	25.00	35.08	270.05	0.18	17.92
Junior high school	52.28	76.49	581.52	0.39	39.49
High school	33.01	50.52	378.54	0.26	26.31
Junior college (2 yrs)	82.03	137.05	1,000.80	0.71	72.86
City park	18.75	28.05	212.39	0.14	14.45
Strip mall	3,734.45	4,720.75	37,952.78	22.82	2,292.44
General office building	666.56	1,037.54	7,697.41	5.42	549.33
Government (civic center)	464.93	612.80	4,843.69	3.02	303.96
Medical office building	647.44	913.47	7,052.97	4.58	462.61
General light industry	623.71	1,016.09	7,435.48	5.38	545.81
TOTAL EMISSIONS (lbs/day)	9,917.32	14,087.51	108,830.67	71.88	7,234.30

Includes correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	6.37 trips / dwelling units	43,794.00	278,967.77

	ExistingOutput		
Apartments low rise	5.19 trips / dwelling units	5,474.00	28,410.06
Condo/townhouse general	3.57 trips / dwelling units	5,474.00	19,542.18
Elementary school	5.81 trips / 1000 sq. ft.	473.24	2,749.51
Junior high school	11.92 trips / 1000 sq. ft.	473.24	5,640.99
High school	7.65 trips / 1000 sq. ft.	473.24	3,620.26
Junior college (2 yrs)	18.36 trips / 1000 sq. ft.	473.24	8,688.63
City park	50.00 trips / acres	43.46	2,173.00
Strip mall	40.00 trips / 1000 sq. ft.	12,217.19	488,687.44
General office building	4.13 trips / 1000 sq. ft.	15,241.33	62,946.67
Government (civic center)	30.00 trips / 1000 sq. ft.	1,892.95	56,788.47
Medical office building	40.78 trips / 1000 sq. ft.	1,892.95	77,194.46
General light industry	7.45 trips / 1000 sq. ft.	7,186.65	53,540.56

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
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	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

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)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0

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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
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government (civic center)	10.0	5.0	85.0
Medical office building	7.0	3.5	89.5
General light industry	50.0	25.0	25.0

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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 percentage of residential units changed from 10 to 3.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The double counting internal work trip limit changed from to 65384.004.
The double counting shopping trip limit changed from to 36120.51600045.
The double counting other trip limit changed from to 140575.6086.
The travel mode environment settings changed from both to: both

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URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP Existing.urb
Project Name: Pasadena General Plan Update Existing Conditions
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	67.93	895.36	374.26	-	1.68
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	62.58	7.12	540.61	16.49	1.09
Consumer Prdcts	2,678.15	-	-	-	-
TOTALS(lbs/day,unmitigated)	2,808.65	902.49	914.87	16.49	2.77

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	3,499.08	3,188.34	36,728.10	27.22	2,482.42
Apartments low rise	376.01	324.70	3,740.39	2.77	252.81
Condo/townhouse general	291.78	223.35	2,572.87	1.91	173.90
Elementary school	30.51	24.17	271.17	0.20	17.92
Junior high school	54.18	52.60	588.61	0.43	39.49
High school	37.49	34.70	382.46	0.29	26.31
Junior college (2 yrs)	80.30	93.83	1,024.42	0.79	72.86
City park	16.93	19.31	211.69	0.16	14.45
Strip mall	3,379.80	3,280.06	36,023.64	25.22	2,292.44
General office building	873.19	710.27	8,027.52	6.01	549.33
Government (civic center)	431.58	424.25	4,714.53	3.34	303.96

		ExistingOutput			
Medical office building	589.38	630.40	6,949.12	5.07	462.61
General light industry	688.59	693.71	7,905.52	5.97	545.81
TOTAL EMISSIONS (lbs/day)	10,348.81	9,699.68	109,140.03	79.37	7,234.30

