

**Lyons Avenue/Dockweiler Road Extension Project  
Draft Environmental Impact Report**

Appendix C  
Air Quality Worksheets



## Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Dockweiler Road Extension											
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)	
Grubbing/Land Clearing	1.5	12.0	15.1	20.7	0.7	20.0	4.8	0.6	4.2	2,464.5	
Grading/Excavation	8.6	56.7	92.8	24.2	4.2	20.0	7.9	3.7	4.2	13,055.5	
Drainage/Utilities/Sub-Grade	6.2	39.1	58.9	23.0	3.0	20.0	6.9	2.8	4.2	8,004.2	
Paving	1.6	12.4	13.4	0.8	0.8	-	0.7	0.7	-	2,309.9	
<b>Maximum (pounds/day)</b>	<b>8.6</b>	<b>56.7</b>	<b>92.8</b>	<b>24.2</b>	<b>4.2</b>	<b>20.0</b>	<b>7.9</b>	<b>3.7</b>	<b>4.2</b>	<b>13,055.5</b>	
<b>Total (tons/construction project)</b>	<b>0.8</b>	<b>5.2</b>	<b>8.1</b>	<b>2.6</b>	<b>0.4</b>	<b>2.2</b>	<b>0.8</b>	<b>0.3</b>	<b>0.5</b>	<b>1,137.4</b>	

Notes: Project Start Year -> 2019  
 Project Length (months) -> 12  
 Total Project Area (acres) -> 5  
 Maximum Area Disturbed/Day (acres) -> 2  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 223

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Dockweiler Road Extension											
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)	
Grubbing/Land Clearing	0.7	5.5	6.9	9.4	0.3	9.1	2.2	0.3	1.9	1,120.2	
Grading/Excavation	3.9	25.8	42.2	11.0	1.9	9.1	3.6	1.7	1.9	5,934.3	
Drainage/Utilities/Sub-Grade	2.8	17.8	26.8	10.5	1.4	9.1	3.1	1.3	1.9	3,638.3	
Paving	0.7	5.6	6.1	0.4	0.4	-	0.3	0.3	-	1,050.0	
<b>Maximum (kilograms/day)</b>	<b>3.9</b>	<b>25.8</b>	<b>42.2</b>	<b>11.0</b>	<b>1.9</b>	<b>9.1</b>	<b>3.6</b>	<b>1.7</b>	<b>1.9</b>	<b>5,934.3</b>	
<b>Total (megagrams/construction project)</b>	<b>0.7</b>	<b>4.7</b>	<b>7.3</b>	<b>2.4</b>	<b>0.4</b>	<b>2.0</b>	<b>0.7</b>	<b>0.3</b>	<b>0.4</b>	<b>1,031.6</b>	

Notes: Project Start Year -> 2019  
 Project Length (months) -> 12  
 Total Project Area (hectares) -> 2  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 170

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

## Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -> Dockweiler Road Extension - On Site Only (excludes haul trips)											
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)	
Grubbing/Land Clearing	1.4	11.4	15.1	20.6	0.6	20.0	4.7	0.6	4.2	2,267.8	
Grading/Excavation	8.2	52.6	88.1	24.0	4.0	20.0	7.8	3.6	4.2	10,797.3	
Drainage/Utilities/Sub-Grade	6.0	36.9	58.6	23.0	3.0	20.0	6.9	2.7	4.2	7,315.7	
Paving	1.5	11.4	13.3	0.8	0.8	-	0.7	0.7	-	2,014.9	
Maximum (pounds/day)	8.2	52.6	88.1	24.0	4.0	20.0	7.8	3.6	4.2	10,797.3	
Total (tons/construction project)	0.8	4.9	7.8	2.6	0.4	2.2	0.8	0.3	0.5	977.9	

Notes: Project Start Year -> 2019  
 Project Length (months) -> 12  
 Total Project Area (acres) -> 5  
 Maximum Area Disturbed/Day (acres) -> 2  
 Total Soil Imported/Exported (yd<sup>3</sup>/day) -> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Dockweiler Road Extension - On Site Only (excludes haul trips)											
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)	
Grubbing/Land Clearing	0.7	5.2	6.8	9.4	0.3	9.1	2.2	0.3	1.9	1,030.8	
Grading/Excavation	3.7	23.9	40.0	10.9	1.8	9.1	3.5	1.7	1.9	4,907.9	
Drainage/Utilities/Sub-Grade	2.7	16.8	26.6	10.4	1.3	9.1	3.1	1.2	1.9	3,325.3	
Paving	0.7	5.2	6.0	0.4	0.4	-	0.3	0.3	-	915.8	
Maximum (kilograms/day)	3.7	23.9	40.0	10.9	1.8	9.1	3.5	1.7	1.9	4,907.9	
Total (megagrams/construction project)	0.7	4.4	7.1	2.4	0.3	2.0	0.7	0.3	0.4	887.0	

Notes: Project Start Year -> 2019  
 Project Length (months) -> 12  
 Total Project Area (hectares) -> 2  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day) -> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

**Project Title:** Dockweiler Extension

**Background Information**

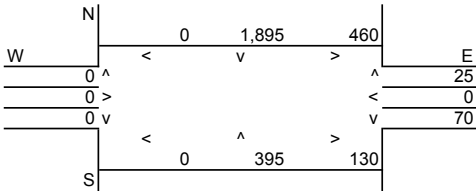
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

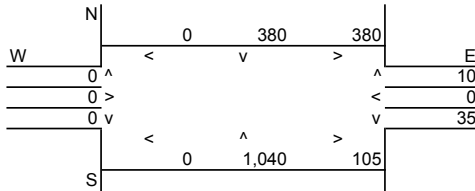
Intersection: 1. Sierra Highway/SR-14 Freeway SouthBound Ramps  
 Analysis Condition: C

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Sierra Highway	At Grade	6	5
East-West Roadway:	SR-14	At Grade	2	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	2,775	N-S Road:	1,810
E-W Road:	685	E-W Road:	530

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	2,775	4.75	1.25	0.80	0.65	0.46
East-West Road	3.7	2.7	2.2	1.7	685	4.75	0.12	0.09	0.07	0.06
<b>P.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	1,810	4.75	0.82	0.52	0.42	0.30
East-West Road	3.7	2.7	2.2	1.7	530	4.75	0.09	0.07	0.06	0.04

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.4	2.9	1.8
25 Feet from Roadway Edge	2.9	2.6	1.4
50 Feet from Roadway Edge	2.7	2.5	1.3
100 Feet from Roadway Edge	2.5	2.3	1.2

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Title: Dockweiler Extension

**Background Information**

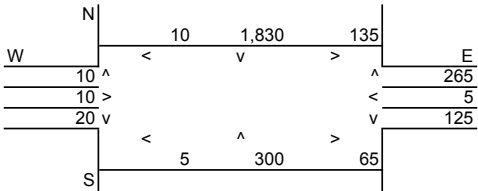
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

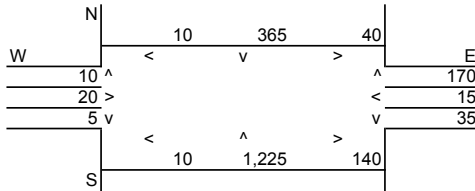
Intersection: 2. Sierra Highway/Placerita Canyon Rd.  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Sierra Highway	At Grade	6	5
East-West Roadway:	Placerita Canyon	At Grade	6	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	2,550	N-S Road:	1,820
E-W Road:	605	E-W Road:	420

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	2,550	4.75	1.15	0.74	0.59	0.42
East-West Road	2.8	2.3	2.0	1.7	605	4.75	0.08	0.07	0.06	0.05
<b>P.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	1,820	4.75	0.82	0.53	0.42	0.30
East-West Road	2.8	2.3	2.0	1.7	420	4.75	0.06	0.05	0.04	0.03

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.2	2.9	1.7
25 Feet from Roadway Edge	2.8	2.6	1.4
50 Feet from Roadway Edge	2.7	2.5	1.3
100 Feet from Roadway Edge	2.5	2.3	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Title: Dockweiler Extension

**Background Information**

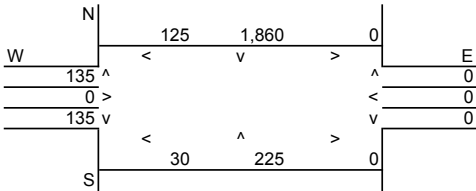
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

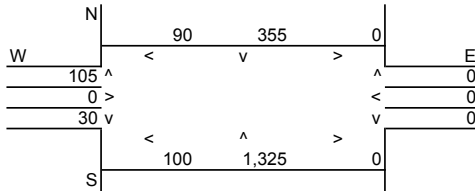
Intersection: 4. Sierra Highway and Dockweiler Drive  
 Analysis Condition: B

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Sierra Highway	4	5	5
East-West Roadway:	Dockweiler Drive	2	5	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road: 2,345  
 E-W Road: 425

N-S Road: 1,875  
 E-W Road: 325

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	11.9	7.0	5.4	3.8	2,345	4.75	1.33	0.78	0.60	0.42
East-West Road	3.7	2.7	2.2	1.7	425	4.75	0.07	0.05	0.04	0.03
<b>P.M. Peak Traffic Hour</b>										
North-South Road	11.9	7.0	5.4	3.8	1,875	4.75	1.06	0.62	0.48	0.34
East-West Road	3.7	2.7	2.2	1.7	325	4.75	0.06	0.04	0.03	0.03

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M.	P.M.	8-Hour
	Peak Hour	Peak Hour	
Roadway Edge	3.4	3.1	1.8
25 Feet from Roadway Edge	2.8	2.7	1.4
50 Feet from Roadway Edge	2.6	2.5	1.3
100 Feet from Roadway Edge	2.5	2.4	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Title: Dockweiler Extension

**Background Information**

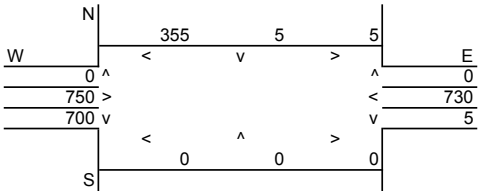
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

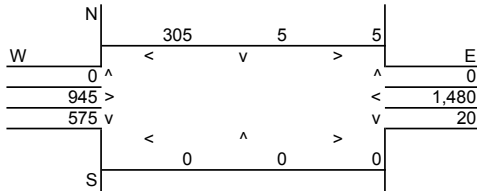
Intersection: 5. SR-14 Soundbound Ramps and Newhall Avenue  
 Analysis Condition: F

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	SR-14 Fwy Southbound	2	5	5
East-West Roadway:	Newhall Avenue	6	5	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	710	N-S Road:	600
E-W Road:	2,535	E-W Road:	3,305

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub> E.O.R.	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
		A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet	E.O.R.			25 Feet	50 Feet	100 Feet	
<b>A.M. Peak Traffic Hour</b>											
North-South Road	3.7	2.7	2.2	1.7	710	4.75	0.12	0.09	0.07	0.06	
East-West Road	9.5	6.1	4.9	3.5	2,535	4.75	1.14	0.74	0.59	0.42	
<b>P.M. Peak Traffic Hour</b>											
North-South Road	3.7	2.7	2.2	1.7	600	4.75	0.11	0.08	0.06	0.05	
East-West Road	9.5	6.1	4.9	3.5	3,305	4.75	1.49	0.96	0.77	0.55	

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.3	3.6	1.9
25 Feet from Roadway Edge	2.8	3.0	1.5
50 Feet from Roadway Edge	2.7	2.8	1.4
100 Feet from Roadway Edge	2.5	2.6	1.2

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).



