# 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				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	
Project Phases (English Units)	ROG (lbs/day)	CO (Ibs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (Ibs/day)	CO2 (Ibs/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
Maximum (pounds/day)	8.6	56.7	92.8	24.2	4.2	20.0	7.9	3.7	4.2	13,055.5
Total (tons/construction project)	0.8	5.2	8.1	2.6	0.4	2.2	0.8	0.3	0.5	1,137.4

 Notes:
 Project Start Year ->
 2019

 Project Length (months) ->
 12

 Total Project Area (acres) ->
 5

 Maximum Area Disturbed/Day (acres) ->
 2

 Total Soil Imported/Exported (yd³/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 -	Emission Estimates for -> Dockweiler Road Extension				Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	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
Maximum (kilograms/day)	3.9	25.8	42.2	11.0	1.9	9.1	3.6	1.7	1.9	5,934.3
Total (megagrams/construction project)	0.7	4.7	7.3	2.4	0.4	2.0	0.7	0.3	0.4	1,031.6

Notes: Project Start Year -> 2019
Project Length (months) -> 12
Total Project Area (hectares) -> 2
Maximum Area Disturbed/Day (hectares) -> 1
Total Soil Imported/Exported (meters³/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 sume of exhaust and fugitive dust emissions shown in columns K and L.

## Road Construction Emissions Model, Version 7.1.5.1

Emission Estimates for -3	> Dockweiler Road Exten	sion - On Site Only (e	excludes haul trips)	Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	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 (yd³/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 -	<ul> <li>Dockweiler Road Exter</li> </ul>	sion - On Site Only (e	excludes haul trips)	Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	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 (meters³/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 sume of exhaust and fugitive dust emissions shown in columns K and L.

Project Title: Dockweiler Extension

#### **Background Information**

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

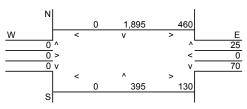
#### **Roadway Data**

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

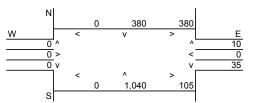
Analysis Condition:

			INO. OI	No. ofAverage S		
		Roadway Type	Lanes	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: E-W Road: N-S Road: 2,775 1,810 E-W Road: 685 530

# Roadway CO Contributions and Concentrations

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

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

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

#### **Total Roadway CO Concentrations**

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

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

Project Title: Dockweiler Extension

#### **Background Information**

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

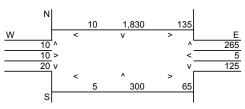
#### **Roadway Data**

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

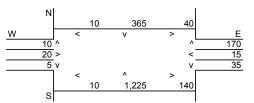
Analysis Condition:

			No. of
		Roadway Type	Lanes
North-South Roadway:	Sierra Highway	At Grade	6
East-West Roadway:	Placerita Canyon	At Grade	6

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



P.M. Peak Hour Traffic Volumes



1,820 420

Average Speed

Highest Traffic Volumes (Vehicles per Hour)

N-S Road: E-W Road: N-S Road: 2,550 E-W Road: 605

# Roadway CO Contributions and Concentrations

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	R	eference CO	Concentratio	ns	Traffic	Emission	E	stimated CO	Concentration	ns
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	9.5 2.8	6.1 2.3	4.9 2.0	3.5 1.7	2,550 605	4.75 4.75	1.15 0.08	0.74 0.07	0.59 0.06	0.42 0.05
P.M. Peak Traffic Hour North-South Road East-West Road	9.5 2.8	6.1 2.3	4.9 2.0	3.5 1.7	1,820 420	4.75 4.75	0.82 0.06	0.53 0.05	0.42 0.04	0.30 0.03

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

#### **Total Roadway CO Concentrations**

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

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.2	2.9	17
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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

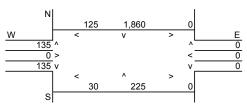
#### **Roadway Data**

Intersection: 4. Sierra Highway and Dockweiler Drive

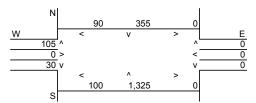
Analysis Condition: B

			NO. OT	Average	e Speea
		Roadway Type	Lanes	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



1,875 325

Highest Traffic Volumes (Vehicles per Hour)

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

# Roadway CO Contributions and Concentrations

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

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

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

#### **Total Roadway CO Concentrations**

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

	A.M.	P.M.	
	Peak Hour	Peak Hour	8-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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

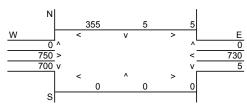
#### **Roadway Data**

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

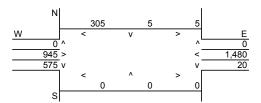
Analysis Condition: F

			No. of Average Spec		e Speed	
		Roadway Type	Lanes	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: 710 N-S Road: 600 E-W Road: 2,535 E-W Road: 3,305

# Roadway CO Contributions and Concentrations

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

	A <sub>1</sub>	A <sub>2</sub> eference CO	A <sub>3</sub>	A <sub>4</sub>	B Traffic	C Emission	-	stimated CO	Concentration	20
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
Noadway	L.O.IV.	231 661	30 1 661	100 1 661	volume	1 aciois	L.O.N.	23 1 661	30 1 661	100 1 661
A.M. Peak Traffic Hour										
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
P.M. Peak Traffic Hour										
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

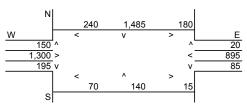
#### **Roadway Data**

Intersection: 6. Sirerra Highway and Newhall Avenue

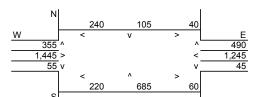
Analysis Condition: D

			INO. OT	. of Average Speed		_
		Roadway Type	Lanes	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







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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	R	Reference CO	Concentratio	ns	Traffic	Emission	E	stimated CO	Concentratio	ns
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	2,215 2,850	4.75 4.75	0.27 1.15	0.23 0.77	0.20 0.62	0.17 0.46
P.M. Peak Traffic Hour North-South Road East-West Road	2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	1,915 3,560	4.75 4.75	0.24 1.44	0.20 0.96	0.17 0.78	0.15 0.58

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

#### **Total Roadway CO Concentrations**

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

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
	1 Cak i loui		<u>0-11001</u>
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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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**

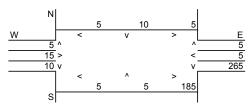
Intersection: 8. Valle Del Oro and Dockeiler Drive

Analysis Condition: B

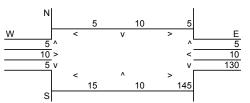
North-South Roadway:	Valle Del Oro
East-West Roadway:	Dockweiler Drive

	No. of	Average Speed			
Roadway Type	Lanes	A.M.	P.M.		
At Grade	2	5	5		
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: 480 E-W Road: 480 N-S Road: 315 E-W Road: 305

# Roadway CO Contributions and Concentrations

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	R	deference CO	Concentratio	ns	Traffic	Emission	E	stimated CO	Concentratio	ns
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	14.0 3.3	7.6 2.6	5.7 2.2	4.0 1.7	480 480	4.75 4.75	0.32 0.08	0.17 0.06	0.13 0.05	0.09 0.04
P.M. Peak Traffic Hour North-South Road East-West Road	14.0 3.3	7.6 2.6	5.7 2.2	4.0 1.7	315 305	4.75 4.75	0.21 0.05	0.11 0.04	0.09 0.03	0.06 0.02