Includes correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2004 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	6.37 trips / dwelling units	43,794.00	278,967.77
Apartments low rise	5.19 trips / dwelling units	5,474.00	28,410.06
Condo/townhouse general	3.57 trips / dwelling units	5,474.00	19,542.18
Elementary school	5.81 trips / 1000 sq. ft.	473.24	2,749.51
Junior high school	11.92 trips / 1000 sq. ft.	473.24	5,640.99
High school	7.65 trips / 1000 sq. ft.	473.24	3,620.26
Junior college (2 yrs)	18.36 trips / 1000 sq. ft.	473.24	8,688.63
City park	50.00 trips / acres	43.46	2,173.00
Strip mall	40.00 trips / 1000 sq. ft.	12,217.19	488,687.44
General office building	4.13 trips / 1000 sq. ft.	15,241.33	62,946.67
Government (civic center)	30.00 trips / 1000 sq. ft.	1,892.95	56,788.47
Medical office building	40.78 trips / 1000 sq. ft.	1,892.95	77,194.46
General light industry	7.45 trips / 1000 sq. ft.	7,186.65	53,540.56

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	56.10	2.70	96.80	0.50
Light Truck < 3,750 lbs	15.10	4.60	92.70	2.70
Light Truck 3,751- 5,750	15.60	2.60	96.20	1.20
Med Truck 5,751- 8,500	6.90	2.90	94.20	2.90
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	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.80	0.00	12.50	87.50
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.60	87.50	12.50	0.00
School Bus	0.20	0.00	0.00	100.00
Motor Home	1.30	15.40	76.90	7.70

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)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0

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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
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government (civic center)	10.0	5.0	85.0
Medical office building	7.0	3.5	89.5
General light industry	50.0	25.0	25.0

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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 percentage of residential units changed from 10 to 3.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The double counting internal work trip limit changed from to 65384.004.
The double counting shopping trip limit changed from to 36120.51600045.
The double counting other trip limit changed from to 140575.6086.
The travel mode environment settings changed from both to: both

Page: 1

URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP 2015.urb
Project Name: Pasadena General Plan Update Yr 2015 Conditions
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)	3,146.08	1,010.00	1,023.69	18.47	3.10

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	5,038.20	4,253.50	46,338.91	53.43	8,098.83

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	8,184.27	5,263.50	47,362.60	71.90	8,101.93

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URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP 2015.urb
Project Name: Pasadena General Plan Update Yr 2015 Conditions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	23,681.92	1,235.98	23,148.27	35.99	3,115.26

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	4,421.90	6,052.36	45,888.69	43.17	8,098.83

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	28,103.82	7,288.34	69,036.96	79.16	11,214.08

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URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP 2015.urb
Project Name: Pasadena General Plan Update Yr 2015 Conditions
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)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	76.02	1,002.03	418.87	-	1.88
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	20,605.83	233.95	22,729.40	35.99	3,113.37
Landscaping - No winter emissions					
Consumer Prdcts	3,000.06	-	-	-	-
TOTALS(lbs/day,unmitigated)	23,681.92	1,235.98	23,148.27	35.99	3,115.26

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	1,344.45	1,958.29	14,631.37	14.91	2,749.81
Apartments low rise	138.61	201.01	1,501.85	1.53	282.26
Condo/townhouse general	94.83	135.94	1,015.70	1.03	190.89
Elementary school	11.16	15.02	113.34	0.11	19.99
Junior high school	24.10	34.18	254.51	0.24	46.13
High school	14.54	21.53	157.55	0.15	29.37
Junior college (2 yrs)	37.10	60.78	432.24	0.44	85.10
City park	8.57	12.56	92.80	0.09	16.88
Strip mall	1,681.78	2,077.86	16,325.59	13.69	2,589.05
General office building	278.92	415.61	3,021.65	3.04	579.94
Government (civic center)	215.83	277.16	2,144.75	1.88	355.08
Medical office building	298.26	411.07	3,102.26	2.84	540.65
General light industry	273.76	431.32	3,095.07	3.22	613.66
TOTAL EMISSIONS (lbs/day)	4,421.90	6,052.36	45,888.69	43.17	8,098.83

Includes correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	6.32 trips / dwelling units	49,058.00	310,046.57