**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Title: Dockweiler Extension

**Background Information**

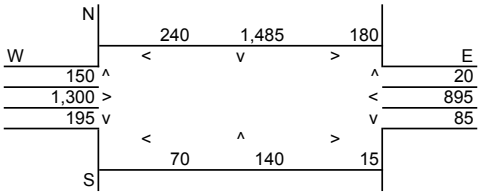
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

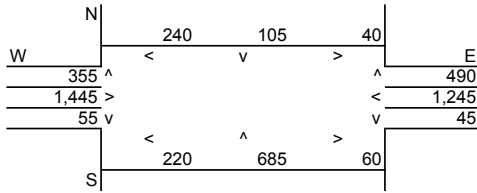
Intersection: 6. Sierra Highway and Newhall Avenue  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Sierra Highway	8	5	5
East-West Roadway:	Newhall Avenue	8	5	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	2,215	N-S Road:	1,915
E-W Road:	2,850	E-W Road:	3,560

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	2.6	2.2	1.9	1.6	2,215	4.75	0.27	0.23	0.20	0.17
East-West Road	8.5	5.7	4.6	3.4	2,850	4.75	1.15	0.77	0.62	0.46
<b>P.M. Peak Traffic Hour</b>										
North-South Road	2.6	2.2	1.9	1.6	1,915	4.75	0.24	0.20	0.17	0.15
East-West Road	8.5	5.7	4.6	3.4	3,560	4.75	1.44	0.96	0.78	0.58

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.4	3.7	2.0
25 Feet from Roadway Edge	3.0	3.2	1.6
50 Feet from Roadway Edge	2.8	3.0	1.5
100 Feet from Roadway Edge	2.6	2.7	1.3

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

## SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

### Background Information

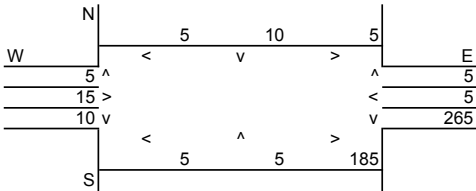
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

### Roadway Data

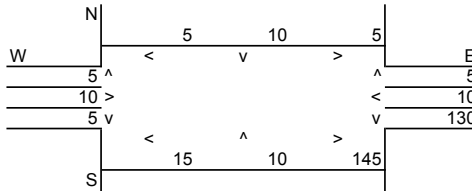
Intersection: 8. Valle Del Oro and Dockweiler Drive  
 Analysis Condition: B

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Valle Del Oro	2	5	5
East-West Roadway:	Dockweiler Drive	4	5	5

#### A.M. Peak Hour Traffic Volumes



#### P.M. Peak Hour Traffic Volumes



#### Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 480  
 E-W Road: 480

N-S Road: 315  
 E-W Road: 305

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub> E.O.R.	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
		A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet	E.O.R.			25 Feet	50 Feet	100 Feet	
A.M. Peak Traffic Hour											
North-South Road	14.0	7.6	5.7	4.0	480	4.75	0.32	0.17	0.13	0.09	
East-West Road	3.3	2.6	2.2	1.7	480	4.75	0.08	0.06	0.05	0.04	
P.M. Peak Traffic Hour											
North-South Road	14.0	7.6	5.7	4.0	315	4.75	0.21	0.11	0.09	0.06	
East-West Road	3.3	2.6	2.2	1.7	305	4.75	0.05	0.04	0.03	0.02	

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

### Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.4	2.3	1.1
25 Feet from Roadway Edge	2.2	2.2	1.0
50 Feet from Roadway Edge	2.2	2.1	0.9
100 Feet from Roadway Edge	2.1	2.1	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

## SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

### Background Information

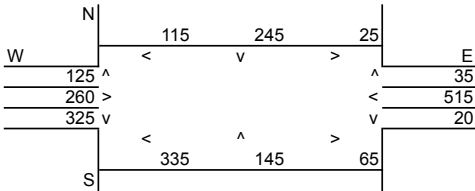
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.6  
 Analysis Year: 2015

### Roadway Data

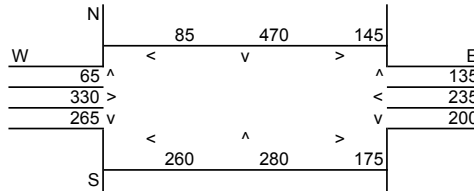
Intersection: 11. Newhall Avenue and Lyons Avenue  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Newhall Avenue	4	20	20
East-West Roadway:	Lyons Avenue	6	20	20

#### A.M. Peak Hour Traffic Volumes



#### P.M. Peak Hour Traffic Volumes



#### Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 1,135  
 E-W Road: 1,675

N-S Road: 1,650  
 E-W Road: 1,240

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.3	2.6	2.2	1.7	1,135	2.85	0.11	0.08	0.07	0.06
East-West Road	9.5	6.1	4.9	3.5	1,675	2.85	0.45	0.29	0.23	0.17
P.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	1,650	2.85	0.56	0.33	0.25	0.18
East-West Road	2.8	2.3	2.0	1.7	1,240	2.85	0.10	0.08	0.07	0.06

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

### Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.6	2.7	1.2
25 Feet from Roadway Edge	2.4	2.4	1.0
50 Feet from Roadway Edge	2.3	2.3	1.0
100 Feet from Roadway Edge	2.2	2.2	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Title: Dockweiler Extension

**Background Information**

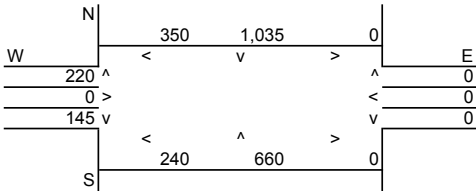
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

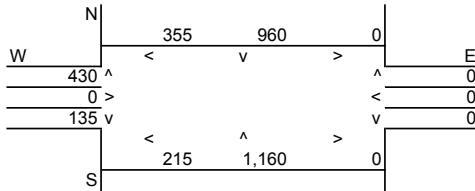
Intersection: 12. Railroad Avenue and Lyons Avenue  
 Analysis Condition: C

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Railroad Avenue	At Grade	6	5
East-West Roadway:	Newhall Avenue	At Grade	2	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	2,265	N-S Road:	2,905
E-W Road:	955	E-W Road:	1,135

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	2,265	4.75	1.02	0.66	0.53	0.38
East-West Road	3.7	2.7	2.2	1.7	955	4.75	0.17	0.12	0.10	0.08
<b>P.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	2,905	4.75	1.31	0.84	0.68	0.48
East-West Road	3.7	2.7	2.2	1.7	1,135	4.75	0.20	0.15	0.12	0.09

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.2	3.5	1.9
25 Feet from Roadway Edge	2.8	3.0	1.5
50 Feet from Roadway Edge	2.6	2.8	1.4
100 Feet from Roadway Edge	2.5	2.6	1.2

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

**Project Title:** Dockweiler Extension

**Background Information**

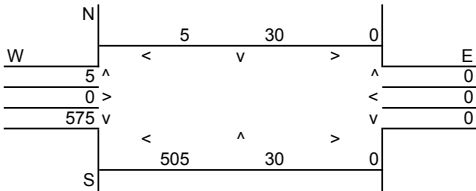
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

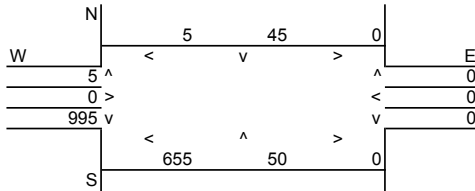
Intersection: 15. Main Street and Newhall Avenue  
 Analysis Condition: E

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Newhall Ave	At Grade	2	5
East-West Roadway:	Main Street	At Grade	2	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	1,140	N-S Road:	1,745
E-W Road:	1,090	E-W Road:	1,660

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	14.0	7.6	5.7	4.0	1,140	4.75	0.76	0.41	0.31	0.22
East-West Road	3.7	2.7	2.2	1.7	1,090	4.75	0.19	0.14	0.11	0.09
<b>P.M. Peak Traffic Hour</b>										
North-South Road	14.0	7.6	5.7	4.0	1,745	4.75	1.16	0.63	0.47	0.33
East-West Road	3.7	2.7	2.2	1.7	1,660	4.75	0.29	0.21	0.17	0.13

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.0	3.5	1.8
25 Feet from Roadway Edge	2.6	2.8	1.4
50 Feet from Roadway Edge	2.4	2.6	1.3
100 Feet from Roadway Edge	2.3	2.5	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

**Project Title:** Dockweiler Extension

**Background Information**

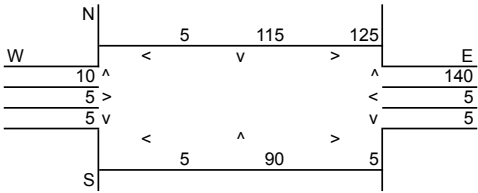
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2015

**Roadway Data**

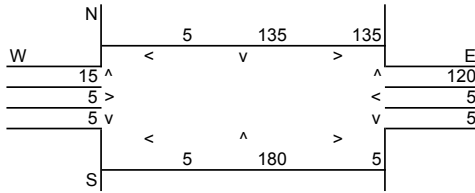
Intersection: 16. Arch Street and 12th Street/Placerita Canyon Road  
 Analysis Condition: C

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Arch Street / 12th Street	2	5	5
East-West Roadway:	Placerita Canyon Road	2	5	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road: 485  
 E-W Road: 285

N-S Road: 590  
 E-W Road: 275

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	14.0	7.6	5.7	4.0	485	4.75	0.32	0.18	0.13	0.09
East-West Road	3.7	2.7	2.2	1.7	285	4.75	0.05	0.04	0.03	0.02
<b>P.M. Peak Traffic Hour</b>										
North-South Road	14.0	7.6	5.7	4.0	590	4.75	0.39	0.21	0.16	0.11
East-West Road	3.7	2.7	2.2	1.7	275	4.75	0.05	0.04	0.03	0.02

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.4	2.4	1.1
25 Feet from Roadway Edge	2.2	2.2	1.0
50 Feet from Roadway Edge	2.2	2.2	0.9
100 Feet from Roadway Edge	2.1	2.1	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Title: Dockweiler Extension

**Background Information**

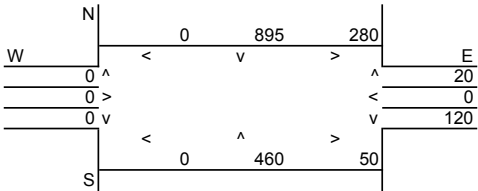
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

**Roadway Data**

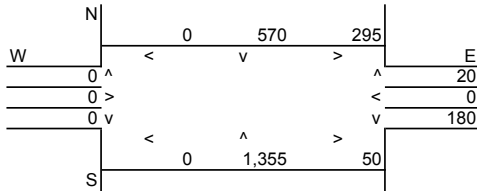
Intersection: 1. Sierra Highway/SR-14 Freeway SouthBound Ramps  
 Analysis Condition: B

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Sierra Highway	At Grade	6	5
East-West Roadway:	SR-14	At Grade	2	5

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	1,655	N-S Road:	2,240
E-W Road:	470	E-W Road:	545

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	A <sub>2</sub> Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	1,655	3.38	0.53	0.34	0.27	0.20
East-West Road	3.7	2.7	2.2	1.7	470	3.38	0.06	0.04	0.03	0.03
<b>P.M. Peak Traffic Hour</b>										
North-South Road	9.5	6.1	4.9	3.5	2,240	3.38	0.72	0.46	0.37	0.26
East-West Road	3.7	2.7	2.2	1.7	545	3.38	0.07	0.05	0.04	0.03

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.6	2.8	1.4
25 Feet from Roadway Edge	2.4	2.5	1.2
50 Feet from Roadway Edge	2.3	2.4	1.1
100 Feet from Roadway Edge	2.2	2.3	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

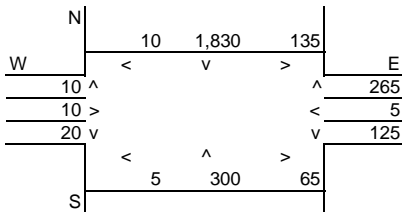
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

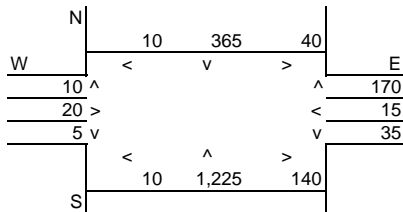
Intersection: 2. Sierra Highway/Placerita Canyon Rd.  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Sierra Highway	At Grade	6	5
East-West Roadway:	Placerita Canyon	At Grade	6	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,550	N-S Road:	1,820
E-W Road:	605	E-W Road:	420

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	9.5	6.1	4.9	3.5	2,550	3.38	0.82	0.53	0.42	0.30
East-West Road	2.8	2.3	2.0	1.7	605	3.38	0.06	0.05	0.04	0.03
P.M. Peak Traffic Hour										
North-South Road	9.5	6.1	4.9	3.5	1,820	3.38	0.58	0.38	0.30	0.22
East-West Road	2.8	2.3	2.0	1.7	420	3.38	0.04	0.03	0.03	0.02

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	2.6	1.4
25 Feet from Roadway Edge	2.6	2.4	1.2
50 Feet from Roadway Edge	2.5	2.3	1.1
100 Feet from Roadway Edge	2.3	2.2	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).



# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

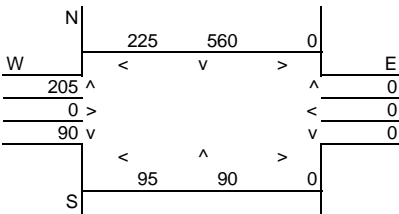
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

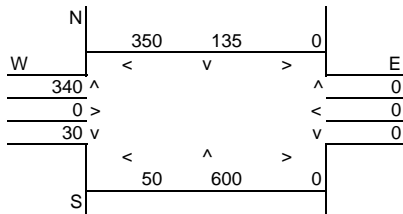
Intersection: 4. Sierra Highway and Dockweiler Drive  
 Analysis Condition: B

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Sierra Highway	At Grade	4	5	5
East-West Roadway: Dockweiler Drive	At Grade	2	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,080	N-S Road:	1,425
E-W Road:	615	E-W Road:	770

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	1,080	3.38	0.43	0.26	0.20	0.14
East-West Road	3.7	2.7	2.2	1.7	615	3.38	0.08	0.06	0.05	0.04
P.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	1,425	3.38	0.57	0.34	0.26	0.18
East-West Road	3.7	2.7	2.2	1.7	770	3.38	0.10	0.07	0.06	0.04

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.5	2.7	1.3
25 Feet from Roadway Edge	2.3	2.4	1.1
50 Feet from Roadway Edge	2.2	2.3	1.0
100 Feet from Roadway Edge	2.2	2.2	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

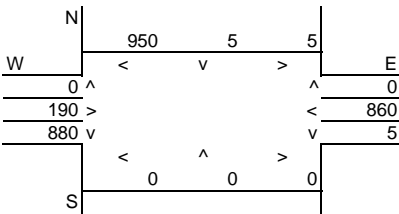
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

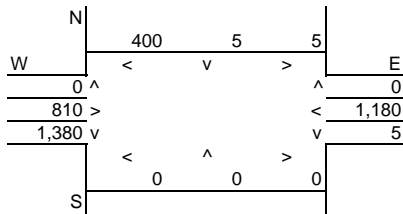
Intersection: 5. SR-14 Soundbound Ramps and Newhall Avenue  
 Analysis Condition: A

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: SR-14 Fwy Southbound	At Grade	2	5	5
East-West Roadway: Newhall Avenue	At Grade	6	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	960	N-S Road:	1,390
E-W Road:	2,880	E-W Road:	3,770

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	960	3.38	0.12	0.09	0.07	0.06
East-West Road	9.5	6.1	4.9	3.5	2,880	3.38	0.92	0.59	0.48	0.34
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,390	3.38	0.17	0.13	0.10	0.08
East-West Road	9.5	6.1	4.9	3.5	3,770	3.38	1.21	0.78	0.62	0.45

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.0	3.4	1.8
25 Feet from Roadway Edge	2.7	2.9	1.4
50 Feet from Roadway Edge	2.5	2.7	1.3
100 Feet from Roadway Edge	2.4	2.5	1.2

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

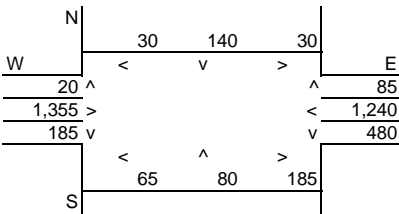
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

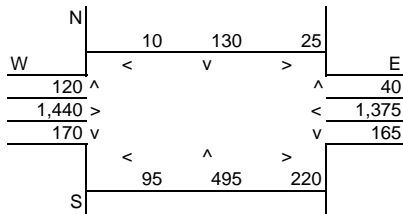
Intersection: 6. Sirerra Highway and Newhall Avenue  
 Analysis Condition: C

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Sierra Highway	At Grade	8	5	5
East-West Roadway: Newhall Avenue	At Grade	8	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,135	N-S Road:	1,275
E-W Road:	3,375	E-W Road:	3,265

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	2.6	2.2	1.9	1.6	1,135	3.38	0.10	0.08	0.07	0.06
East-West Road	8.5	5.7	4.6	3.4	3,375	3.38	0.97	0.65	0.52	0.39
P.M. Peak Traffic Hour										
North-South Road	2.6	2.2	1.9	1.6	1,275	3.38	0.11	0.09	0.08	0.07
East-West Road	8.5	5.7	4.6	3.4	3,265	3.38	0.94	0.63	0.51	0.38

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.1	3.1	1.5
25 Feet from Roadway Edge	2.7	2.7	1.3
50 Feet from Roadway Edge	2.6	2.6	1.2
100 Feet from Roadway Edge	2.4	2.4	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

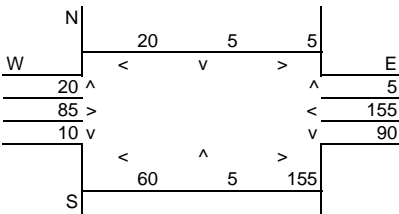
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

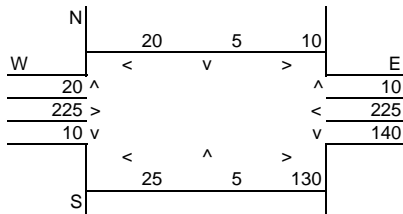
Intersection: 8. Valle Del Oro and Dockweiler Drive  
 Analysis Condition: B

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Valle Del Oro	At Grade	2	5	5
East-West Roadway: Dockweiler Drive	At Grade	4	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	325	N-S Road:	315
E-W Road:	495	E-W Road:	740

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	325	3.38	0.04	0.03	0.02	0.02
East-West Road	11.9	7.0	5.4	3.8	495	3.38	0.20	0.12	0.09	0.06
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	315	3.38	0.04	0.03	0.02	0.02
East-West Road	11.9	7.0	5.4	3.8	740	3.38	0.30	0.18	0.14	0.10

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.2	2.3	1.0
25 Feet from Roadway Edge	2.1	2.2	0.9
50 Feet from Roadway Edge	2.1	2.2	0.9
100 Feet from Roadway Edge	2.1	2.1	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

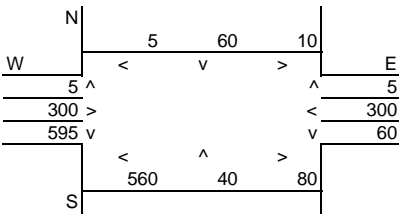
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.6  
 Analysis Year: 2019

## Roadway Data

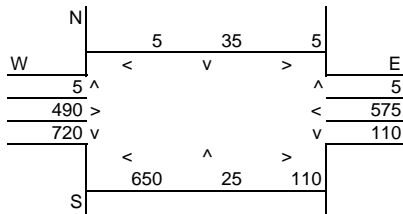
Intersection: 11. Newhall Avenue and Lyons Avenue  
 Analysis Condition: C

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Newhall Avenue	At Grade	4	20	20
East-West Roadway: Lyons Avenue	At Grade	8	20	20

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,395	N-S Road:	1,650
E-W Road:	1,765	E-W Road:	2,445

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.3	2.6	2.2	1.7	1,395	2.09	0.10	0.08	0.06	0.05
East-West Road	8.5	5.7	4.6	3.4	1,765	2.09	0.31	0.21	0.17	0.13
P.M. Peak Traffic Hour										
North-South Road	3.3	2.6	2.2	1.7	1,650	2.09	0.11	0.09	0.08	0.06
East-West Road	8.5	5.7	4.6	3.4	2,445	2.09	0.43	0.29	0.23	0.17

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.4	2.5	1.1
25 Feet from Roadway Edge	2.3	2.4	1.0
50 Feet from Roadway Edge	2.2	2.3	1.0
100 Feet from Roadway Edge	2.2	2.2	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

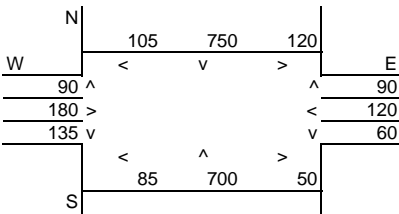
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

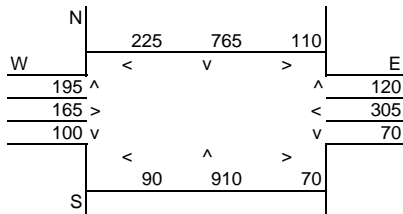
Intersection: 12. Railroad Avenue and Lyons Avenue  
 Analysis Condition: C

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Railroad Avenue	At Grade	8	5	5
East-West Roadway: Lyons Avenue	At Grade	6	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,855	N-S Road:	2,325
E-W Road:	715	E-W Road:	1,080

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	8.5	5.7	4.6	3.4	1,855	3.38	0.53	0.36	0.29	0.21
East-West Road	2.8	2.3	2.0	1.7	715	3.38	0.07	0.06	0.05	0.04
P.M. Peak Traffic Hour										
North-South Road	8.5	5.7	4.6	3.4	2,325	3.38	0.67	0.45	0.36	0.27
East-West Road	2.8	2.3	2.0	1.7	1,080	3.38	0.10	0.08	0.07	0.06

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.6	2.8	1.3
25 Feet from Roadway Edge	2.4	2.5	1.2
50 Feet from Roadway Edge	2.3	2.4	1.1
100 Feet from Roadway Edge	2.3	2.3	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

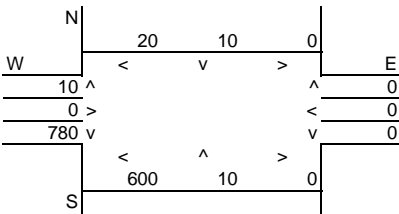
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

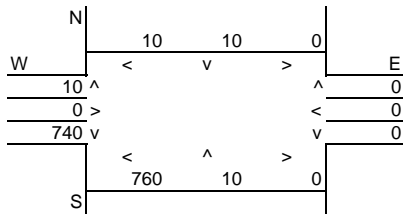
Intersection: 15. Main Street and Newhall Avenue  
 Analysis Condition: C

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Newhall Ave	At Grade	2	5	5
East-West Roadway: Main Street	At Grade	2	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,400	N-S Road:	1,520
E-W Road:	1,410	E-W Road:	1,520

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,400	3.38	0.18	0.13	0.10	0.08
East-West Road	14.0	7.6	5.7	4.0	1,410	3.38	0.67	0.36	0.27	0.19
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	1,520	3.38	0.72	0.39	0.29	0.21
East-West Road	3.7	2.7	2.2	1.7	1,520	3.38	0.19	0.14	0.11	0.09

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.8	2.9	1.4
25 Feet from Roadway Edge	2.5	2.5	1.2
50 Feet from Roadway Edge	2.4	2.4	1.1
100 Feet from Roadway Edge	2.3	2.3	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

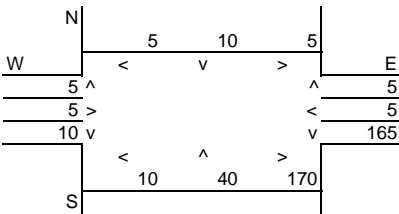
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2019

## Roadway Data

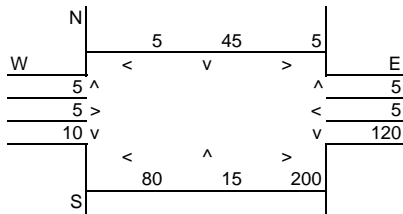
Intersection: 16. Arch Street and 12th Street/Placerita Canyon Road  
 Analysis Condition: C

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Arch Street / 12th Street	At Grade	4	5	5
East-West Roadway:	Placerita Canyon Road / Doc	At Grade	4	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	405	N-S Road:	470
E-W Road:	355	E-W Road:	340

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	405	3.38	0.16	0.10	0.07	0.05
East-West Road	3.3	2.6	2.2	1.7	355	3.38	0.04	0.03	0.03	0.02
P.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	470	3.38	0.19	0.11	0.09	0.06
East-West Road	3.3	2.6	2.2	1.7	340	3.38	0.04	0.03	0.03	0.02

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.2	2.2	1.0
25 Feet from Roadway Edge	2.1	2.1	0.9
50 Feet from Roadway Edge	2.1	2.1	0.9
100 Feet from Roadway Edge	2.1	2.1	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).



**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

**Project Title:** Dockweiler Extension

**Background Information**

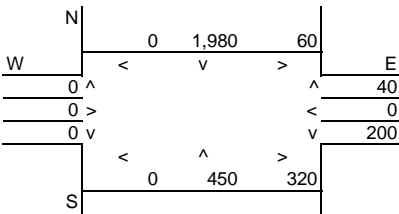
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

**Roadway Data**

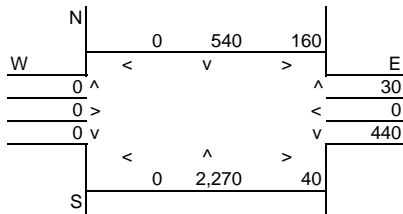
Intersection: 1. Sierra Highway/SR-14 Freeway SouthBound Ramps  
 Analysis Condition: E

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Sierra Highway	At Grade	6	5	5
East-West Roadway: SR-14	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,950	N-S Road:	3,290
E-W Road:	620	E-W Road:	670

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	9.5	6.1	4.9	3.5	2,950	2.34	0.65	0.42	0.34	0.24
East-West Road	3.7	2.7	2.2	1.7	620	2.34	0.05	0.04	0.03	0.02
P.M. Peak Traffic Hour										
North-South Road	9.5	6.1	4.9	3.5	3,290	2.34	0.73	0.47	0.38	0.27
East-West Road	3.7	2.7	2.2	1.7	670	2.34	0.06	0.04	0.03	0.03

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.7	2.8	1.4
25 Feet from Roadway Edge	2.5	2.5	1.2
50 Feet from Roadway Edge	2.4	2.4	1.1
100 Feet from Roadway Edge	2.3	2.3	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

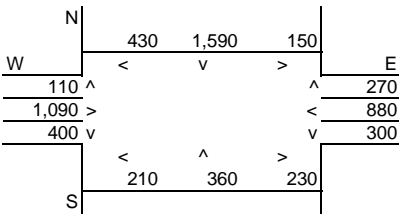
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

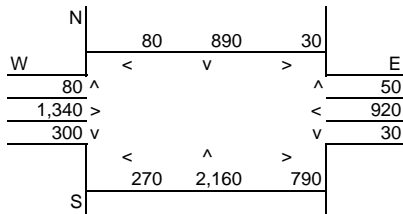
Intersection: 2. Sierra Highway/Placerita Canyon Rd.  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Sierra Highway	At Grade	8	5	5
East-West Roadway:	Placerita Canyon	At Grade	8	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	3,090	N-S Road:	4,440
E-W Road:	3,120	E-W Road:	3,160