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

#### **Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

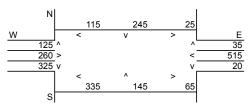
#### **Roadway Data**

Intersection: 11. Newhall Avenue and Lyons Avenue

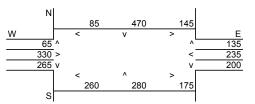
Analysis Condition: D

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

#### A.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 =  $(A \times B \times C) / 100,000^{\circ}$ 

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	R	eference CO	Concentratio	ns	Traffic	Emission	E	stimated CO	Concentration	ns
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	3.3 9.5	2.6 6.1	2.2 4.9	1.7 3.5	1,135 1,675	2.85 2.85	0.11 0.45	0.08 0.29	0.07 0.23	0.06 0.17
P.M. Peak Traffic Hour North-South Road East-West Road	11.9 2.8	7.0 2.3	5.4 2.0	3.8 1.7	1,650 1,240	2.85 2.85	0.56 0.10	0.33 0.08	0.25 0.07	0.18 0.06

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

#### **Total Roadway CO Concentrations**

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

	A.M.	P.M.	0.11
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

Project Title: Dockweiler Extension

#### **Background Information**

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

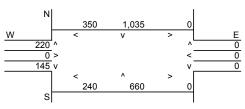
#### Roadway Data

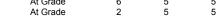
Intersection: 12. Railroad Avenue and Lyons Avenue

Analysis Condition:

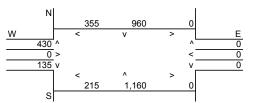
			INO. OT	Average Speed		
		Roadway Type	Lanes	A.M.	P.M.	
North-South Roadway:	Railroad Avenue	At Grade	6	5	5	
East-West Roadway:	Newhall Avenue	At Grade	2	5	5	

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





P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

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

# Roadway CO Contributions and Concentrations

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	R	eference CO	Concentratio	ns	Traffic	Emission	E	stimated CO	Concentratio	ns
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	9.5 3.7	6.1 2.7	4.9 2.2	3.5 1.7	2,265 955	4.75 4.75	1.02 0.17	0.66 0.12	0.53 0.10	0.38 0.08
P.M. Peak Traffic Hour North-South Road East-West Road	9.5 3.7	6.1 2.7	4.9 2.2	3.5 1.7	2,905 1,135	4.75 4.75	1.31 0.20	0.84 0.15	0.68 0.12	0.48 0.09

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

#### **Total Roadway CO Concentrations**

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

	A.M.	P.M.	0.11
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

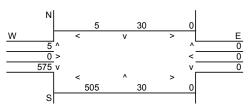
Intersection: 15. Main Street and Newhall Avenue

Analysis Condition:

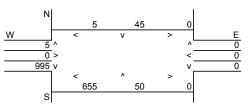
North-South Roadway:	Newhall Ave
East-West Roadway:	Main Street

	No. of	Average	e Speed
Roadway Type	Lanes	A.M.	P.M.
At Grade	2	5	5
At Grade	2	5	5

A.M. Peak Hour Traffic Volumes







Highest Traffic Volumes (Vehicles per Hour)

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

# Roadway CO Contributions and Concentrations

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

	A <sub>1</sub>	A <sub>2</sub> eference CO	A <sub>3</sub>	A <sub>4</sub>	B Traffic	C Emission	_	stimated CO	Concentratio	ne
Roadwav	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	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	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
P.M. Peak Traffic Hour										
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

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

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

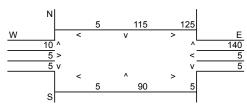
#### Roadway Data

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

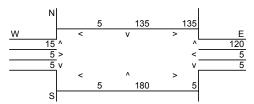
Analysis Condition: C

			No. ofAverage Spe		e Speea
		Roadway Type	Lanes	A.M.	P.M.
North-South Roadway:	Arch Street / 12th Street	At Grade	2	5	5
East-West Roadway:	Placerita Canyon Road	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:
 485
 N-S Road:
 590

 E-W Road:
 285
 E-W Road:
 275

# Roadway CO Contributions and Concentrations

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

	A <sub>1</sub>	A <sub>2</sub> eference CO	A <sub>3</sub>	A <sub>4</sub>	B Traffic	C Emission	-	stimated CO	Concentration	20
Deedwey							_			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	14.0 3.7	7.6 2.7	5.7 2.2	4.0 1.7	485 285	4.75 4.75	0.32 0.05	0.18 0.04	0.13 0.03	0.09 0.02
P.M. Peak Traffic Hour North-South Road East-West Road	14.0 3.7	7.6 2.7	5.7 2.2	4.0 1.7	590 275	4.75 4.75	0.39 0.05	0.21 0.04	0.16 0.03	0.11 0.02

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

#### **Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

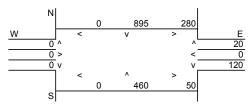
#### Roadway Data

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

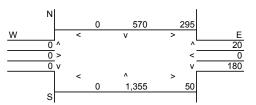
Analysis Condition: B

			INO. OT	or Average Speed		
		Roadway Type	Lanes	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







Highest Traffic Volumes (Vehicles per Hour)

# Roadway CO Contributions and Concentrations

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	R	eference CO	Concentratio	ns	Traffic	Emission	E	stimated CO	Concentratio	ns
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour North-South Road East-West Road	9.5 3.7	6.1 2.7	4.9 2.2	3.5 1.7	1,655 470	3.38 3.38	0.53 0.06	0.34 0.04	0.27 0.03	0.20 0.03
P.M. Peak Traffic Hour North-South Road East-West Road	9.5 3.7	6.1 2.7	4.9 2.2	3.5 1.7	2,240 545	3.38 3.38	0.72 0.07	0.46 0.05	0.37 0.04	0.26 0.03

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

#### **Total Roadway CO Concentrations**

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

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Danders Edua			
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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

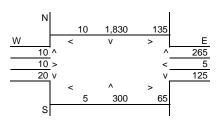
Intersection: 2. Sierra Highway/Placerita Canyon Rd.