Apartments low rise	5.19 trips / dwelling units	6,132.00	31,825.08
Condo/townhouse general	3.51 trips / dwelling units	6,132.00	21,523.32
Elementary school	5.55 trips / 1000 sq. ft.	554.58	3,077.94
Junior high school	11.92 trips / 1000 sq. ft.	554.58	6,610.64
High school	7.31 trips / 1000 sq. ft.	554.58	4,054.01
Junior college (2 yrs)	18.36 trips / 1000 sq. ft.	554.58	10,182.16
City park	50.00 trips / acres	50.93	2,546.50
Strip mall	40.00 trips / 1000 sq. ft.	13,842.30	553,692.04
General office building	4.07 trips / 1000 sq. ft.	16,379.71	66,665.42
Government (civic center)	30.00 trips / 1000 sq. ft.	2,218.33	66,550.02
Medical office building	40.80 trips / 1000 sq. ft.	2,218.33	90,508.03
General light industry	7.46 trips / 1000 sq. ft.	8,094.68	60,386.31

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
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	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

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)

Elementary school	20.0	10.0	70.0
Junior high school	20.0	10.0	70.0

Page: 5

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
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government (civic center)	10.0	5.0	85.0
Medical office building	7.0	3.5	89.5
General light industry	50.0	25.0	25.0

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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 percentage of residential units changed from 10 to 3.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The operational emission year changed from 2004 to 2015.
The double counting internal work trip limit changed from to 72678.992.
The double counting shopping trip limit changed from to 40285.00354325.
The double counting other trip limit changed from to 156259.8328.
The travel mode environment settings changed from both to: both

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URBEMIS 2002 For Windows 7.4.2

File Name: L:\env\1300s\1342PasadenaGP\AIR&NOISE\Pasadena GP 2015.urb
Project Name: Pasadena General Plan Update Yr 2015 Conditions
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	76.02	1,002.03	418.87	-	1.88
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	69.99	7.97	604.82	18.47	1.22
Consumer Prdcts	3,000.06	-	-	-	-
TOTALS(lbs/day,unmitigated)	3,146.08	1,010.00	1,023.69	18.47	3.10

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UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	1,716.83	1,366.07	15,430.86	18.16	2,749.81
Apartments low rise	188.21	140.22	1,583.92	1.86	282.26
Condo/townhouse general	148.98	94.83	1,071.20	1.26	190.89
Elementary school	15.68	10.56	114.67	0.13	19.99
Junior high school	27.21	23.99	260.00	0.30	46.13
High school	18.77	15.09	160.68	0.19	29.37
Junior college (2 yrs)	39.15	42.45	447.98	0.55	85.10
City park	8.16	8.82	93.12	0.11	16.88
Strip mall	1,623.68	1,475.59	15,462.10	17.10	2,589.05
General office building	420.36	290.10	3,199.02	3.82	579.94

Government (civic center)	213.52	196.01	2,091.80	2.35	355.08
Medical office building	287.55	289.69	3,070.09	3.55	540.65
General light industry	330.08	300.07	3,353.44	4.04	613.66
TOTAL EMISSIONS (lbs/day)	5,038.20	4,253.50	46,338.91	53.43	8,098.83

Includes correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2015 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	6.32 trips / dwelling units	49,058.00	310,046.57
Apartments low rise	5.19 trips / dwelling units	6,132.00	31,825.08
Condo/townhouse general	3.51 trips / dwelling units	6,132.00	21,523.32
Elementary school	5.55 trips / 1000 sq. ft.	554.58	3,077.94
Junior high school	11.92 trips / 1000 sq. ft.	554.58	6,610.64
High school	7.31 trips / 1000 sq. ft.	554.58	4,054.01
Junior college (2 yrs)	18.36 trips / 1000 sq. ft.	554.58	10,182.16
City park	50.00 trips / acres	50.93	2,546.50
Strip mall	40.00 trips / 1000 sq. ft.	13,842.30	553,692.04
General office building	4.07 trips / 1000 sq. ft.	16,379.71	66,665.42
Government (civic center)	30.00 trips / 1000 sq. ft.	2,218.33	66,550.02
Medical office building	40.80 trips / 1000 sq. ft.	2,218.33	90,508.03
General light industry	7.46 trips / 1000 sq. ft.	8,094.68	60,386.31