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	2.6	2.2	1.9	1.6	3,090	2.34	0.19	0.16	0.14	0.12
East-West Road	8.5	5.7	4.6	3.4	3,120	2.34	0.62	0.42	0.34	0.25
P.M. Peak Traffic Hour										
North-South Road	8.5	5.7	4.6	3.4	4,440	2.34	0.88	0.59	0.48	0.35
East-West Road	2.6	2.2	1.9	1.6	3,160	2.34	0.19	0.16	0.14	0.12

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.8	3.1	1.6
25 Feet from Roadway Edge	2.6	2.8	1.3
50 Feet from Roadway Edge	2.5	2.6	1.2
100 Feet from Roadway Edge	2.4	2.5	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

**Project Title:** Dockweiler Extension

**Background Information**

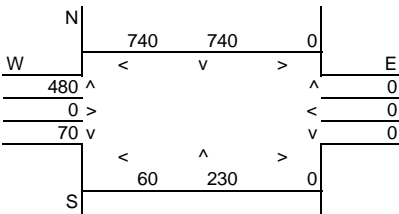
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

**Roadway Data**

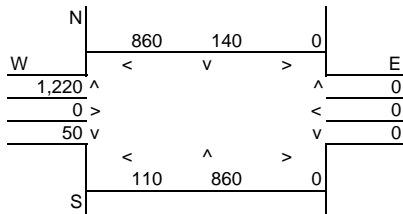
Intersection: 4. Sierra Highway and Dockweiler Drive  
 Analysis Condition: E

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Sierra Highway	At Grade	4	5	5
East-West Roadway: Dockweiler Drive	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,190	N-S Road:	3,080
E-W Road:	1,350	E-W Road:	2,240

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	2,190	2.34	0.61	0.36	0.28	0.19
East-West Road	3.7	2.7	2.2	1.7	1,350	2.34	0.12	0.09	0.07	0.05
P.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	3,080	2.34	0.86	0.50	0.39	0.27
East-West Road	3.7	2.7	2.2	1.7	2,240	2.34	0.19	0.14	0.12	0.09

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.7	3.1	1.5
25 Feet from Roadway Edge	2.4	2.6	1.3
50 Feet from Roadway Edge	2.3	2.5	1.2
100 Feet from Roadway Edge	2.2	2.4	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

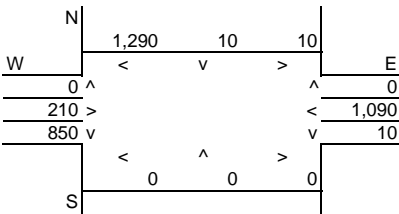
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

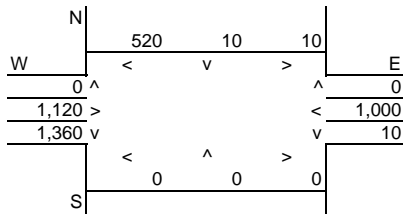
Intersection: 5. SR-14 Soundbound Ramps and Newhall Avenue  
 Analysis Condition: A

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: SR-14 Fwy Southbound	At Grade	2	5	5
East-West Roadway: Newhall Avenue	At Grade	6	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,310	N-S Road:	1,380
E-W Road:	3,440	E-W Road:	4,000

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,310	2.34	0.11	0.08	0.07	0.05
East-West Road	9.5	6.1	4.9	3.5	3,440	2.34	0.76	0.49	0.39	0.28
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,380	2.34	0.12	0.09	0.07	0.05
East-West Road	9.5	6.1	4.9	3.5	4,000	2.34	0.89	0.57	0.46	0.33

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	3.0	1.5
25 Feet from Roadway Edge	2.6	2.7	1.3
50 Feet from Roadway Edge	2.5	2.5	1.2
100 Feet from Roadway Edge	2.3	2.4	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

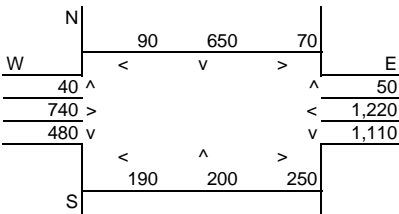
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

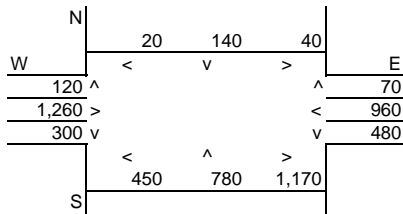
Intersection: 6. Sierra Highway and Newhall Avenue  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Sierra Highway	At Grade	8	5	5
East-West Roadway:	Newhall Avenue	At Grade	8	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,880	N-S Road:	3,320
E-W Road:	3,440	E-W Road:	3,980

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>	B	C	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet	Traffic Volume	Emission Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	2.6	2.2	1.9	1.6	2,880	2.34	0.17	0.15	0.13	0.11
East-West Road	8.5	5.7	4.6	3.4	3,440	2.34	0.68	0.46	0.37	0.27
P.M. Peak Traffic Hour										
North-South Road	2.6	2.2	1.9	1.6	3,320	2.34	0.20	0.17	0.15	0.12
East-West Road	8.5	5.7	4.6	3.4	3,980	2.34	0.79	0.53	0.43	0.32

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	3.0	1.5
25 Feet from Roadway Edge	2.6	2.7	1.3
50 Feet from Roadway Edge	2.5	2.6	1.2
100 Feet from Roadway Edge	2.4	2.4	1.1

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

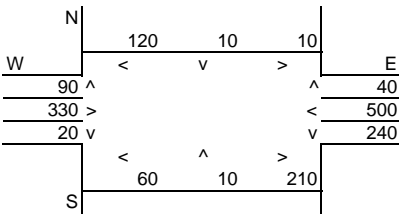
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

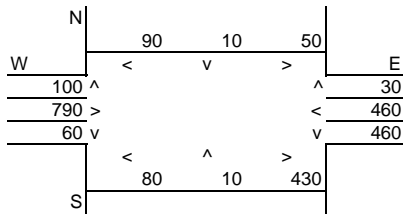
Intersection: 8. Valle Del Oro and Dockweiler Drive  
 Analysis Condition: D

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Valle Del Oro	At Grade	2	5	5
East-West Roadway: Dockweiler Drive	At Grade	6	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	550	N-S Road:	1,050
E-W Road:	1,330	E-W Road:	2,220

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	550	2.34	0.05	0.03	0.03	0.02
East-West Road	9.5	6.1	4.9	3.5	1,330	2.34	0.30	0.19	0.15	0.11
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,050	2.34	0.09	0.07	0.05	0.04
East-West Road	9.5	6.1	4.9	3.5	2,220	2.34	0.49	0.32	0.25	0.18

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.3	2.6	1.2
25 Feet from Roadway Edge	2.2	2.4	1.1
50 Feet from Roadway Edge	2.2	2.3	1.0
100 Feet from Roadway Edge	2.1	2.2	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

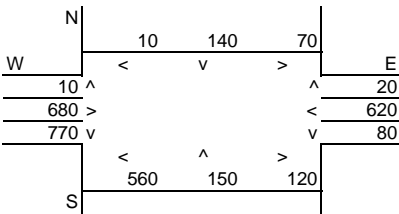
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.6  
 Analysis Year: 2025

## Roadway Data

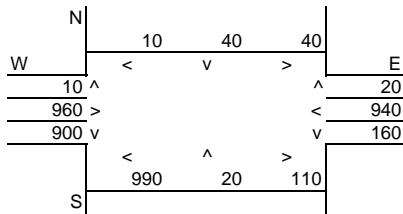
Intersection: 11. Newhall Avenue and Lyons Avenue  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	Newhall Avenue	At Grade	4	20
East-West Roadway:	Lyons Avenue	At Grade	8	20

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,820	N-S Road:	2,220
E-W Road:	2,650	E-W Road:	3,810

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.3	2.6	2.2	1.7	1,820	1.48	0.09	0.07	0.06	0.05
East-West Road	8.5	5.7	4.6	3.4	2,650	1.48	0.33	0.22	0.18	0.13
P.M. Peak Traffic Hour										
North-South Road	3.3	2.6	2.2	1.7	2,220	1.48	0.11	0.09	0.07	0.06
East-West Road	8.5	5.7	4.6	3.4	3,810	1.48	0.48	0.32	0.26	0.19

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.4	2.6	1.2
25 Feet from Roadway Edge	2.3	2.4	1.0
50 Feet from Roadway Edge	2.2	2.3	1.0
100 Feet from Roadway Edge	2.2	2.2	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

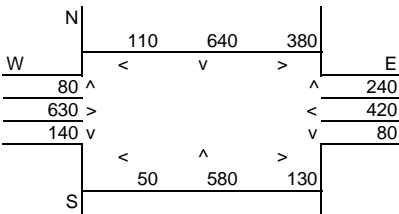
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

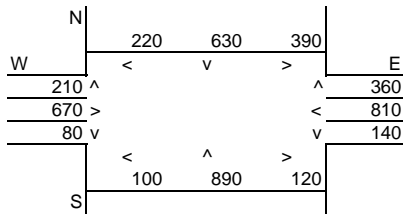
Intersection: 12. Railroad Avenue and Lyons Avenue  
 Analysis Condition: D

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Railroad Avenue	At Grade	8	5	5
East-West Roadway:	Lyons Avenue	At Grade	6	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,030	N-S Road:	2,700
E-W Road:	1,880	E-W Road:	2,490

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	8.5	5.7	4.6	3.4	2,030	2.34	0.40	0.27	0.22	0.16
East-West Road	2.8	2.3	2.0	1.7	1,880	2.34	0.12	0.10	0.09	0.07
P.M. Peak Traffic Hour										
North-South Road	8.5	5.7	4.6	3.4	2,700	2.34	0.54	0.36	0.29	0.21
East-West Road	2.8	2.3	2.0	1.7	2,490	2.34	0.16	0.13	0.12	0.10

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.5	2.7	1.3
25 Feet from Roadway Edge	2.4	2.5	1.1
50 Feet from Roadway Edge	2.3	2.4	1.1
100 Feet from Roadway Edge	2.2	2.3	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).



# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

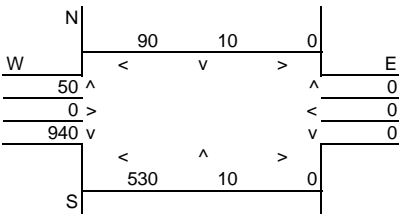
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

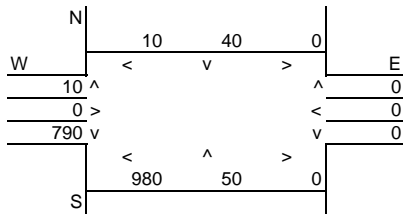
Intersection: 15. Main Street and Newhall Avenue  
 Analysis Condition: B

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: Newhall Ave	At Grade	2	5	5
East-West Roadway: Main Street	At Grade	2	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,490	N-S Road:	1,860
E-W Road:	1,610	E-W Road:	1,790

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	E.O.R.	25 Feet	50 Feet	100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,490	2.34	0.13	0.09	0.08	0.06
East-West Road	14.0	7.6	5.7	4.0	1,610	2.34	0.53	0.29	0.21	0.15
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	1,860	2.34	0.61	0.33	0.25	0.17
East-West Road	3.7	2.7	2.2	1.7	1,790	2.34	0.15	0.11	0.09	0.07

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.7	2.8	1.3
25 Feet from Roadway Edge	2.4	2.4	1.1
50 Feet from Roadway Edge	2.3	2.3	1.0
100 Feet from Roadway Edge	2.2	2.2	1.0

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: Dockweiler Extension

## Background Information

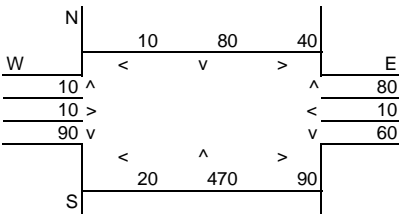
Nearest Air Monitoring Station measuring CO: SRA 13  
 Background 1-hour CO Concentration (ppm): 2.0  
 Background 8-hour CO Concentration (ppm): 0.8  
 Persistence Factor: 0.7  
 Analysis Year: 2025

## Roadway Data

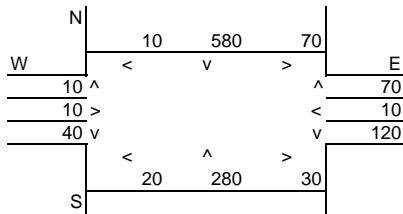
Intersection: 16. Arch Street and 12th Street/Placerita Canyon Road  
 Analysis Condition: C

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Arch Street / 12th Street	At Grade	4	5	5
East-West Roadway:	Placerita Canyon Road / Doc	At Grade	4	5	5

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	810	N-S Road:	1,070
E-W Road:	290	E-W Road:	310

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations				B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations			
	A <sub>1</sub> E.O.R.	A <sub>2</sub> 25 Feet	A <sub>3</sub> 50 Feet	A <sub>4</sub> 100 Feet			E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	810	2.34	0.23	0.13	0.10	0.07
East-West Road	3.3	2.6	2.2	1.7	290	2.34	0.02	0.02	0.01	0.01
P.M. Peak Traffic Hour										
North-South Road	11.9	7.0	5.4	3.8	1,070	2.34	0.30	0.18	0.14	0.10
East-West Road	3.3	2.6	2.2	1.7	310	2.34	0.02	0.02	0.02	0.01

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2007.

## Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.2	2.3	1.0
25 Feet from Roadway Edge	2.2	2.2	0.9
50 Feet from Roadway Edge	2.1	2.2	0.9
100 Feet from Roadway Edge	2.1	2.1	0.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**2013 AIR QUALITY  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**2013**

Source/Receptor Area No. Location	Station No.	Carbon Monoxide <sup>a)</sup>		Ozone								Nitrogen Dioxide <sup>b)</sup>				Sulfur Dioxide <sup>c)</sup>			
		No. Days of Data	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	Health Advisory ≥ 0.15 ppm 1-hour	No. Days Standard Exceeded				No. Days of Data	Max Conc. in ppb 1-hour	98 <sup>th</sup> Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 <sup>th</sup> Percentile Conc. ppb 1-hour
									Old Federal > 0.124 ppm 1-hour	Current Federal > 0.075 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour							
<b>LOS ANGELES COUNTY</b>																			
1 Central LA	087	330	2.0	365	0.081	0.069	0.060	0	0	0	0	0	301	90.3	62.6	21.8	312	6.3	5.2
2 Northwest Coastal LA County	091	340	1.3	359	0.088	0.075	0.059	0	0	0	0	1	291	51.2	48.8	14.5	--	--	--
3 Southwest Coastal LA County	820	281*	2.5	352	0.105	0.081	0.060	0	0	1	1	1	334	77.8	58.0	11.8	322	10.1	6.5
4 South Coastal LA County 1	072	249*	2.0	267*	0.092	0.070	0.060	0	0	0	0	0	234*	66.9	55.7	14.0	178*	21.8	10.1
4 South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4 South Coastal LA County 3	033	323	2.6	362	0.090	0.069	0.057	0	0	0	0	0	325	81.3	71.3	21.5	349	15.1	11.6
6 West San Fernando Valley	074	323	2.3	320	0.124	0.092	0.084	0	0	11	7	21	258*	58.2	51.7	14.4	--	--	--
7 East San Fernando Valley	069	335	2.4	362	0.110	0.083	0.079	0	0	6	4	17	284	72.5	60.0	20.2	342	10.8	4.2
8 West San Gabriel Valley	088	201*	1.7	211*	0.099	0.075	0.070	0	0	0	2	2	200*	66.7	60.3	19.1	--	--	--
9 East San Gabriel Valley 1	060	343	1.7	361	0.115	0.085	0.080	0	0	6	7	15	352	76.9	56.7	17.7	--	--	--
9 East San Gabriel Valley 2	591	347	0.8	340	0.135	0.100	0.088	0	1	24	24	43	349	55.7	50.4	13.0	--	--	--
10 Pomona/Walnut Valley	075	340	1.6	355	0.125	0.099	0.085	0	1	15	12	22	343	78.8	64.8	22.5	--	--	--
11 South San Gabriel Valley	085	347	2.0	363	0.101	0.072	0.070	0	0	0	2	3	337	79.4	60.6	20.6	--	--	--
12 South Central LA County	112	338	3.5	358	0.090	0.080	0.063	0	0	1	0	1	340	69.8	61.8	17.6	--	--	--
13 Santa Clarita Valley	090	352	0.8	365	0.134	0.104	0.094	0	2	40	30	58	362	65.4	45.0	14.4	--	--	--
<b>ORANGE COUNTY</b>																			
16 North Orange County	3177	355	2.2	363	0.104	0.078	0.066	0	0	1	2	2	269*	85.0	53.3	14.8	--	--	--
17 Central Orange County	3176	333	2.6	340	0.084	0.070	0.063	0	0	0	0	0	301	81.6	58.8	18.0	--	--	--
18 North Coastal Orange County	3195	313	2.0	385	0.095	0.083	0.065	0	0	1	1	2	330	75.7	53.2	11.6	296	4.2	3.3
19 Saddleback Valley	3812	356	1.3	365	0.104	0.082	0.074	0	0	2	2	5	--	--	--	--	--	--	--
<b>RIVERSIDE COUNTY</b>																			
22 Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23 Metropolitan Riverside County 1	4144	334	2.0	357	0.123	0.103	0.094	0	0	26	13	38	318	59.6	54.8	17.3	354	8.1	4.6
23 Metropolitan Riverside County 2	4146	318	1.6	--	--	--	--	--	--	--	--	--	257*	57.6	50.7	15.8	--	--	--
23 Mira Loma	4165	339	1.9	365	0.118	0.096	0.092	0	0	21	11	32	333	53.8	50.7	13.7	--	--	--
24 Perris Valley	4149	--	--	344	0.108	0.090	0.088	0	0	34	17	60	--	--	--	--	--	--	--
25 Lake Elsinore	4158	336	0.6	362	0.102	0.089	0.081	0	0	12	6	25	294	46.6	40.0	8.4	--	--	--
26 Temecula	4031	--	--	324	0.093	0.078	0.075	0	0	3	0	12	--	--	--	--	--	--	--
29 Banning Airport	4164	--	--	254*	0.115	0.103	0.091	0	0	41	24	66	308	51.9	45.0	8.5	--	--	--
30 Coachella Valley 1**	4137	354	1.5	365	0.113	0.104	0.090	0	0	46	10	82	359	52.3	38.5	7.5	--	--	--
30 Coachella Valley 2**	4157	--	--	365	0.105	0.087	0.085	0	0	18	2	38	--	--	--	--	--	--	--
<b>SAN BERNARDINO COUNTY</b>																			
32 Northwest San Bernardino Valley	5175	340	1.7	365	0.143	0.111	0.095	0	3	27	25	44	276*	62.1	53.3	17.7	--	--	--
33 Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34 Central San Bernardino Valley 1	5197	337	1.3	363	0.151	0.122	0.100	1	2	42	34	68	335	81.7	60.6	20.6	298	3.8	3.1
34 Central San Bernardino Valley 2	5203	340	1.7	361	0.139	0.112	0.097	0	2	36	22	53	291	72.2	54.5	17.6	--	--	--
35 East San Bernardino Valley	5204	--	--	356	0.133	0.119	0.104	0	3	63	43	93	--	--	--	--	--	--	--
37 Central San Bernardino Mountains	5181	--	--	365	0.120	0.105	0.099	0	0	72	45	101	--	--	--	--	--	--	--
38 East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>DISTRICT MAXIMUM</b>			3.5		0.151	0.122	0.104	1	3	72	45	101		90.3	71.3	22.5		21.8	11.6
<b>SOUTH COAST AIR BASIN</b>			3.5		0.151	0.122	0.104	1	5	88	70	119		90.3	71.3	22.5		21.8	11.6

\* Incomplete data.

\*\* Salton Sea Air Basin

-- Pollutant not monitored

ppm - Parts Per Million parts of air, by volume

ppb - Parts Per Billion parts of air, by volume

AAM = Annual Arithmetic Mean

a) - The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.

The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.

b) - The NO<sub>2</sub> federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO<sub>2</sub> > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).

c) - The federal SO<sub>2</sub> 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO<sub>2</sub> > 0.25 ppm (250 ppb) and 24-hour average SO<sub>2</sub> > 0.04 ppm (40 ppb).



For information on the current standard levels and most recent revisions please refer to "Appendix II - Current Air Quality" of the "Final 2012 AQMP" which can be accessed at [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/appendix-ii-final-2012.pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/appendix-ii-final-2012.pdf). Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD Current Hourly Air Quality Map, accessed from <http://www2.aqmd.gov/webappl/aisaqi2/VEMap3D.aspx>. A map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

**2013 AIR QUALITY  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**2013**

Source/Receptor Area No. Location		Station No.	Suspended Particulates PM10 <sup>d)</sup>				Fine Particulates PM2.5 <sup>f)</sup>					Lead <sup>h)</sup>		PM10 Sulfate <sup>i)</sup>		
			No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Federal Standard > 150 µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding State Standard > 50 µg/m <sup>3</sup> 24-hour	Annual Average Conc. (AAM) µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	98 <sup>th</sup> Percentile Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Federal Std > 35 µg/m <sup>3</sup> 24-hour	Annual Average Conc. (AAM) µg/m <sup>3</sup>	Max. Monthly Average Conc. µg/m <sup>3</sup>	Max. 3-Months Rolling Averages µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour
<b>LOS ANGELES COUNTY</b>																
1	Central LA	087	60	57	0	1(2%)	29.5	344	43.1	29.0	1(0.3%)	11.95	0.013	0.011	60	5.8
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	Southwest Coastal LA County	820	56	38	0	0	20.8	--	--	--	--	--	0.005	0.004	56	5.6
4	South Coastal LA County 1	072	43*	37	0	0	23.2	331	47.2	26.1	2(0.6%)	11.34	0.006	0.006	43*	4.5
4	South Coastal LA County 2	077	56	54	0	1(2%)	27.3	341	42.9	24.6	1(0.3%)	10.97	0.012	0.009	56	4.8
4	South Coastal LA County 3	033	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	074	--	--	--	--	--	118	41.8	23.0	1(0.8%)	9.71	--	--	--	--
7	East San Fernando Valley	069	58	52	0	1(2%)	28.5	346	45.1	30.4	4(1.2%)	12.15	--	--	58	5.4
8	West San Gabriel Valley	088	--	--	--	--	--	64*	25.7	20.5	0(0%)	10.13	--	--	--	--
9	East San Gabriel Valley 1	060	61	76	0	6(10%)	33.0	120	29.6	26.4	0(0%)	10.54	--	--	61	4.8
9	East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	114	29.1	28.8	0(0%)	11.56	0.012	0.011	--	--
12	South Central LA County	112	--	--	--	--	--	113	52.1	24.3	1(0.9%)	11.95	0.014	0.011	--	--
13	Santa Clarita Valley	090	60	43	0	0	21.6	--	--	--	--	--	--	--	60	3.7
<b>ORANGE COUNTY</b>																
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	59	77	0	1(2%)	25.4	331	37.8	22.7	1(0.3%)	10.09	--	--	59	4.7
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	61	51	0	1(2%)	19.3	117	28.0	17.5	0(0%)	8.08	--	--	61	4.4
<b>RIVERSIDE COUNTY</b>																
22	Norco/Corona	4155	57	58	0	2(4%)	28.3	--	--	--	--	--	--	--	57	4.2
23	Metropolitan Riverside County 1	4144	119	135	0	10(8%)	33.8	353	60.3	34.6	6(1.7%)	12.50	0.010	0.009	119	4.2
23	Metropolitan Riverside County 2	4146	--	--	--	--	--	117	53.7	29.2	1(0.9%)	11.28	0.007	0.006	--	--
23	Mira Loma	4165	59	147	0	14(24%)	41.1	355	56.5	37.5	9(2.5%)	14.12	--	--	59	4.2
24	Perris Valley	4149	57	70	0	10(18%)	33.6	--	--	--	--	--	--	--	57	3.4
25	Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Temecula	4031	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Banning Airport	4164	61	64	0	1(2%)	20.6	--	--	--	--	--	--	--	61	2.9
30	Coachella Valley 1**	4137	60	129	0	3(5%)	22.6	117	18.5	13.8	0(0%)	6.52	--	--	60	3.5
30	Coachella Valley 2**	4157	120	129+	0+	23(19%)	38.1	118	25.8	15.9	0(0%)	8.35	--	--	120	3.9
<b>SAN BERNARDINO COUNTY</b>																
32	Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	0.008	0.006	--	--
33	Southwest San Bernardino Valley	5817	60	115	0	3(5%)	33.2	110	49.3	26.8	1(0.9%)	11.98	--	--	60	4.8
34	Central San Bernardino Valley 1	5197	61	90	0	19(31%)	40.6	121	43.6	33.1	1(0.8%)	12.26	--	--	61	4.1
34	Central San Bernardino Valley 2	5203	60	102	0	3(5%)	31.3	110	55.3	33.4	1(0.9%)	11.41	0.010	0.010	60	4.6
35	East San Bernardino Valley	5204	61	72	0	2(3%)	27.1	--	--	--	--	--	--	--	61	3.6
37	Central San Bernardino Mountains	5181	60	37	0	0	21.4	--	--	--	--	--	--	--	60	3.6
38	East San Bernardino Mountains	5818	--	--	--	--	--	59	35.5	35.1	1(1.7%)	9.67	--	--	--	--
<b>DISTRICT MAXIMUM</b>				147+	0+	23	41.1		60.3	37.5	9	14.12	0.013++	0.011++		5.8
<b>SOUTH COAST AIR BASIN</b>				147	0	33	41.1		60.4	37.5	13	14.12	0.013++	0.011++		5.8

\* Incomplete data. \*\* Salton Sea Air Basin µg/m<sup>3</sup> - Micrograms per cubic meter of air AAM = Annual Arithmetic Mean -- - Pollutant not monitored  
d) - Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. PM10 statistics listed above are for the FRM data only. Federal Equivalent Method (FEM) PM10 continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM10 at sites with FEM monitoring was 153 µg/m<sup>3</sup>, at Indio (155 µg/m<sup>3</sup> is needed to exceed the PM10 standard).  
e) - State standard is annual average (AAM) > 20 µg/m<sup>3</sup>. Federal annual PM10 standard (AAM > 50 µg/m<sup>3</sup>) was revoked in 2006.  
f) - PM2.5 samples were collected every 3 days at all sites except for station numbers 069, 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations for special purposes with the max 24-hour average concentration recorded of 83.2 µg/m<sup>3</sup>, (at Mira Loma).  
g) - U.S. EPA has revised the federal annual PM2.5 standard from annual average (AAM) > 15.0 µg/m<sup>3</sup> to AAM > 12.0 µg/m<sup>3</sup>, effective December 14, 2012. State standard is annual average (AAM) > 12.0 µg/m<sup>3</sup>.  
+) - High PM10 data sample (159 µg/m<sup>3</sup> on August 23 at Indio) excluded due to the high wind in accordance with the EPA Exceptional Event Regulation. Also, multiple high PM10 FEM data recorded in Coachella Valley and the Basin were excluded.  
h) - Federal lead standard is 3-months rolling average > 0.15 µg/m<sup>3</sup>; state standard is monthly average ≥ 1.5 µg/m<sup>3</sup>. Lead statistics listed above are for population-oriented sites only. Lead standards were not exceeded.  
++) - Higher lead concentrations were recorded at source-oriented monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages recorded were 0.14 µg/m<sup>3</sup> and 0.10 µg/m<sup>3</sup>, respectively.  
i) - State sulfate standard is 24-hour ≥ 25 µg/m<sup>3</sup>. There is no federal standard for sulfate.