Analysis Condition: D

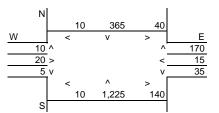
North-South Roadway: Sierra Highway
East-West Roadway: Placerita Canyon

	No. of	Average	e Speed
Roadway Type	Lanes	A.M.	P.M.
At Grade	6	5	5
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: 2,550 N-S Road: 1,820 E-W Road: 605 E-W Road: 420

#### **Roadway CO Contributions and Concentrations**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	mated CO	Concentra	tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic F	lour									
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 H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

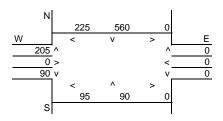
Intersection: 4. Sierra Highway and Dockweiler Drive

Analysis Condition: B

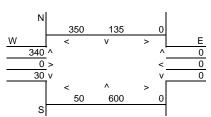
North-South Roadway: Sierra Highway
East-West Roadway: Dockweiler Drive

	INO. OI	Average	e Speeu
Roadway Type	Lanes	A.M.	P.M.
At Grade	4	5	5
At Grade	2	5	5

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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 H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

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

ΑМ

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

ΡМ

/ \VI.	1 .171.	
Peak Hour	Peak Hour	8-Hour
2.5	2.7	1.3
2.3	2.4	1.1
2.2	2.3	1.0
2.2	2.2	1.0
	Peak Hour 2.5 2.3 2.2	Peak Hour         Peak Hour           2.5         2.7           2.3         2.4           2.2         2.3

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

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

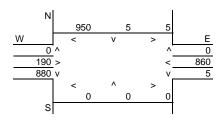
#### Roadway Data

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

Analysis Condition: A

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

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**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	mated CO	Concentra	tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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 H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

Project Title: Dockweiler Extension

#### **Background Information**

Nearest Air Monitoring Station measuring CO: Background 1-hour CO Concentration (ppm): SRA 13 2.0 Background 8-hour CO Concentration (ppm): 8.0 Persistence Factor: 0.7 2019 Analysis Year:

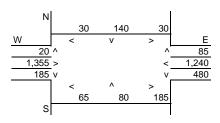
#### Roadway Data

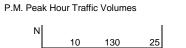
Intersection: 6. Sirerra Highway and Newhall Avenue

Analysis Condition:

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

A.M. Peak Hour Traffic Volumes

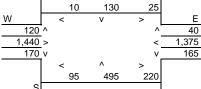




P.M.

5

5



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**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	1,135 3,375	3.38 3.38	0.10 0.97	0.08 0.65	0.07 0.52	0.06 0.39
P.M. Peak Traffic H North-South Road East-West Road	lour 2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	1,275 3,265	3.38 3.38	0.11 0.94	0.09 0.63	0.08 0.51	0.07 0.38

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

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

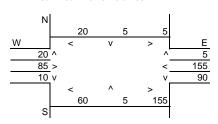
Intersection: 8. Valle Del Oro and Dockeiler Drive

Analysis Condition: B

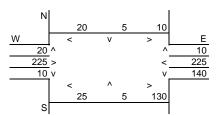
North-South Roadway: Valle Del Oro
East-West Roadway: Dockweiler Drive

	INO. OI	Average Speed		
Roadway Type	Lanes	A.M.	P.M.	
At Grade	2	5	5	
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**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

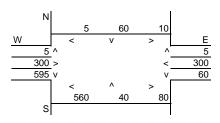
#### Roadway Data

Intersection: 11. Newhall Avenue and Lyons Avenue

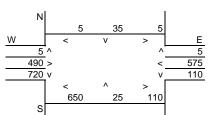
Analysis Condition: C

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

A.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**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Estimated CO Concentrations			tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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
D.M. DI. T#:- 11										
P.M. Peak Traffic H	iour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **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>

	/ \VI.	1 .171.	
	Peak Hour	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

ΑМ

ΡМ

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

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

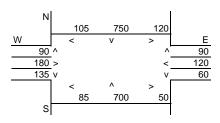
#### Roadway Data

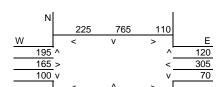
Intersection: 12. Railroad Avenue and Lyons Avenue

Analysis Condition: C

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

A.M. Peak Hour Traffic Volumes





910

P.M. Peak Hour Traffic Volumes

Highest Traffic Volumes (Vehicles per Hour)

#### **Roadway CO Contributions and Concentrations**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic F	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

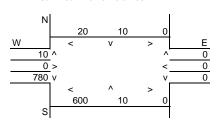
Intersection: 15. Main Street and Newhall Avenue

Analysis Condition: C

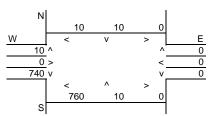
North-South Roadway: Newhall Ave East-West Roadway: Main Street

	INO. OI	Average Speed		
Roadway Type	Lanes	A.M.	P.M.	
At Grade	2	5	5	
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 =  $(A \times B \times C) / 100,000^{1}$ 

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **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>

/\.IVI.	1 .IVI.	
Peak Hour	Peak Hour	8-Hour
2.8	2.9	1.4
2.5	2.5	1.2
2.4	2.4	1.1
2.3	2.3	1.0
	Peak Hour 2.8 2.5 2.4	Peak Hour         Peak Hour           2.8         2.9           2.5         2.5           2.4         2.4

Δ 1/1

РΜ

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

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

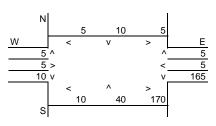
#### Roadway Data

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

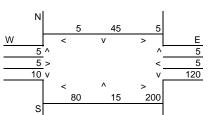
Analysis Condition: C

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

#### A.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**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic F	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

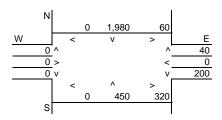
#### Roadway Data

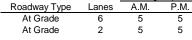
Intersection: 1. Sierra Highway/SR-14 Freeway SouthBound Ramps

Analysis Condition: E

North-South Roadway: Sierra Highway At Grade
East-West Roadway: SR-14 At Grade

A.M. Peak Hour Traffic Volumes

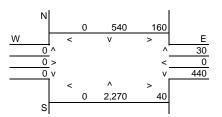




No. of

Average Speed





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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 9.5 3.7	6.1 2.7	4.9 2.2	3.5 1.7	2,950 620	2.34 2.34	0.65 0.05	0.42 0.04	0.34 0.03	0.24 0.02
P.M. Peak Traffic H North-South Road East-West Road	lour 9.5 3.7	6.1 2.7	4.9 2.2	3.5 1.7	3,290 670	2.34 2.34	0.73 0.06	0.47 0.04	0.38 0.03	0.27 0.03

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

#### **Total Roadway CO Concentrations**

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

Δ 1/1

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

РΜ

A.IVI.	1 .IVI.	
Peak Hour	Peak Hour	8-Hour
2.7	2.8	1.4
2.5	2.5	1.2
2.4	2.4	1.1
2.3	2.3	1.0
	Peak Hour 2.7 2.5 2.4	Peak Hour         Peak Hour           2.7         2.8           2.5         2.5           2.4         2.4

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

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

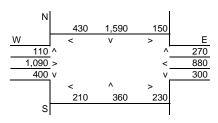
Intersection: 2. Sierra Highway/Placerita Canyon Rd.