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.40	0.40	99.40	0.20
Light Truck < 3,750 lbs	15.30	0.70	98.00	1.30
Light Truck 3,751- 5,750	16.40	0.60	98.80	0.60
Med Truck 5,751- 8,500	7.30	0.00	98.60	1.40
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
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	1.60	50.00	50.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.50	0.00	93.30	6.70

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)

Elementary school	20.0	10.0	70.0

Junior high school	20.0	10.0	70.0

Page: 9

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
Strip mall	2.0	1.0	97.0
General office building	35.0	17.5	47.5
Government (civic center)	10.0	5.0	85.0
Medical office building	7.0	3.5	89.5
General light industry	50.0	25.0	25.0

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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 percentage of residential units changed from 10 to 3.

Changes made to the default values for Operations

The pass by trips option switch changed from off to on.
The operational emission year changed from 2004 to 2015.
The double counting internal work trip limit changed from to 72678.992.
The double counting shopping trip limit changed from to 40285.00354325.
The double counting other trip limit changed from to 156259.8328.
The travel mode environment settings changed from both to: both

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Fair Oaks Ave/Colorado Blvd No Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=   1.0 M/S              Z0= 175. CM            ALT=     0. (M)
    BRG= WORST CASE             VD=   .0 CM/S
   CLAS=     7 (G)              VS=   .0 CM/S
   MIXH= 1000. M               AMB=  6.6 PPM
  SIGTH=    5. DEGREES        TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	4	-450	4	-150	AG	800	2.5	.0	15.0
B. NA	5	-150	5	0	AG	800	4.1	.0	13.5
C. ND	5	0	5	150	AG	787	2.8	.0	9.9
D. NE	4	150	4	450	AG	787	2.5	.0	15.0
E. SF	-4	450	-4	150	AG	1267	2.5	.0	15.0
F. SA	-4	150	-4	0	AG	1267	4.7	.0	9.9
G. SD	-4	0	-4	-150	AG	1359	3.4	.0	9.9
H. SE	-4	-150	-4	-450	AG	1359	2.5	.0	15.0
I. WF	450	5	150	5	AG	1393	2.8	.0	15.0
J. WA	150	5	0	5	AG	1190	4.5	.0	9.9
K. WD	0	5	-150	5	AG	1375	3.1	.0	9.9
L. WE	-150	5	-450	5	AG	1375	2.8	.0	15.0
M. EF	-450	-5	-150	-5	AG	856	2.8	.0	15.0
N. EA	-150	-5	0	-5	AG	780	4.0	.0	9.9
O. ED	0	-5	150	-5	AG	795	2.8	.0	9.9
P. EE	150	-5	450	-5	AG	795	2.8	.0	15.0
Q. WL	150	0	0	0	AG	203	3.9	.0	9.9
R. EL	-150	0	0	0	AG	76	3.9	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	14	12	1.8
2. SE	14	-12	1.8
3. SW	-10	-12	1.8
4. NW	-10	12	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Fair Oaks Ave/Colorado Blvd No Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	264.	7.4	.0	.0	.0	.0	.0	.1	.0	.0
2. SE	276.	7.3	.0	.1	.0	.0	.0	.0	.1	.0
3. SW	6.	7.5	.0	.0	.0	.0	.0	.5	.0	.0
4. NW	96.	7.6	.0	.0	.0	.0	.0	.2	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R
1. NE	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
2. SE	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