**2012 AIR QUALITY  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

# 2012

Source/Receptor Area No. Location	Station No.	Carbon Monoxide <sup>a)</sup>		Ozone								Nitrogen Dioxide <sup>b)</sup>				Sulfur Dioxide <sup>c)</sup>			
		No. Days of Data	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. in ppm 8-hour	No. Days Standard Exceeded				No. Days of Data	Max Conc. in ppb 1-hour	98 <sup>th</sup> Percentile Conc. in ppb 1-hour	Annual Average AAM Conc. in ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 <sup>th</sup> Percentile Conc. in ppb 1-hour	
								> 0.124 ppm 1-hour	> 0.075 ppm 8-hour	> 0.09 ppm 1-hour	> 0.070 ppm 8-hour								
<b>LOS ANGELES COUNTY</b>																			
1	Central LA	087	365	1.9	364	0.093	0.077	0.068	0	1	0	2	240*	77.3	68.9	24.8	235*	5.2	5.0
2	Northwest Coastal LA County	091	366	1.4	351	0.093	0.073	0.065	0	0	0	1	324*	61.3	53.6	13.7	--	--	--
3	Southwest Coastal LA County	820	366	2.5	366	0.106	0.075	0.059	0	0	1	1	268*	61.7	55	10.4	203*	4.9	4.7
4	South Coastal LA County 1	072	363	2.2	366	0.084	0.067	0.060	0	0	0	0	221*	77.2	62.5	20.8	285*	22.2	14.3
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	033	214*	2.6	212*	0.08	0.066	0.054	0	0	0	0	213*	97.8	77.4	25.3	213*	22.7	21.3
6	West San Fernando Valley	074	366	2.8	366	0.129	0.098	0.095	1	23	18	38	261*	70.9	48.7	14.9	--	--	--
7	East San Fernando Valley	069	366	2.4	366	0.117	0.088	0.081	0	8	8	15	295*	79.5	57	21.9	366	6.5	2.9
8	West San Gabriel Valley	088	319	1.6	318	0.111	0.086	0.08	0	9	8	20	280*	71.2	55.8	17.2	--	--	--
9	East San Gabriel Valley 1	060	366	1.2	366	0.134	0.095	0.079	1	10	18	18	352	71.8	61.5	19.5	--	--	--
9	East San Gabriel Valley 2	591	366	1.1	366	0.147	0.11	0.095	3	45	45	57	287*	60	53.3	14.2	--	--	--
10	Pomona/Walnut Valley	075	364	1.5	364	0.117	0.092	0.085	0	15	21	28	364	81.6	60.6	21.4	--	--	--
11	South San Gabriel Valley	085	366	2.2	357	0.106	0.075	0.071	0	0	5	6	204*	80.8	55.2	20.4	--	--	--
12	South Central LA County	112	366	4.0	357	0.086	0.07	0.064	0	0	0	0	337*	79.3	63.1	17.2	--	--	--
13	Santa Clarita Valley	090	353	1.1	366	0.134	0.112	0.102	6	57	45	81	366	66.1	50.7	13.6	--	--	--
<b>ORANGE COUNTY</b>																			
16	North Orange County	3177	348	2.4	365	0.100	0.078	0.070	0	2	3	3	332*	67.5	53.2	18.0	--	--	--
17	Central Orange County	3176	366	2.3	366	0.079	0.067	0.065	0	0	0	0	366	67.3	53.5	14.6	--	--	--
18	North Coastal Orange County	3195	366	1.7	366	0.090	0.076	0.060	0	1	2	1	348	74.4	50.6	10.4	350	6.2	2
19	Saddleback Valley	3812	366	1.1	336	0.096	0.078	0.071	0	1	0	4	--	--	--	--	--	--	--
<b>RIVERSIDE COUNTY</b>																			
22	Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	366	1.6	357	0.126	0.102	0.096	1	47	27	70	333*	61.7	54.6	15.5	321*	4.3	2
23	Metropolitan Riverside County 2	4146	365	1.5	--	--	--	--	--	--	--	--	246*	60.3	53.7	16.5	--	--	--
23	Mira Loma	4165	355	1.9	360	0.124	0.102	0.095	0	47	31	70	301*	60.7	49.7	13.9	--	--	--
24	Perris Valley	4149	--	--	321	0.111	0.093	0.090	0	46	28	64	--	--	--	--	--	--	--
25	Lake Elsinore	4158	366	0.7	366	0.111	0.089	0.087	0	17	10	29	366	48.3	40.9	10.2	--	--	--
26	Temecula	4031	--	--	306	0.104	0.082	0.077	0	4	1	22	--	--	--	--	--	--	--
29	Banning Airport	4164	--	--	338	0.117	0.098	0.095	0	53	40	71	321*	72.0	49.7	9.5	--	--	--
30	Coachella Valley 1**	4137	366	0.5	366	0.126	0.100	0.094	1	51	17	76	353	45.1	39.3	7.8	--	--	--
30	Coachella Valley 2**	4157	--	--	364	0.102	0.089	0.085	0	24	2	43	--	--	--	--	--	--	--
<b>SAN BERNARDINO COUNTY</b>																			
32	Northwest San Bernardino Valley	5175	360	1.1	336	0.136	0.111	0.102	4	45	42	66	328*	66.7	60.2	19.5	--	--	--
33	Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	366	1.1	366	0.142	0.11	0.106	5	62	60	85	359	69.1	61.2	22.1	366	22.5	4.3
34	Central San Bernardino Valley 2	5203	362	1.7	366	0.124	0.109	0.100	0	54	41	74	315*	67.0	59.7	18.8	--	--	--
35	East San Bernardino Valley	5204	--	--	366	0.136	0.109	0.105	3	79	66	98	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	364	0.140	0.112	0.103	2	86	56	100	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>DISTRICT MAXIMUM</b>				4.0		0.147	0.112	0.106	6	86	66	100		97.8	77.4	25.3		22.7	21.3
<b>SOUTH COAST AIR BASIN</b>				4.0		0.147	0.112	0.106	12	111	98	138		97.8	77.4	25.3		22.7	21.3

\* Incomplete data.

\*\* Salton Sea Air Basin

ppm - Parts Per Million parts of air, by volume

ppb - Parts Per Billion parts of air, by volume

AAM = Annual Arithmetic Mean

-- - Pollutant not monitored

a) - The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.

The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.

b) - The NO<sub>2</sub> federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO<sub>2</sub> > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).

c) - The federal SO<sub>2</sub> 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO<sub>2</sub> > 0.25 ppm (250 ppb) and 24-hour average SO<sub>2</sub> > 0.04 ppm (40 ppb).



**South Coast  
Air Quality Management District**  
21865 Copley Drive  
Diamond Bar, CA 91765-4182  
www.aqmd.gov

For information on the current standard levels and most recent revisions please refer to "Appendix II - Current Air Quality" of the "Final 2012 AQMP (December)" which can be accessed at <http://www.aqmd.gov/aqmp/2012aqmp/DraftFinal/appII.pdf>.  
Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD [Current Hourly Air Quality Map](http://www2.aqmd.gov/webappl/gisaiqi2/VEMap3D.aspx), accessed from <http://www2.aqmd.gov/webappl/gisaiqi2/VEMap3D.aspx> or at <http://www.aqmd.gov/map/MapAQMD2.pdf>. A map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

**2012 AIR QUALITY  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Source/Receptor Area No. Location		Station No.	Suspended Particulates PM10 <sup>(d,g)</sup>				Fine Particulates PM2.5 <sup>(g)</sup>				Particulates TSP		Lead <sup>h)</sup>		PM10 Sulfate <sup>1)</sup>				
			No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Standards Federal >150 µg/m <sup>3</sup> State >50 µg/m <sup>3</sup>		Annual Average Conc. <sup>e)</sup> (AAM) µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	98 <sup>th</sup> Percentile Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Federal Std >35 µg/m <sup>3</sup> 24-hour	Annual Average Conc. <sup>e)</sup> (AAM) µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	Annual Average Conc. <sup>e)</sup> (AAM) µg/m <sup>3</sup>	Max. Monthly Average Conc. µg/m <sup>3</sup>	Max. 3-Months Rolling Averages µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour
<b>LOS ANGELES COUNTY</b>																			
1	Central LA	087	60	80	0	4	30.2	342	58.7	31.8	4	12.55	57	197	61.8	0.014	0.011	60	5.7
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	56	128	47.0	--	--	--	--
3	Southwest Coastal LA County	820	57	31	0	0	19.8	--	--	--	--	--	52	60	35.1	0.005	0.003	57	5.4
4	South Coastal LA County 1	072	60	45	0	0	23.3	349	49.8	26.4	4	10.37	60	74	41.2	0.005	0.005	60	5.2
4	South Coastal LA County 2	077	60	54	0	1	25.5	340	46.7	25.1	4	10.57	59	76	40.3	0.007	0.005	60	4.9
4	South Coastal LA County 3	033	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	074	--	--	--	--	--	110	41.6	31.2	2	10.48	--	--	--	--	--	--	--
7	East San Fernando Valley	069	60	55	0	1	26.4	355	54.2	28.2	2	12.17	--	--	--	--	--	60	6.2
8	West San Gabriel Valley	088	--	--	--	--	--	96	30.5	24.2	0	10.12	49	82	47.2	--	--	--	--
9	East San Gabriel Valley 1	060	61	78	0	6	30.3	118	39.6	25.6	1	11.02	56	175	67.1	--	--	61	5.2
9	East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	119	45.3	28.5	1	11.85	59	77	49.9	0.007	0.007	--	--
12	South Central LA County	112	--	--	--	--	--	115	51.2	30.3	1	11.69	550	91	52.1	0.009	0.008	--	--
13	Santa Clarita Valley	090	55	37	0	0	19.6	--	--	--	--	--	--	--	--	--	--	55	4.9
<b>ORANGE COUNTY</b>																			
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	61	48	0	0	22.4	347	50.1	24.9	4	10.81	--	--	--	--	--	61	4.4
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	60	37	0	0	17.3	123	27.6	17.6	0	7.91	--	--	--	--	--	60	4.2
<b>RIVERSIDE COUNTY</b>																			
22	Norco/Corona	4155	59	52	0	1	26.6	--	--	--	--	--	--	--	--	--	--	59	4.4
23	Metropolitan Riverside County 1	4144	121	67	0	19	34.5	352	38.1	33.7	7	13.51	58	126	66.7	0.008	0.007	120	7.7
23	Metropolitan Riverside County 2	4146	--	--	--	--	--	104	30.2	26.8	0	11.35	59	72	44.2	0.006	0.005	--	--
23	Mira Loma	4165	56	78	0	15	39.9	351	39.3	35.1	7	15.06	--	--	--	--	--	56	4.7
24	Perris Valley	4149	60	62	0	1	26.5	--	--	--	--	--	--	--	--	--	--	60	3.8
25	Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Temecula	4031	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Banning Airport	4164	60	45	0	0	19.1	--	--	--	--	--	--	--	--	--	--	60	5.0
30	Coachella Valley 1**	4137	60	37	0	0	16.4	117	15.5	13.7	0	6.50	--	--	--	--	--	60	5.9
30	Coachella Valley 2**	4157	121	124	0	7	29.5	117	20	16.4	0	7.64	--	--	--	--	--	121	7.6
<b>SAN BERNARDINO COUNTY</b>																			
32	Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	59	106	43.4	0.007	0.006	--	--
33	Southwest San Bernardino Valley	5817	61	57	0	4	30.8	120	35.2	28.6	0	12.41	--	--	--	--	--	61	5.1
34	Central San Bernardino Valley 1	5197	60	67	0	9	34.3	110	39.9	35.6	3	12.82	56	148	78.4	--	--	60	4.6
34	Central San Bernardino Valley 2	5203	55	53	0	1	29.2	107	34.8	27.1	0	11.76	56	128	55.6	0.008	0.007	55	4.4
35	East San Bernardino Valley	5204	61	48	0	0	23.4	--	--	--	--	--	--	--	--	--	--	61	4.2
37	Central San Bernardino Mountains	5181	57	43	0	0	18.9	--	--	--	--	--	--	--	--	--	--	57	3.7
38	East San Bernardino Mountains	5818	--	--	--	--	--	52	36.4	27.4	1	7.98	--	--	--	--	--	--	--
<b>DISTRICT MAXIMUM</b>			124	0	19	39.9		58.7	35.6	7	15.06		197	78.4	0.014	0.011		7.7	
<b>SOUTH COAST AIR BASIN</b>			80	0	31	39.9		58.7	35.6	15	15.06		197	78.4	0.014	0.011		7.7	

\*\* Salton Sea Air Basin µg/m<sup>3</sup> - Micrograms per cubic meter of air

AAM = Annual Arithmetic Mean

-- - Pollutant not monitored

d) - Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. PM10 statistics listed above are for the FRM data only. Federal Equivalent Method (FEM) PM10 continuous monitors were operated at some of the above locations. Max 24-hour average PM10 at sites with FEM monitoring was 142 µg/m<sup>3</sup>, at Palm Springs in Coachella Valley. The FEM Basin's max was 104 µg/m<sup>3</sup>, at Mira Loma.

e) - Federal annual PM10 standard (AAM > 50 µg/m<sup>3</sup>) was revoked in 2006. State standard is annual average (AAM) > 20 µg/m<sup>3</sup>.

f) - PM2.5 samples were collected every 3 days at all sites except for station numbers 069, 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM2.5 concentration recorded at FEM sites was 79.0 µg/m<sup>3</sup>, at Central LA..