Analysis Condition: D

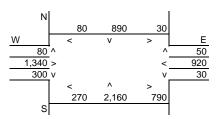
North-South Roadway: Sierra Highway
East-West Roadway: Placerita Canyon

		INO. OI	Average Speed		
	Roadway Type	Lanes	A.M.	P.M.	
Ī	At Grade	8	5	5	
	At Grade	8	5	5	

#### A.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

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	3,090 3.120	2.34 2.34	0.19 0.62	0.16 0.42	0.14 0.34	0.12 0.25
P.M. Peak Traffic H North-South Road East-West Road		5.7 2.2	4.6 1.9	3.4 1.6	4,440 3,160	2.34 2.34	0.88 0.19	0.59 0.16	0.48 0.14	0.35 0.12

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

#### **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>

/ \VI.	1 .171.	
Peak Hour	Peak Hour	8-Hour
2.8	3.1	1.6
2.6	2.8	1.3
2.5	2.6	1.2
2.4	2.5	1.1
	<u>Peak Hour</u> 2.8 2.6 2.5	Peak Hour         Peak Hour           2.8         3.1           2.6         2.8           2.5         2.6

ΑМ

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

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

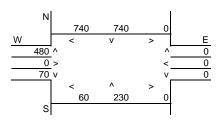
Intersection: 4. Sierra Highway and Dockweiler Drive

Analysis Condition: E

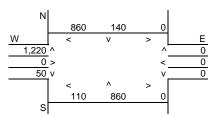
North-South Roadway: Sierra Highway
East-West Roadway: Dockweiler Drive

	INO. OI	Average Speed		
Roadway Type	Lanes	A.M.	P.M.	
At Grade	4	5	5	
At Grade	2	5	5	

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	Estimated CO Concentrations		
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic F	lour									
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 H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

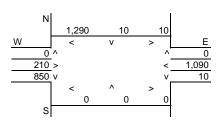
#### Roadway Data

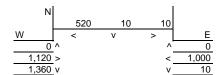
Intersection: 5. SR-14 Soundbound Ramps and Newhall Avenue

Analysis Condition: A

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

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**

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Esti	mated CO	Concentra	tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 3.7 9.5	2.7 6.1	2.2 4.9	1.7 3.5	1,310 3,440	2.34 2.34	0.11 0.76	0.08 0.49	0.07 0.39	0.05 0.28
P.M. Peak Traffic H North-South Road East-West Road	lour 3.7 9.5	2.7 6.1	2.2 4.9	1.7 3.5	1,380 4,000	2.34 2.34	0.12 0.89	0.09 0.57	0.07 0.46	0.05 0.33

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

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

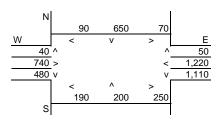
#### Roadway Data

Intersection: 6. Sirerra Highway and Newhall Avenue

Analysis Condition: D

North-South Roadway: Sierra Highway At Grade 8
East-West Roadway: Newhall Avenue At Grade 8

A.M. Peak Hour Traffic Volumes



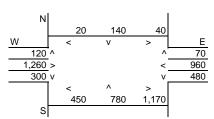


Average Speed

P.M.

A.M.

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Estimated CO Concentrations			tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	2,880 3,440	2.34 2.34	0.17 0.68	0.15 0.46	0.13 0.37	0.11 0.27
P.M. Peak Traffic H North-South Road East-West Road	lour 2.6 8.5	2.2 5.7	1.9 4.6	1.6 3.4	3,320 3,980	2.34 2.34	0.20 0.79	0.17 0.53	0.15 0.43	0.12 0.32

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

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

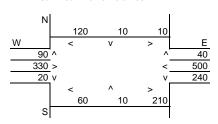
#### Roadway Data

Intersection: 8. Valle Del Oro and Dockeiler Drive

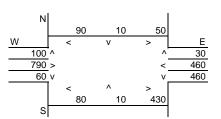
Analysis Condition: D

North-South Roadway: Valle Del Oro At Grade
East-West Roadway: Dockweiler Drive At Grade

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



# P.M. Peak Hour Traffic Volumes



No. of

Lanes

6

Average Speed

P.M.

5

5

A.M.

5

5

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Estimated CO Concentrations			tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 3.7 9.5	2.7 6.1	2.2 4.9	1.7 3.5	550 1,330	2.34 2.34	0.05 0.30	0.03 0.19	0.03 0.15	0.02 0.11
P.M. Peak Traffic H North-South Road East-West Road	lour 3.7 9.5	2.7 6.1	2.2 4.9	1.7 3.5	1,050 2,220	2.34 2.34	0.09 0.49	0.07 0.32	0.05 0.25	0.04 0.18

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

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

Project Title: Dockweiler Extension

#### **Background Information**

Nearest Air Monitoring Station measuring CO: Background 1-hour CO Concentration (ppm): SRA 13 2.0 Background 8-hour CO Concentration (ppm): 8.0 Persistence Factor: 0.6 Analysis Year: 2025

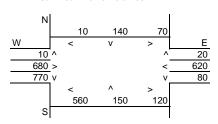
#### Roadway Data

Intersection: 11. Newhall Avenue and Lyons Avenue

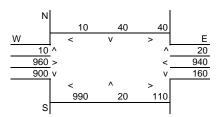
Analysis Condition:

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

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







20

20

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Estimated CO Concentrations			tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

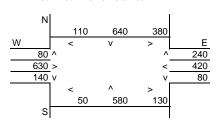
#### Roadway Data

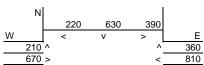
Intersection: 12. Railroad Avenue and Lyons Avenue

Analysis Condition: D

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

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	Reference CO Concentrations				Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H	lour									
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 H	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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

	A.M.	P.M.	
	Peak Hour	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>&</sup>lt;sup>2</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

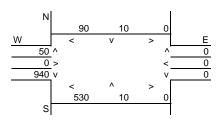
Intersection: 15. Main Street and Newhall Avenue

Analysis Condition: B

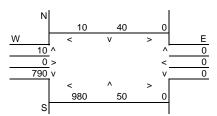
North-South Roadway: Newhall Ave East-West Roadway: Main Street

	INO. OI	Average Speed			
Roadway Type	Lanes	A.M.	P.M.		
At Grade	2	5	5		
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 =  $(A \times B \times C) / 100,000^{1}$ 

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	erence CO	Concentra	tions	Traffic	Emission	Estimated CO Concentrations			tions
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic H North-South Road East-West Road	lour 3.7 14.0	2.7 7.6	2.2 5.7	1.7 4.0	1,490 1,610	2.34 2.34	0.13 0.53	0.09 0.29	0.08 0.21	0.06 0.15
P.M. Peak Traffic H North-South Road East-West Road	lour 14.0 3.7	7.6 2.7	5.7 2.2	4.0 1.7	1,860 1,790	2.34 2.34	0.61 0.15	0.33 0.11	0.25 0.09	0.17 0.07

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

#### **Total Roadway CO Concentrations**

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

,		
Peak Hour	Peak Hour	8-Hour
2.7	2.8	1.3
2.4	2.4	1.1
2.3	2.3	1.0
2.2	2.2	1.0
	Peak Hour 2.7 2.4 2.3	Peak Hour         Peak Hour           2.7         2.8           2.4         2.4           2.3         2.3

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

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

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

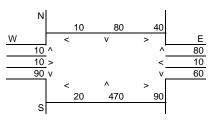
#### Roadway Data

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

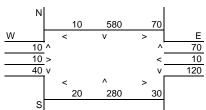
Analysis Condition: C

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

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

	$A_1$	$A_2$	$A_3$	$A_4$	В	С				
	Refe	Reference CO Concentrations				Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>2</sup>	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
D										
P.M. Peak Traffic H	lour									
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>&</sup>lt;sup>1</sup> Methodology from Bay Area Air Quality Management District BAAQMD CEQA Guidelines (1996).