4. NW	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Fair Oaks Ave/Colorado Blvd With Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=   1.0 M/S              Z0= 175. CM            ALT=     0. (M)
    BRG= WORST CASE             VD=   .0 CM/S
   CLAS=     7 (G)              VS=   .0 CM/S
   MIXH= 1000. M               AMB=  6.6 PPM
  SIGTH=    5. DEGREES        TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	4	-450	4	-150	AG	988	2.5	.0	15.0
B. NA	5	-150	5	0	AG	988	3.7	.0	13.5
C. ND	5	0	5	150	AG	984	2.7	.0	9.9
D. NE	4	150	4	450	AG	984	2.5	.0	15.0
E. SF	-4	450	-4	150	AG	1692	2.5	.0	15.0
F. SA	-4	150	-4	0	AG	1692	4.5	.0	9.9
G. SD	-4	0	-4	-150	AG	1588	3.0	.0	9.9
H. SE	-4	-150	-4	-450	AG	1588	2.5	.0	15.0
I. WF	450	5	150	5	AG	910	2.5	.0	15.0
J. WA	150	5	0	5	AG	873	4.7	.0	9.9
K. WD	0	5	-150	5	AG	1193	3.8	.0	9.9
L. WE	-150	5	-450	5	AG	1193	2.5	.0	15.0
M. EF	-450	-5	-150	-5	AG	757	2.5	.0	15.0
N. EA	-150	-5	0	-5	AG	681	4.5	.0	9.9
O. ED	0	-5	150	-5	AG	582	2.9	.0	9.9
P. EE	150	-5	450	-5	AG	582	2.5	.0	15.0
Q. WL	150	0	0	0	AG	37	4.3	.0	9.9
R. EL	-150	0	0	0	AG	76	4.3	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	14	12	1.8
2. SE	14	-12	1.8
3. SW	-10	-12	1.8
4. NW	-10	12	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Fair Oaks Ave/Colorado Blvd With Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	263.	7.4	.0	.0	.0	.0	.0	.2	.0	.0
2. SE	277.	7.3	.0	.1	.0	.0	.0	.0	.1	.0
3. SW	6.	7.6	.0	.0	.0	.0	.0	.6	.0	.0
4. NW	172.	7.5	.0	.2	.0	.0	.0	.0	.4	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R
1. NE	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
2. SE	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
3. SW	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
4. NW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Lake Ave/Corson St. No Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=   1.0 M/S            Z0= 175. CM          ALT=     0. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  6.6 PPM
  SIGTH=    5. DEGREES       TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	5	-450	5	-150	AG	2141	2.5	.0	19.5
B. NA	9	-150	9	0	AG	2141	3.9	.0	22.5
C. ND	9	0	9	150	AG	2433	3.2	.0	13.5
D. NE	5	150	5	450	AG	2433	2.5	.0	19.5
E. SF	-9	450	-9	150	AG	1339	2.5	.0	19.5
F. SA	-9	150	-9	0	AG	974	3.8	.0	13.5
G. SD	-9	0	-9	-150	AG	1477	2.8	.0	13.5
H. SE	-9	-150	-9	-450	AG	1477	2.5	.0	19.5
I. EF	-450	-9	-150	-9	AG	2745	2.5	.0	19.5
J. EA	-150	-9	0	-9	AG	1971	5.4	.0	13.5
K. ED	0	-9	150	-9	AG	2315	4.3	.0	13.5
L. EE	150	-9	450	-9	AG	2315	2.5	.0	19.5
M. SL	0	150	0	0	AG	365	3.8	.0	9.9
N. EL	-150	0	0	0	AG	774	4.3	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	21	3	1.8
2. SE	21	-17	1.8
3. SW	-17	-17	1.8
4. NW	-17	3	1.8

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   2

     JOB: Lake Ave/Corson St. No Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	187.	7.8	.0	.6	.0	.0	.0	.0	.0	.1
2. SE	278.	8.0	.0	.3	.0	.0	.0	.0	.0	.0
3. SW	82.	7.8	.0	.2	.0	.0	.0	.0	.1	.0
4. NW	99.	7.7	.0	.1	.0	.0	.0	.1	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N
1. NE	.0	.0	.3	.0	.0	.0
2. SE	.0	.7	.2	.0	.0	.1
3. SW	.0	.2	.7	.0	.0	.0
4. NW	.0	.0	.5	.0	.0	.2