U.S. EPA has revised the annual PM2.5 standard from annual average (AAM) 15.0 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>, effective March 18, 2013. State standard is annual average (AAM) > 12.0 µg/m<sup>3</sup>.

g) - High PM10 and PM2.5 data samples excluded in accordance with the EPA Exceptional Event Regulation are as follows: PM10 (FEM) data recorded on August 9 (270 µg/m<sup>3</sup>) and January 21 (207 µg/m<sup>3</sup>) both at Indio; PM2.5 (FRM) at Azusa (39.6 µg/m<sup>3</sup>) and Fontana (39.9 µg/m<sup>3</sup>), both recorded on July 5.

h) - Federal lead standard is 3-months rolling average > 0.15 µg/m<sup>3</sup>; state standard is monthly average ≥ 1.5 µg/m<sup>3</sup>. Lead statistics listed above are for population-oriented sites only; standards were not exceeded at any of these sites.

i) - State sulfate standard is 24-hour ≥ 25 µg/m<sup>3</sup>. There is no federal standard for sulfate.



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**2010 AIR QUALITY  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**2010**

Source/Receptor Area No. Location	Station No.	Suspended Particulates PM10 <sup>d)</sup>					Fine Particulates PM2.5 <sup>e)</sup>					Particulates TSP <sup>f)</sup>			Lead <sup>f)</sup>		Sulfate <sup>f)</sup>	
		No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Standards Federal > 150 µg/m <sup>3</sup> 24-hour State > 50 µg/m <sup>3</sup> 24-hour		Annual Average Conc. (AAM) µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	98 <sup>th</sup> Percentile Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Federal Std > 35 µg/m <sup>3</sup> 24-hour	Annual Average Conc. (AAM) µg/m <sup>3</sup>	No. Days of Data <sup>e)</sup>	Max. Conc. in µg/m <sup>3</sup> 24-hour	Annual Average Conc. (AAM) µg/m <sup>3</sup>	Max. Monthly Average Conc. µg/m <sup>3</sup>	Max. Quarterly Average Conc. µg/m <sup>3</sup>	Max. Conc. in µg/m <sup>3</sup> 24-hour	No. Days Exceeding State Std ≥ 25 µg/m <sup>3</sup> 24-hour
<b>LOS ANGELES COUNTY</b>																		
1 Central LA	087	56	42	0	0	27.1	335	39.2	27.1	2(0.6%)	11.9	53	105	53.3	0.02	0.01	9.1	0
2 Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	59	82	40.8	--	--	7.5	0
3 Southwest Coastal LA County	820	55	37	0	0	20.6	--	--	--	--	--	55	85	36.7	0.01	0.01	9.7	0
4 South Coastal LA County 1	072	58	44	0	0	22.0	338	35.0	28.3	0	10.5	60	129	45.5	0.01	0.01	11.8	0
4 South Coastal LA County 2	077	59	76	0	2(3.4%)	27.3	351	33.7	26.5	0	10.4	57	130	50.8	0.01	0.01	12.2	0
6 West San Fernando Valley	074	--	--	--	--	--	100	40.7	30.4	1(1.0%)	10.2	--	--	--	--	--	--	--
7 East San Fernando Valley	069	55	51	0	1(1.8%)	29.6	322	43.7	31.8	4(1.2%)	12.5	--	--	--	--	--	--	--
8 West San Gabriel Valley	088	--	--	--	--	--	97	35.2	24.0	0	10.2	58	58	36.4	--	--	7.7	0
9 East San Gabriel Valley 1	060	55	70	0	5(9.1%)	29.8	93	44.4	35.4	1(1.1%)	10.9	53	136	58.2	--	--	6.4	0
9 East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10 Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11 South San Gabriel Valley	085	--	--	--	--	--	117	34.9	32.0	0	12.5	59	265	86.1	0.02	0.01	8.5	0
12 South Central LA County	112	--	--	--	--	--	111	38.2	31.8	1(0.9%)	12.5	58	94	49.2	0.01	0.01	7.8	0
13 Santa Clarita Valley	090	57	40	0	0	21.0	--	--	--	--	--	--	--	--	--	--	--	--
<b>ORANGE COUNTY</b>																		
16 North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17 Central Orange County	3176	57	43	0	0	22.4	331	31.7	25.2	0	10.2	--	--	--	--	--	--	--
18 North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19 Saddleback Valley	3812	58	34	0	0	18.1	116	19.9	17.3	0	8.0	--	--	--	--	--	--	--
<b>RIVERSIDE COUNTY</b>																		
22 Norco/Corona	4155	61	50	0	0	27.2	--	--	--	--	--	--	--	--	--	--	--	--
23 Metropolitan Riverside County 1	4144	122	75	0	7(5.7%)	32.8	351	46.5	32.0	4(1.1%)	13.2	60	131	64.3	0.01	0.01	6.7	0
23 Metropolitan Riverside County 2	4146	--	--	--	--	--	115	43.7	27.3	2(1.7%)	11.0	59	88	45.0	0.01	0.01	5.0	0
23 Mira Loma	4165	60	89	0	25(41.7%)	42.3	340	54.2	36.1	8(2.4%)	15.2	--	--	--	--	--	--	--
24 Perris Valley	4149	61	51	0	1(1.6%)	28.0	--	--	--	--	--	--	--	--	--	--	--	--
25 Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29 Banning Airport	4164	60	55	0	1(1.7%)	21.8	--	--	--	--	--	--	--	--	--	--	--	--
30 Coachella Valley 1**	4137	61	37	0	0	18.7	111	12.8	12.6	0	6.0	--	--	--	--	--	--	--
30 Coachella Valley 2**	4157	119	107	0	6(5%)	29.3	112	16.0	12.2	0	6.8	--	--	--	--	--	--	--
<b>SAN BERNARDINO COUNTY</b>																		
32 Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	59	86	46.7	0.01	0.01	10.1	0
33 Southwest San Bernardino Valley	5817	60	87	0	3(5%)	31.8	112	46.1	31.2	1(0.9%)	13.0	--	--	--	--	--	--	--
34 Central San Bernardino Valley 1	5197	53	62	0	9(17%)	33.9	112	42.6	30.8	2(1.8%)	12.0	61	142	73.3	--	--	6.3	0
34 Central San Bernardino Valley 2	5203	59	63	0	3(5.1%)	32.4	119	39.3	29.7	2(1.7%)	11.1	60	106	57.7	0.01	0.01	11.4	0
35 East San Bernardino Valley	5204	58	57	0	1(1.7%)	25.8	--	--	--	--	--	--	--	--	--	--	--	--
37 Central San Bernardino Mountains	5181	57	39	0	0	18.9	--	--	--	--	--	--	--	--	--	--	--	--
38 East San Bernardino Mountains	5818	--	--	--	--	--	53	35.4	27.5	0	8.4	--	--	--	--	--	--	--
<b>DISTRICT MAXIMUM</b>			107	0	25	42.3		54.2	36.1	8	15.2		265	86.1	0.02	0.01	12.2	0
<b>SOUTH COAST AIR BASIN</b>			89	0	34	42.3		54.2	36.1	13	15.2		265	86.1	0.02	0.01	12.2	0

\*\* Salton Sea Air Basin      µg/m<sup>3</sup> - Micrograms per cubic meter of air

AAM = Annual Arithmetic Mean

-- Pollutant not monitored

- In 2010, Particulate Matter concentrations met the Ambient Air Quality Standard levels for the federal PM10 Standard, the State and Federal Lead Standards, and the State Sulfate standard at the regular monitoring sites, listed above.
- d) - PM10 samples were collected every 6 days at all sites except for Station Numbers 4144 and 4157, where samples were collected every 3 days. The Federal annual PM10 standard (AAM > 50 µg/m<sup>3</sup>) was revoked in 2006. State standard is annual average (AAM) > 20 µg/m<sup>3</sup>.
- e) - PM2.5 samples were collected every 3 days at all sites except for station numbers 069, 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. Federal annual PM2.5 standard is annual average (AAM) > 15.0 µg/m<sup>3</sup>. State standard is annual average (AAM) > 12.0 µg/m<sup>3</sup>.
- f) - TSP Particulate, Lead and Sulfate samples were taken every 6 days at all sites monitored.
- Federal Equivalent Method (FEM) continuous monitoring instruments were operated at some of the above locations for PM10 and PM2.5 monitoring. The Federal Reference Method (FRM) data is used for the above statistics.



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For information on the current standard levels and most recent revisions please refer to the previous year "Air Quality" summary card or access the "Ambient Air Quality Standards" chart at <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD [Current Hourly Air Quality Map](http://www2.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx), accessed from <http://www2.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx> or at <http://www.aqmd.gov/map/MapAQMD2.pdf>. A map is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.