#### **Total Roadway CO Concentrations**

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

,		
Peak Hour	Peak Hour	8-Hour
2.2	2.3	1.0
2.2	2.2	0.9
2.1	2.2	0.9
2.1	2.1	0.9
	Peak Hour 2.2 2.2 2.1	Peak Hour         Peak Hour           2.2         2.3           2.2         2.2           2.1         2.2

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

<sup>&</sup>lt;sup>2</sup> Emission factors from EMFAC2007.

			I	_	500		дот д	in QUA	LIII	1711 171	GENIE	IVI DIL	INICI	1				ı		
	0010		Car Mono	bon oxide <sup>a)</sup>					Ozone						Nitroge	n Dioxide	<b>b</b> )	Sul	fur Dio	xide <sup>c)</sup>
	774114									No. Day	s Standard I	Exceeded								
	2013	Station.	No. Days	Max Conc. in	No. Days	Max. Conc. in	Max. Conc. in	Fourth High Conc.	Health Advisory ≥ 0.15	Old Federal > 0.124	Current Federal > 0.075	Current State > 0.09	Current State > 0.070	No. Days	Max Conc.	98 <sup>th</sup> Percentile Conc.	Annual Average <u>AAM</u>	No. Days	Max. Conc. in	99 <sup>th</sup> Percentile Conc.
Sou No	rce/Receptor Area Location	Station No.	of Data	ppm 8-hour	of Data	ppm 1-hour	ppm 8-hour	ppm 8-hour	ppm 1-hour	ppm 1-hour	ppm 8-hour	ppm 1-hour	ppm 8-hour	of Data	ppb 1-hour	ppb 1-hour	Conc.	of Data	ppb 1-hour	ppb 1-hour
		INO.	Data	o-110u1	Data	1-Hour	6-110u1	0-110u1	1-Hour	1-Hour	o-noui	1-Hour	0-110u1	Data	1-11001	1-HOUI	рро	Data	1-11001	1-11001
LOS	ANGELES COUNTY 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	087	340	1.3	359	0.081	0.069	0.059	0	0	0	0	1	291	51.2	48.8	14.5	312	0.3	3.2
3	Southwest Coastal LA County	820	281*	2.5	352	0.105	0.073	0.059	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*	0.103	0.031	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												234					21.0	
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	0.030	0.002	0.037	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	0.075	0.080	0	0	6	7	15	352	76.9	56.7	17.7			
9		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	ő	1	15	12	22	343	78.8	64.8	22.5			
11	South San Gabriel Valley	085	347	2.0	363	0.123	0.072	0.000	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	ő	0	1	0	1	340	69.8	61.8	17.6			
13	2	090	352	0.8	365	0.134	0.104	0.094	ő	2	40	30	58	362	65.4	45.0	14.4			
_	<u> </u>							****												
	NGE COUNTY	3177	355	2.2	262	0.104	0.078	0.066	0	0	1	2	2	269*	85.0	53.3	14.8			
16 17	North Orange County Central Orange County	3176	333	2.2	363 340	0.104	0.078	0.066	0	0	0	0	0	301	85.0 81.6	55.5 58.8	14.8			
18	North Coastal Orange County	3176	313	2.0	385	0.084	0.070	0.065	0	0	1	1	2	330	75.7	53.2	11.6	296	4.2	3.3
19	2 ,	3812	356	1.3	365	0.093	0.083	0.003	0	0	2	2	5	330				290	4.2	3.3 
	<u> </u>	3012	330	1.5	303	0.104	0.062	0.074	0	0			3							
	ERSIDE COUNTY	41.55																		
22	Norco/Corona	4155	22.4		257	0.122	0.102	0.004			26	12		210		 54.0	17.2	254		
23 23	Metropolitan Riverside County 1 Metropolitan Riverside County 2	4144 4146	334 318	2.0	357	0.123	0.103	0.094	0	0	26	13	38	318 257*	59.6 57.6	54.8 50.7	17.3 15.8	354	8.1	4.6
23	Mira Loma	4146	339	1.6 1.9	365	0.118	0.096	0.092	0	0	21	 11	32	333	53.8	50.7 50.7	13.8			
24	Perris Valley	4149	339	1.9	344	0.118	0.090	0.092	0	0	34	17	60	333	33.6	30.7	13./			
		4158	336	0.6	362	0.108	0.090	0.088	0	0	12	6	25	294	46.6	40.0	8.4			
25 26	Lake Elsinore Temecula	4158	330	0.6	302	0.102	0.089	0.081	0	0	3	0	12	294	46.6	40.0	8.4			
29	Banning Airport	4164			254*	0.093	0.078	0.073	0	0	41	24	66	308	51.9	45.0	8.5			
30	Coachella Valley 1**	4137	354	1.5	365	0.113	0.103	0.091	0	0	46	10	82	359	52.3	38.5	7.5			
30		4157			365	0.115	0.087	0.085	0	0	18	2	38							
					303	0.105	0.007	0.005	-	-	10		30	<u> </u>						
	BERNARDINO COUNTY	6176	2.40	1.7	265	0.142	0.111	0.005	0	3	27	25	4.4	27/*	(2.1	52.2	177			
32	2	5175 5817	340	1.7	365	0.143	0.111	0.095	U	-	27	25	44	276*	62.1	53.3	17.7			
33 34	Southwest San Bernardino Valley 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		5203	340	1.7	361	0.131	0.122	0.100	0	2	36	22	53	291	72.2	54.5	17.6	290	3.6	3.1
35	East San Bernardino Valley	5203	340	1./	356	0.139	0.112	0.097	0	3	63	43	93	271	12.2	34.3	17.0			
37	Central San Bernardino Mountains	5181			365	0.133	0.115	0.104	0	0	72	45	101							
38		5818				0.120														
	DISTRICT MAXIMUM		İ	3.5	1	0.151	0.122	0.104	1	3	72	45	101	İ	90.3	71.3	22.5	<u> </u>	21.8	11.6
	SOUTH COAST AIR BASIN		<u> </u>	3.5	1	0.151	0.122	0.104	1	5	88	70	119	<u> </u>	90.3	71.3	22.5	<u> </u>	21.8	11.6
	500 III COAST AIR BASIN			د.د	<u> </u>	V.1J1	0.122	0.104	1	J	00	/0	117	<u> </u>	70.3	/1.3	44.3	<u> </u>	41.0	11.0

<sup>\*</sup> Incomplete data.

ppb - Parts Per Billion parts of air, by volume

AAM = Annual Arithmetic Mean



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 <a href="http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-

<sup>\*\*</sup> Salton Sea Air Basin

<sup>-- -</sup> Pollutant not monitored

ppm - Parts Per Million parts of air, by volume

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  $NO_2$  federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean  $NO_2 > 0.0534$  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  $SO_2$  1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average  $SO_2 > 0.25$  ppm (250 ppb) and 24-hour average  $SO_2 > 0.04$  ppm (40 ppb).