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Lake Ave/Corson St. With Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=   1.0 M/S              Z0= 175. CM            ALT=     0. (M)
    BRG= WORST CASE             VD=   .0 CM/S
   CLAS=     7 (G)              VS=   .0 CM/S
   MIXH= 1000. M               AMB=  6.6 PPM
  SIGTH=    5. DEGREES        TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	5	-450	5	-150	AG	1702	2.5	.0	19.5
B. NA	9	-150	9	0	AG	1702	4.1	.0	22.5
C. ND	9	0	9	150	AG	2416	3.9	.0	13.5
D. NE	5	150	5	450	AG	2416	2.5	.0	19.5
E. SF	-9	450	-9	150	AG	1327	2.5	.0	19.5
F. SA	-9	150	-9	0	AG	909	4.1	.0	13.5
G. SD	-9	0	-9	-150	AG	1338	2.8	.0	13.5
H. SE	-9	-150	-9	-450	AG	1338	2.5	.0	19.5
I. EF	-450	-9	-150	-9	AG	3376	2.5	.0	19.5
J. EA	-150	-9	0	-9	AG	2287	5.2	.0	13.5
K. ED	0	-9	150	-9	AG	2651	3.9	.0	13.5
L. EE	150	-9	450	-9	AG	2651	2.5	.0	19.5
M. SL	0	150	0	0	AG	418	4.0	.0	9.9
N. EL	-150	0	0	0	AG	1089	4.1	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	21	3	1.8
2. SE	21	-17	1.8
3. SW	-17	-17	1.8
4. NW	-17	3	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lake Ave/Corson St. With Project
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	265.	8.0	.0	.0	.3	.0	.0	.0	.0	.0
2. SE	278.	8.1	.0	.2	.0	.0	.0	.0	.0	.0
3. SW	82.	7.8	.0	.2	.0	.0	.0	.0	.1	.0
4. NW	97.	7.8	.0	.0	.0	.0	.0	.1	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N
1. NE	.1	.5	.0	.0	.0	.4
2. SE	.0	.8	.2	.0	.0	.2
3. SW	.0	.2	.7	.0	.0	.0
4. NW	.0	.0	.5	.0	.0	.3

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Marengo Ave/Corson St. With Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=   1.0 M/S            Z0= 175. CM          ALT=     0. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  6.6 PPM
  SIGTH=    5. DEGREES       TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	4	-450	4	-150	AG	1775	2.5	.0	15.0
B. NA	7	-150	7	0	AG	1775	4.0	.0	18.0
C. ND	7	0	7	150	AG	1143	2.9	.0	9.9
D. NE	4	150	4	450	AG	1143	2.5	.0	15.0
E. SF	-5	450	-5	150	AG	878	2.5	.0	15.0
F. SA	-5	150	-5	0	AG	779	4.0	.0	9.9
G. SD	-5	0	-5	-150	AG	899	2.8	.0	9.9
H. SE	-5	-150	-5	-450	AG	899	2.5	.0	15.0
I. EF	-450	-5	-150	-5	AG	2232	2.5	.0	15.0
J. EA	-150	-7	0	-7	AG	1986	5.2	.0	13.5
K. ED	0	-7	150	-7	AG	2843	4.7	.0	13.5
L. EE	150	-5	450	-5	AG	2843	2.5	.0	19.5
M. SL	0	150	0	0	AG	99	3.8	.0	9.9
N. EL	-150	0	0	0	AG	246	4.0	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	17	3	1.8
2. SE	17	-16	1.8
3. SW	-12	-16	1.8
4. NW	-12	3	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Marengo Ave/Corson St. With Project
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	187.	7.8	.0	.6	.0	.0	.0	.0	.0	.0
2. SE	278.	7.9	.0	.2	.0	.0	.0	.0	.0	.0
3. SW	83.	7.9	.0	.2	.0	.0	.0	.0	.0	.0
4. NW	99.	7.7	.0	.0	.0	.0	.0	.1	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N
1. NE	.0	.0	.4	.0	.0	.0
2. SE	.0	.7	.2	.0	.0	.0
3. SW	.0	.0	1.0	.0	.0	.0
4. NW	.0	.0	.8	.0	.0	.0