**2011 AIR QUALITY  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**2011**

Source/Receptor Area No. Location	Station No.	Carbon Monoxide <sup>a)</sup>		Ozone								Nitrogen Dioxide <sup>b)</sup>				Sulfur Dioxide <sup>c)</sup>				
		No. Days of Data	Max Conc. in ppm 8-hour	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour	Fourth High Conc. ppm 8-hour	Health Advisory ≥ 0.15 ppm 1-hour	No. Days Standard Exceeded				No. Days of Data	Max Conc. in ppb 1-hour	98 <sup>th</sup> Percentile Conc. ppb 1-hour	Annual Average AAM Conc. ppb	No. Days of Data	Max. Conc. in ppb 1-hour	99 <sup>th</sup> Percentile ppb 1-hour	
									Old Federal > 0.124 ppm 1-hour	Current Federal > 0.075 ppm 8-hour	Current State > 0.09 ppm 1-hour	Current State > 0.070 ppm 8-hour								
<b>LOS ANGELES COUNTY</b>																				
1	Central LA	087	365	2.4	365	0.087	0.065	0.060	0	0	0	0	0	365	109.6	67.0	23.1	331	19.8	11.0
2	Northwest Coastal LA County	091	360	1.3	360	0.098	0.068	0.061	0	0	0	2	0	360	81.3	58.2	13.9	--	--	--
3	Southwest Coastal LA County	820	364	1.8	360	0.078	0.067	0.062	0	0	0	0	0	365	97.6	64.8	13.4	365	11.5	8.3
4	South Coastal LA County 1	072	365	2.6	363	0.073	0.061	0.059	0	0	0	0	0	365	106.4	67.6	17.7	365	14.8	10.7
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	033	354	3.3	360	0.074	0.063	0.057	0	0	0	0	0	359	90.0	74.0	21.2	350	43.3	24.7
6	West San Fernando Valley	074	355	2.8	365	0.130	0.103	0.091	0	3	26	17	35	359	56.1	53.8	14.9	--	--	--
7	East San Fernando Valley	069	365	2.4	364	0.120	0.084	0.081	0	0	6	8	10	365	67.8	56.2	22.1	363	9.0	5.2
8	West San Gabriel Valley	088	365	2.2	365	0.107	0.084	0.077	0	0	5	5	13	359	87.3	72.8	20.3	--	--	--
9	East San Gabriel Valley 1	060	365	1.4	365	0.111	0.092	0.082	0	0	12	13	19	356	79.5	65.1	19.0	--	--	--
9	East San Gabriel Valley 2	591	362	1.1	362	0.134	0.111	0.095	0	4	30	35	40	361	77.6	53.9	12.9	--	--	--
10	Pomona/Walnut Valley	075	364	1.6	364	0.119	0.096	0.086	0	0	16	15	24	364	87.3	66.7	24.6	--	--	--
11	South San Gabriel Valley	085	365	2.4	362	0.096	0.074	0.061	0	0	0	1	1	362	90.6	72.5	23.7	--	--	--
12	South Central LA County	112	364	4.7	362	0.082	0.065	0.061	0	0	0	0	0	361	75.4	65.3	18.6	--	--	--
13	Santa Clarita Valley	090	363	0.8	363	0.144	0.122	0.101	0	3	30	31	52	360	60.1	46.8	13.3	--	--	--
<b>ORANGE COUNTY</b>																				
16	North Orange County	3177	365	2.1	365	0.095	0.074	0.069	0	0	0	1	3	365	69.8	60.7	17.7	--	--	--
17	Central Orange County	3176	365	2.1	362	0.088	0.072	0.064	0	0	0	0	1	365	73.8	60.8	16.8	--	--	--
18	North Coastal Orange County	3195	344	2.2	360	0.093	0.077	0.063	0	0	1	0	2	350	60.5	52.8	10.0	357	7.7	4.8
19	Saddleback Valley	3812	365	0.8	365	0.094	0.083	0.074	0	0	2	0	5	--	--	--	--	--	--	--
<b>RIVERSIDE COUNTY</b>																				
22	Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	365	1.4	365	0.128	0.115	0.106	0	4	67	52	92	359	63.3	56.5	16.6	365	51.3	12.5
23	Metropolitan Riverside County 2	4146	365	1.5	--	--	--	--	--	--	--	--	--	364	57.1	50.4	16.9	--	--	--
23	Mira Loma	4165	361	1.4	362	0.126	0.104	0.096	0	1	36	32	63	364	58.8	51.8	15.3	--	--	--
24	Perris Valley	4149	--	--	364	0.125	0.112	0.094	0	2	54	44	77	--	--	--	--	--	--	--
25	Lake Elsinore	4158	365	0.7	365	0.133	0.106	0.092	0	1	28	19	45	365	50.3	41.3	9.6	--	--	--
26	Temecula	4031	--	--	355	0.105	0.085	0.073	0	0	14	1	27	--	--	--	--	--	--	--
29	Banning Airport	4164	--	--	362	0.127	0.111	0.100	0	3	41	35	59	350	60.7	50.2	9.5	--	--	--
30	Coachella Valley 1**	4137	350	0.6	350	0.124	0.098	0.092	0	0	49	21	69	350	44.7	39.4	8.0	--	--	--
30	Coachella Valley 2**	4157	--	--	360	0.099	0.090	0.085	0	0	19	3	42	--	--	--	--	--	--	--
<b>SAN BERNARDINO COUNTY</b>																				
32	Northwest San Bernardino Valley	5175	365	1.3	365	0.145	0.122	0.098	0	5	36	36	45	353	68.5	60.1	19.6	--	--	--
33	Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	365	1.1	365	0.144	0.124	0.105	0	5	39	39	53	365	76.4	64.6	21.1	365	12.3	7.2
34	Central San Bernardino Valley 2	5203	365	1.7	365	0.135	0.121	0.101	0	2	39	40	66	365	61.9	52.9	16.9	--	--	--
35	East San Bernardino Valley	5204	--	--	364	0.151	0.133	0.113	1	7	80	64	96	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	360	0.160	0.136	0.106	1	8	84	58	103	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>DISTRICT MAXIMUM</b>				4.7		0.160	0.136	0.113	1	8	84	64	103		109.6	74.0	24.6		51.3	24.7
<b>SOUTH COAST AIR BASIN</b>				4.7		0.160	0.136	0.113	1	16	106	90	125		109.6	74.0	24.6		51.3	24.7

ppm - Parts Per Million parts of air, by volume

ppb - Parts Per Billion parts of air, by volume

AAM = Annual Arithmetic Mean

-- - Pollutant not monitored

\*\* Salton Sea Air Basin

a) - The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded.

The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.

b) - The NO<sub>2</sub> federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO<sub>2</sub> > 0.0534 ppm (53.4 ppb). The state 1-hour and annual standards are 0.18 ppm (180 ppb) and 0.030 ppm (30 ppb).

c) - The federal SO<sub>2</sub> 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO<sub>2</sub> > 0.25 ppm (250 ppb) and 24-hour average SO<sub>2</sub> > 0.04 ppm (40 ppb).



For information on the current standard levels and most recent revisions please refer to "Appendix II - Current Air Quality" of the "Final 2012 AQMP (December)" which can be accessed at <http://www.aqmd.gov/aqmp/2012aqmp/DraftFinal/appII.pdf>. Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD [Current Hourly Air Quality Map](http://www2.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx), accessed from <http://www2.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx> or at <http://www.aqmd.gov/map/MapAQMD2.pdf>. A map or copy of the AQMP Appendix II is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

## 2011 AIR QUALITY SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# 2011

Source/Receptor Area No. Location		Station No.	Suspended Particulates PM10 <sup>d)</sup>				Fine Particulates PM2.5 <sup>f)</sup>				Particulates TSP			Lead <sup>h)</sup>			PM10 Sulfate <sup>i)</sup>			
			No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Standards		Annual Average Conc. <sup>e)</sup> µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	98 <sup>th</sup> Percentile Conc. in µg/m <sup>3</sup> 24-hour	No. (%) Samples Exceeding Federal Std > 35 µg/m <sup>3</sup> 24-hour	Annual Average Conc. µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour	Annual Average Conc. µg/m <sup>3</sup>	Max. Monthly Average Conc. µg/m <sup>3</sup>	Max. 3-Months Rolling Averages µg/m <sup>3</sup>	Max. Quarterly Average Conc. µg/m <sup>3</sup>	No. Days of Data	Max. Conc. in µg/m <sup>3</sup> 24-hour
<b>LOS ANGELES COUNTY</b>																				
1	Central LA	087	59	53	0	1(2%)	29.0	331	49.3	31.5	4(1.2%)	13.0	60	84	53.7	0.012	0.011	0.011	58	8.0
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	59	155	49.3	--	--	--	--	--
3	Southwest Coastal LA County	820	58	41	0	0	21.7	--	--	--	--	--	55	69	36.1	0.008	0.005	0.005	58	5.9
4	South Coastal LA County 1	072	60	43	0	0	24.2	340	39.7	27.8	1(0.3%)	11.0	61	91	44.0	0.010	0.007	0.007	59	6.1
4	South Coastal LA County 2	077	60	50	0	0	28.7	346	42.0	26.6	3(0.9%)	10.7	56	81	43.9	0.013	0.009	0.009	60	5.9
4	South Coastal LA County 3	033	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	074	--	--	--	--	--	117	39.8	23.6	1(0.9%)	10.2	--	--	--	--	--	--	--	--
7	East San Fernando Valley	069	55	61	0	2(4%)	28.4	321	47.8	33.5	5(1.6%)	13.2	--	--	--	--	--	--	54	7.4
8	West San Gabriel Valley	088	--	--	--	--	--	97	43.8	29.8	1(1.0%)	10.8	59	74	44.1	--	--	--	--	--
9	East San Gabriel Valley 1	060	61	65	0	9(15%)	32.7	118 <sup>g)</sup>	49.5 <sup>g)</sup>	26.9 <sup>g)</sup>	1(0.8%) <sup>g)</sup>	11.4 <sup>g)</sup>	57	154	72.5	--	--	--	60	6.6
9	East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	114	41.2	31.5	1(0.9%)	12.5	59	140	64.4	0.011	0.010	0.010	--	--
12	South Central LA County	112	--	--	--	--	--	110	35.3	31.5	0	13.0	57	112	52.8	0.014	0.010	0.010	--	--
13	Santa Clarita Valley	090	58	45	0	0	20.8	--	--	--	--	--	--	--	--	--	--	--	58	6.1
<b>ORANGE COUNTY</b>																				
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	60	53	0	2(3%)	24.8	352	39.2	28.1	2(0.6%)	11.0	--	--	--	--	--	--	60	6.5
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	61	48	0	0	19.2	110	33.4	28.8	0	8.6	--	--	--	--	--	--	61	4.8
<b>RIVERSIDE COUNTY</b>																				
22	Norco/Corona	4155	59	60	0	2(3%)	27.6	--	--	--	--	--	--	--	--	--	--	--	56	5.1
23	Metropolitan Riverside County 1	4144	112	82	0	14(13%)	33.7	352	60.8	31.0	4(1.1%)	13.6	60	107	62.7	0.007	0.007	0.007	119	5.1
23	Metropolitan Riverside County 2	4146	--	--	--	--	--	112	51.6	28.0	2(1.8%)	11.8	59	83	43.8	0.007	0.006	0.006	--	--
23	Mira Loma	4165	59	79	0	25(42%)	41.3	343	56.3	36.6	8(3%)	15.3	--	--	--	--	--	--	58	5.4
24	Perris Valley	4149	60	65	0	3(5%)	29.2	--	--	--	--	--	--	--	--	--	--	--	58	4.4
25	Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
26	Temecula	4031	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Banning Airport	4164	59	51	0	1(2%)	19.3	--	--	--	--	--	--	--	--	--	--	--	59	4.4
30	Coachella Valley 1**	4137	61 <sup>g)</sup>	42 <sup>g)</sup>	0 <sup>g)</sup>	0 <sup>g)</sup>	18.5 <sup>g)</sup>	114	26.3	12.5	0	6.1	--	--	--	--	--	--	61	4.4
30	Coachella Valley 2**	4157	119 <sup>g)</sup>	106 <sup>g)</sup>	0 <sup>g)</sup>	3(3%) <sup>g)</sup>	28.5 <sup>g)</sup>	111	35.4	15.6	0	7.2	--	--	--	--	--	--	110	5.7
<b>SAN BERNARDINO COUNTY</b>																				
32	Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	58	94	47.2	0.009	0.008	0.007	--	--
33	Southwest San Bernardino Valley	5817	60	70	0	3(5%)	30.8	118	52.9	35.3	2(1.7%)	13.2	--	--	--	--	--	--	60	5.5
34	Central San Bernardino Valley 1	5197	60	84	0	4(7%)	31.8	109	60.1	28.2	2(1.8%)	12.6	54	131	64.7	--	--	--	59	6.0
34	Central San Bernardino Valley 2	5203	58	56	0	3(5%)	31.5	101	65.0	32.5	2(2%)	12.2	61	97	51.4	0.008	0.007	0.007	59	5.5
35	East San Bernardino Valley	5204	58	71	0	2(3%)	24.9	--	--	--	--	--	--	--	--	--	--	--	57	4.9
37	Central San Bernardino Mountains	5181	59	43	0	0	19.0	--	--	--	--	--	--	--	--	--	--	--	57	4.0
38	East San Bernardino Mountains	5818	--	--	--	--	--	55	30.7	30.6	0	8.5	--	--	--	--	--	--	--	--
DISTRICT MAXIMUM				106	0	25	41.3		65.0	36.6	8	15.3		155	72.5	0.014	0.011	0.011		8.0
SOUTH COAST AIR BASIN				84 <sup>g)</sup>	0	35	41.3		65.0	36.6	17	15.3		155	72.5	0.014	0.011	0.011		8.0

\*\* Salton Sea Air Basin µg/m<sup>3</sup> - Micrograms per cubic meter of air

AAM = Annual Arithmetic Mean

-- - Pollutant not monitored

d) - Federal Reference Method (FRM) PM10 samples were collected every 6 days at all sites except for Stations 4144 and 4157, where samples were collected every 3 days. PM10 statistics listed above are for the FRM data only. Federal Equivalent Method (FEM) PM10 continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM10 at sites with FEM monitoring was 152 µg/m<sup>3</sup>, at Mira Loma (155 µg/m<sup>3</sup> is needed to exceed the PM10 standard).

e) - Federal annual PM10 standard (AAM > 50 µg/m<sup>3</sup>) was revoked in 2006. State standard is annual average (AAM) > 20 µg/m<sup>3</sup>.

f) - PM2.5 samples were collected every 3 days at all sites except for station numbers 069, 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every 6 days. PM2.5 statistics listed above are for the FRM data only. FEM PM2.5 continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM2.5 concentration recorded at FEM sites was 73.1 µg/m<sup>3</sup>, at Mira Loma. Federal annual PM2.5 standard is annual average (AAM) > 15.0 µg/m<sup>3</sup>. State standard is annual average (AAM) > 12.0 µg/m<sup>3</sup>.

g) - High PM10 and PM2.5 data samples excluded in accordance with the EPA Exceptional Event Regulation due to the special events (i.e., high wind, firework activities, etc.) are as follows: PM10 (FRM) on August 28 at Indio (323 µg/m<sup>3</sup>); and PM2.5 (FRM) on July 5 at Station 060 (94.6 µg/m<sup>3</sup>). Also, the following high PM10 FEM data were excluded: July 3 (396 and 344 µg/m<sup>3</sup>) and August 28 (265 and 375 µg/m<sup>3</sup>), both dates recorded at Stations 4137 and 4157, respectively.

h) - Federal lead standard is 3-months rolling average > 0.15 µg/m<sup>3</sup>; state standard is monthly average ≥ 1.5 µg/m<sup>3</sup>. Lead statistics listed above are for population-oriented sites only; standards were not exceeded at any of these sites. Lead standards were exceeded at source-oriented monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages at source-oriented sites were 0.51 µg/m<sup>3</sup> and 0.46 µg/m<sup>3</sup>, respectively.

i) - State sulfate standard is 24-hour ≥ 25 µg/m<sup>3</sup>. There is no federal standard for sulfate.



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