			Suspend	led Particula	ates PM10 d	1)		Fin	e Particulat	es PM2.5 f)		Lea	nd <sup>h)</sup>	PM10	Sulfate i)
2013 Source/Receptor Area No. Location	Station No.	No. Days of Data	Max. Conc. in μg/m <sup>3</sup> 24-hour	Exceeding Federal	Samples g Standards State > 50 μg/m <sup>3</sup> 24-hour	Annual. Average Conc. e) (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>g)</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
LOS ANGELES COUNTY															
1 Central LA 2 Northwest Coastal LA County 3 Southwest Coastal LA County 4 South Coastal LA County 1 4 South Coastal LA County 2	087 091 820 072 077	60  56 43* 56	57  38 37 54	0  0 0 0	1(2%)  0 0 1(2%)	29.5  20.8 23.2 27.3	344   331 341	43.1  47.2 42.9	29.0  26.1 24.6	1(0.3%) 2(0.6%) 1(0.3%)	11.95   11.34 10.97	0.013  0.005 0.006 0.012	0.011  0.004 0.006 0.009	60  56 43* 56	5.8  5.6 4.5 4.8
4 South Coastal LA County 3 6 West San Fernando Valley 7 East San Fernando Valley	033 074 069	  58	  52	  0	  1(2%)	  28.5	118 346	41.8 45.1	23.0 30.4	1(0.8%) 4(1.2%)	9.71 12.15	  	  	  58	  5.4
West San Gabriel Valley     East San Gabriel Valley 1     East San Gabriel Valley 2     Pomona/Walnut Valley	088 060 591 075	61 	76 	0	6(10%)	33.0	64* 120 	25.7 29.6 	20.5 26.4	0(0%) 0(0%) 	10.13 10.54 	   	  	61	4.8
11 South San Gabriel Valley 12 South Central LA County 13 Santa Clarita Valley	085 112 090	  60	  43	  0	  0	  21.6	114 113	29.1 52.1	28.8 24.3	0(0%) 1(0.9%)	11.56 11.95	0.012 0.014	0.011 0.011 	  60	  3.7
ORANGE COUNTY  16 North Orange County  17 Central Orange County  18 North Coastal Orange County  19 Saddleback Valley	3177 3176 3195 3812	 59  61	 77  51	 0  0	1(2%)  1(2%)	25.4  19.3	 331  117	37.8  28.0	 22.7  17.5	1(0.3%)  0(0%)	10.09  8.08	  	  	 59  61	 4.7  4.4
RIVERSIDE COUNTY 22 Norco/Corona	4155	57	58	0	2(4%)	28.3								57	4.2
<ul> <li>23 Metropolitan Riverside County 1</li> <li>23 Metropolitan Riverside County 2</li> <li>23 Mira Loma</li> <li>24 Perris Valley</li> </ul>	4144 4146 4165 4149	119  59 57	135  147 70	0  0 0	10(8%)  14(24%) 10(18%)	33.8  41.1 33.6	353 117 355	60.3 53.7 56.5	34.6 29.2 37.5	6(1.7%) 1(0.9%) 9(2.5%)	12.50 11.28 14.12	0.010 0.007 	0.009 0.006 	119  59 57	4.2  4.2 3.4
25 Lake Elsinore 26 Temecula 29 Banning Airport 30 Coachella Valley 1**	4158 4031 4164 4137	 61 60	  64 129	  0 0	1(2%) 3(5%)	 20.6 22.6	   117	   18.5	  13.8	   0(0%)	   6.52	  	  	 61 60	2.9 3.5
30 Coachella Valley 2**	4157	120	129+	0+	3(5%) 23(19%)	38.1	117	25.8	15.8	0(0%)	8.35			120	3.5 3.9
SAN BERNARDINO COUNTY 32 Northwest San Bernardino Valley	5175									<del></del>		0.008	0.006		
<ul> <li>33 Southwest San Bernardino Valley</li> <li>34 Central San Bernardino Valley 1</li> <li>34 Central San Bernardino Valley 2</li> </ul>	5817 5197 5203	60 61 60	115 90 102	0 0	3(5%) 19(31%) 3(5%)	33.2 40.6 31.3	110 121 110	49.3 43.6 55.3	26.8 33.1 33.4	1(0.9%) 1(0.8%) 1(0.9%)	11.98 12.26 11.41	0.010	0.010	60 61 60	4.8 4.1 4.6
<ul> <li>East San Bernardino Valley</li> <li>Central San Bernardino Mountains</li> <li>East San Bernardino Mountains</li> </ul>	5204 5181 5818	61 60 	72 37 	0 0 	2(3%) 0 	27.1 21.4 	  59	  35.5	35.1	  1(1.7%)	  9.67	  	  	61 60 	3.6 3.6 
DISTRICT MAXIMUM			147+	0+	23	41.1		60.3	37.5	9	14.12	0.013++	0.011++		5.8
* Incomplete data ** Salton	Soo Air Do		147	0	33	41.1		60.4	37.5	13	14.12	0.013++	0.011++	nt not mor	5.8

<sup>\*</sup> Incomplete data.



<sup>\*\*</sup> Salton Sea Air Basin

μg/m<sup>3</sup> - Micrograms per cubic meter of air

AAM = Annual Arithmetic Mean

<sup>-</sup> 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/m³, at Indio (155 µg/m³ is needed to exceed the PM10 standard).

e) - State standard is annual average (AAM) > 20 µg/m³ Federal annual PM10 standard (AAM > 50 µg/m³) 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/m³, (at Mira Loma). g) - U.S. EPA has revised the federal annual PM2.5 standard from annual average (AAM) > 15.0 μg/m³ to AAM > 12.0 μg/m³, effective December 14, 2012. State standard is annual average (AAM) > 12.0 μg/m³.

<sup>+) -</sup> High PM10 data sample (159 µg/m³ 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  $> 0.15 \,\mu\text{g/m}^3$ ; state standard is monthly average  $\ge 1.5 \,\mu\text{g/m}^3$ . Lead statistics listed above are for population-oriented sites only. Lead standards were not exceeded.

<sup>++) –</sup> 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/m³ and 0.10 µg/m³, respectively.

i) – State sulfate standard is 24-hour  $\geq 25 \,\mu \text{g/m}^3$ . There is no federal standard for sulfate.