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Marengo Ave/Union St No Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
      U=   1.0 M/S            Z0= 175. CM           ALT=     0. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  6.6 PPM
  SIGTH=    5. DEGREES       TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	5	-450	5	-150	AG	1188	2.5	.0	15.0
B. NA	5	-150	5	0	AG	1137	3.8	.0	9.9
C. ND	5	0	5	150	AG	1234	2.7	.0	9.9
D. NE	5	150	5	450	AG	1234	2.5	.0	15.0
E. SF	-4	450	-4	150	AG	754	2.5	.0	15.0
F. SA	-5	150	-5	0	AG	754	3.5	.0	13.5
G. SD	-5	0	-5	-150	AG	815	2.7	.0	9.9
H. SE	-4	-150	-4	-450	AG	815	2.5	.0	15.0
I. WF	450	5	150	5	AG	1025	2.5	.0	15.0
J. WA	150	7	0	7	AG	877	4.5	.0	13.5
K. WD	0	7	-150	7	AG	918	3.5	.0	9.9
L. WE	-150	5	-450	5	AG	918	2.5	.0	15.0
M. NL	0	-150	0	0	AG	51	3.4	.0	9.9
N. WL	150	0	0	0	AG	148	4.3	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	12	16	1.8
2. SE	12	-3	1.8
3. SW	-14	-3	1.8
4. NW	-14	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Marengo Ave/Union St No Project
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	186.	7.3	.0	.4	.0	.0	.0	.0	.0	.0
2. SE	354.	7.2	.0	.0	.3	.0	.0	.0	.0	.0
3. SW	84.	7.1	.0	.0	.0	.0	.0	.0	.0	.0
4. NW	96.	7.2	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N
1. NE	.0	.1	.0	.0	.0	.0
2. SE	.0	.1	.0	.0	.0	.0
3. SW	.0	.3	.0	.0	.0	.0
4. NW	.0	.3	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB: Marengo Ave/Union St With Project
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
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I. SITE VARIABLES

```
      U=   1.0 M/S            Z0= 175. CM          ALT=     0. (M)
    BRG= WORST CASE           VD=   .0 CM/S
   CLAS=     7 (G)            VS=   .0 CM/S
   MIXH= 1000. M             AMB=  6.6 PPM
  SIGTH=    5. DEGREES       TEMP= 15.0 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	5	-450	5	-150	AG	1476	2.5	.0	15.0
B. NA	5	-150	5	0	AG	1424	4.3	.0	9.9
C. ND	5	0	5	150	AG	1533	3.1	.0	9.9
D. NE	5	150	5	450	AG	1533	2.5	.0	15.0
E. SF	-4	450	-4	150	AG	872	2.5	.0	15.0
F. SA	-5	150	-5	0	AG	872	3.8	.0	13.5
G. SD	-5	0	-5	-150	AG	470	2.7	.0	9.9
H. SE	-4	-150	-4	-450	AG	470	2.5	.0	15.0
I. WF	450	5	150	5	AG	1712	2.5	.0	15.0
J. WA	150	7	0	7	AG	1679	5.2	.0	13.5
K. WD	0	7	-150	7	AG	2057	5.2	.0	9.9
L. WE	-150	5	-450	5	AG	2057	2.5	.0	15.0
M. NL	0	-150	0	0	AG	52	3.7	.0	9.9
N. WL	150	0	0	0	AG	33	4.1	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE	12	16	1.8
2. SE	12	-3	1.8
3. SW	-14	-3	1.8
4. NW	-14	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Marengo Ave/Union St With Project
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE	260.	7.6	.0	.0	.2	.0	.0	.0	.0	.0
2. SE	280.	7.5	.0	.2	.0	.0	.0	.0	.0	.0
3. SW	7.	7.4	.0	.0	.0	.0	.0	.3	.0	.0
4. NW	96.	7.6	.0	.0	.0	.0	.0	.1	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N
1. NE	.0	.0	.7	.0	.0	.0
2. SE	.0	.0	.6	.0	.0	.0
3. SW	.0	.0	.3	.0	.0	.0
4. NW	.0	.7	.0	.0	.0	.0