	0010		Car Mono	:bon oxide <sup>a)</sup>				Oz	one					Nitroge	n Dioxide	<b>b</b> )	S	ulfur Dio	xide <sup>C)</sup>
									N	o. Days Sta	ndard Excee	ded							
	2012 e/Receptor Area	Station	No. Days of	Max Conc. in ppm	No. Days of	Max. Conc. in ppm	Max. Conc. in ppm	Fourth High Conc. ppm	Old Federal > 0.124 ppm	Current Federal > 0.075 ppm	Current State > 0.09 ppm	Current State > 0.070 ppm	No. Days of	Max Conc. in ppb	98 <sup>th</sup> Percentile Conc. ppb	Annual Average <u>AAM</u> Conc.	No. Days of	Max. Conc. in ppb	99 <sup>th</sup> Percentile Conc. ppb
No.	Location	No.	Data	8-hour	Data	1-hour	8-hour	8-hour	1-hour	8-hour	1-hour	8-hour	Data	1-hour	1-hour	ppb	Data	1-hour	1-hour
LOS A	NGELES COUNTY																		
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 South Coastal LA County 1	820 072	366 363	2.5 2.2	366 366	0.106 0.084	0.075 0.067	0.059	0	0	0	1	268* 221*	61.7 77.2	55 62.5	10.4 20.8	203* 285*	4.9 22.2	4.7 14.3
4	South Coastal LA County 1 South Coastal LA County 2	072	303	2.2	300	0.084	0.067	0.060	U				221**		62.5	20.8	285**	22.2	14.5
4	South Coastal LA County 2 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	033	366	2.8	366	0.08	0.000	0.095	1	23	18	38	261*	70.9	48.7	14.9			
7	East San Fernando Valley	069	366	2.4	366	0.129	0.098	0.093	0	8	8	15	295*	70.9	57	21.9	366	6.5	2.9
8	West San Gabriel Valley	088	319	1.6	318	0.117	0.086	0.081	0	9	8	20	280*	71.2	55.8	17.2	300	0.5	2.9
9	East San Gabriel Valley 1	060	366	1.2	366	0.111	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			
ORAN	IGE COUNTY																		
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							
RIVE	RSIDE COUNTY																		
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	221*	72.0					
29 30	Banning Airport Coachella Valley 1**	4164 4137	366	0.5	338 366	0.117 0.126	0.098 0.100	0.095 0.094	0	53 51	40 17	71 76	321* 353	72.0 45.1	49.7 39.3	9.5 7.8			
30	Coachella Valley 2**	4157	300		364	0.120	0.100	0.094	0	24	2	43		4J.1 	39.3	7.6			
	<u> </u>	1107			304	0.102	0.009	0.003	U	24	2	43							
	BERNARDINO COUNTY	5175	260	1.1	226	0.126	0.111	0.102	4	4.5	40		220*	667	60.2	10.5			
32 33	Northwest San Bernardino Valley Southwest San Bernardino Valley	5175 5817	360	1.1	336	0.136	0.111	0.102	4	45 	42	66 	328*	66.7	60.2	19.5			
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	0.142	0.11	0.100	0	54	41	74	315*	67.0	59.7	18.8			4.3
35	East San Bernardino Valley	5204			366	0.124	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																	
	DISTRICT MAXIMUM		1	4.0		0.147	0.112	0.106	6	86	66	100	1	97.8	77.4	25.3		22.7	21.3
	SOUTH COAST AIR BASIN		<u> </u>	4.0		0.147	0.112	0.106	12	111	98	138	<u> </u>	97.8	77.4	25.3		22.7	21.3
	plate data		l	4.0		0.147	0.112	0.100	12	111	98	138	l	97.0	//.4	23.3		22.1	21.3

<sup>\*</sup> Incomplete data.

\*\* Salton Sea Air Basin

ppm - Parts Per Million parts of air, by volume

ppb - Parts Per Billion parts of air, by volume

-- - 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.



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, 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.

AAM = Annual Arithmetic Mean

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).

		S	uspended	Particula	tes PM10	d,g)		Fine P	articulate	s PM2.5 <sup>f,g)</sup>		Pa	rticulates	TSP	Le	ead <sup>h)</sup>	PM10	Sulfate <sup>i)</sup>
2012	Cara:	No. Days	Max. Conc. in µg/m <sup>3</sup>	No. (%) Exceeding Federal > 150	Samples g Standards State > 50	Annual. Average Conc. e)	Days	Max. Conc. in μg/m <sup>3</sup>	98 <sup>th</sup> Percentile Conc. in µg/m <sup>3</sup>	No. (%) Samples Exceeding Federal Std	Annual. Average Conc.	No. Days	Max. Conc. in μg/m <sup>3</sup>	Annual. Average Conc.	Max. Monthly Average	Max. 3-Months Rolling	No. Days	Max. Conc. in
Source/Receptor Area No. Location	Station No.	of Data	μg/III <sup>2</sup> 24-hour	μg/m <sup>3</sup> 24-hour	μg/m <sup>3</sup> 24-hour	(AAM) μg/m <sup>3</sup>	of Data	μg/m² 24-hour	μg/m² 24-hour	> 35 μg/m <sup>3</sup> 24-hour	(AAM) μg/m <sup>3</sup>	of Data	μg/m² 24-hour	(AAM) μg/m <sup>3</sup>	Conc. µg/m <sup>3</sup>	Averages μg/m <sup>3</sup>	of Data	μg/m <sup>3</sup> 24-hour
LOS ANGELES COUNTY	INU.	Data	∠+-110u1	44-110UI	∠+=110UI	μg/III	Data	44-110uf	∠+-110u1	∠+-110UI	μg/III	Data	44-110ui	μg/III	μg/III	μg/III	Dala	∠+-110u1
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	ő	Ö	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		33				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					30.3			25.0		11.02	50		07.1				3.2
		ì																
10 Pomona/Walnut Valley	075						110	45.2	20.5		- 11.05			40.0	0.007	0.007		
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
ORANGE COUNTY																		
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
RIVERSIDE COUNTY																		
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
SAN BERNARDINO COUNTY		121	121	Ü	,	27.5	117	20	10.1	Ü	7.01				1		121	7.0
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			43.4	0.007	0.006	61	5.1
34 Central San Bernardino Valley 1	5197	60	67	0	9	34.3	110	35.2 39.9	28.6 35.6	3	12.41	56	148	78.4			60	5.1 4.6
34 Central San Bernardino Valley 2	5203	55	53	0	7 1	29.2	107	34.8	27.1	0	11.76	56	128	78.4 55.6	0.008	0.007	55	4.0
	5203	61	48	0	0												61	
35 East San Bernardino Valley 37 Central San Bernardino Mountains	5204 5181	57		0	0	23.4 18.9											57	4.2 3.7
37 Central San Bernardino Mountains 38 East San Bernardino Mountains	5181		43	o .					27.4		7.00						37	
	2818						52	36.4	27.4	l	7.98						<u> </u>	
DISTRICT MAXIMUM			124	0	19	39.9		58.7	35.6	7	15.06		197	78.4	0.014	0.011		7.7
SOUTH COAST AIR BASIN			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	ua/m <sup>2</sup>	- Micros	rame ner cul	oic meter of a	r		AAM	- Annual A	rithmetic Me	an		Pollu	tant not mor	itored				

\*\* Salton Sea Air Basin

μg/m<sup>3</sup> - Micrograms per cubic meter of air

-- - 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  $\mu$ g/m³, at Palm Springs in Coachella Valley. The FEM Basin's max was  $104 \mu$ g/m³, at Mira Loma.

e) - Federal annual PM10 standard (AAM > 50 μg/m³) was revoked in 2006. State standard is annual average (AAM) > 20 μg/m³

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  $\mu$ g/m³) and January 21 (207  $\mu$ g/m³) both at Indio; PM2.5 (FRM) at Azusa (39.6  $\mu$ g/m³) and Fontana (39.9  $\mu$ g/m³), both recorded on July 5.



i) – State sulfate standard is 24-hour  $\geq 25 \,\mu \text{g/m}^3$ . There is no federal standard for sulfate.



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/m³, at Central LA..

U.S. EPA has revised the annual PM2.5 standard from annual average (AAM) 15.0 μg/m³ to 12.0 μg/m³, effective March 18, 2013. State standard is annual average (AAM) > 12.0 μg/m³.

	0.0.1.0		Cai	rbon Mon	oxide <sup>a)</sup>					Ozone						Nitrog	gen Dioxide <sup>b</sup>	o)	Su	ılfur Diox	kide <sup>c)</sup>
	<b>2010</b>		No.	Max. Conc.	Max Conc.	No.	Max. Conc.	Max. Conc.	Fourth High	Health Advisory	No. Day Fede	s Standard I eral Current		tate Current	No.	Max Conc.	98 <sup>th</sup> Percentile	Annual Average	No.	Max. Conc.	Max. Conc.
So	urce/Receptor Area		Days	in	in	Days	in	in	Conc.	≥ 0.15	> 0.12	> 0.075	> 0.09	> 0.070	Days	in	Conc.	AAM	Days	in	in .
No	Location	Station No.	of Data	ppm 1-hour	ppm 8-hour	of Data	ppm 1-hour	ppm 8-hour	ppm 8-hour	ppm 1-hour	ppm 1-hour	ppm 8-hour	ppm 1-hour	ppm 8-hour	of Data	ppb 1-hour	ppb 1-hour	Conc. ppb	of Data	ppb 1-hour	ppb 24-hour
LOS	ANGELES COUNTY																				
1		087	364	3	2.3	357	0.098	0.080	0.064	0	0	1	1	1	364	89.0	70.5	25.0	355	9.8	1.5
2	Northwest Coastal LA County	091	364	2	1.4	360	0.099	0.078	0.069	0	0	1	2	4	365	70.8	57.4	15.6			
3	Southwest Coastal LA County	820	344	3	2.2	319	0.089	0.070	0.059	0	0	0	0	1	358	75.8	60.9	12.1	327	25.9	3.5
4	bouin coustur Err county 1	072	358	3	2.1	358	0.101	0.084	0.057	0	0	1	1	1	360	92.8	70.2	19.8	329	40.0	6.0
4	Bouin Coustai Err County 2	077																			
6		074	365	3	2.6	295	0.122	0.091	0.086	0	0	19	11	40	365	75.0	56.0	16.7			
7	East San Fernando Valley	069	364	3	2.4	317	0.111	0.084	0.076	0	0	4	3	11	359	82.0	64.3	24.1	233*	14.9	4.1
8		088	355	3	2.0	325	0.101	0.081	0.075	0	0	3	1	6	355	71.0	63.0	19.6			
9	East San Gastier valley 1	060	355	3	1.3	356	0.104	0.081	0.075	0	0	3	5	10	364	77.2	59.6	18.5			
9		591	360	2	1.3	350	0.124	0.099	0.090	0	0	20	25	48	360	78.5	55.5	15.4			
10		075	365	3	1.8	342	0.115	0.082	0.076	0	0	4	9	20	365	97.0	72.5	26.2			
11	,	085	364	2	1.9	358	0.112	0.086	0.059	0	0	1	1	1	364	79.0	65.4	22.9			
12		112	353	6	3.6	358	0.081	0.062	0.050	0	0	0	0	0	364	76.8	68.8	17.9			
13	Santa Clarita Valley	090	355	2	1.1	331	0.126	0.105	0.087	0	1	23	18	44	364	59.3	54.2	14.3			
ORA	NGE COUNTY																				
16	North Orange County	3177	356	3	1.8	351	0.118	0.096	0.071	0	0	1	2	4	333	82.5	61.6	20.1			
17	ک ع	3176	358	3	2.0	331	0.104	0.088	0.060	0	0	1	1	1	364	73.3	61.1	17.5			
18		3195	364	2	2.1	353	0.097	0.076	0.060	0	0	1	1	2	364	70.0	56.0	11.3	348	9.5	2.1
19	Saddleback Valley	3812	362	1	0.9	353	0.117	0.082	0.069	0	0	2	2	2							
RIVI	ERSIDE COUNTY																				
22	Norco/Corona	4155																			
23	Metropolitan Riverside County 1	4144	364	3	1.8	341	0.128	0.098	0.092	0	1	47	31	78	333	64.5	57.0	16.8	349	17.6	4.6
23		4146	355	3	1.7										361	60.8	51.5	17.2			
23		4165	360	3	1.9	324	0.121	0.094	0.090	0	0	38	22	63	365	62.2	50.3	15.1			
24		4149				343	0.122	0.107	0.099	0	0	50	42	82							
25		4158	363	1	0.6	355	0.107	0.091	0.086	0	0	24	15	42	363	51.2	40.6	10.1			
29	2 1	4164				328	0.124	0.107	0.099	0	0	60	31	84	365	65.7	53.2	11.6			
30		4137 4157	365	2	0.5	361	0.114	0.099	0.092	0	0	52	23	83	365	45.7	39.0	8.5			
30	Coachella Valley 2**	4157				348	0.100	0.087	0.084	0	0	19	7	47							
SAN	BERNARDINO COUNTY																				
32		5175	353	2	1.8	349	0.131	0.097	0.090	0	1	39	31	59	365	78.9	58.0	20.4			
33		5817																			
34		5197	359	3	1.4	350	0.143	0.100	0.094	0	2	33	28	55	363	71.9	64.8	23.1	330*	6.6	1.6
34	2	5203	326	2	1.7	354	0.129	0.105	0.095	0	1	40	27	63	365	69.2	56.6	18.8			
35		5204				363	0.128	0.112	0.097	0	1	61	43	86							
37		5181				364	0.142	0.123	0.109	0	6	74	52	101							
38	East San Bernardino Mountains	5818																			
	DISTRICT MAXIMUM			6	3.6		0.143	0.123	0.109	0	6	74	52	101		97.0	72.5	26.2		40.0	6.0
	SOUTH COAST AIR BASIN			6	3.6		0.143	0.123	0.109	0	7	102	79	131		97.0	72.5	26.2		40.0	6.0
	D · D MIII · C · I			1 0	D D.II.						2.0 3	-									

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

• In 2010, the State and Federal Ambient Air Quality Standards were met for the gaseous pollutants CO, NO2 and SO2 at all District regular monitoring sites, listed above.

- a) The federal 8-hour standard is 8-hour average CO > 9 ppm and state 8-hour standard is 8-hour average CO > 9.0 ppm. The federal and state 1-hour standards are 35 ppm and 20 ppm.
- b) The NO2 federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO<sub>2</sub> > 0.0534 ppm. The state 1-hour and annual standards are 0.18 ppm and 0.030 ppm.
- c) The federal SO2 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average  $SO_2 > 0.25$  ppm and 24-hour average  $SO_2 > 0.04$  ppm.
- Revised/New Standards in 2010

\*\* Salton Sea Air Basin

- -- U.S. EPA established the new NO2 1-hour federal standard of 100 ppb (0.100 ppm), effective April 7, 2010.
- -- U.S. EPA revised the SO2 federal standard by establishing the new 1-hour standard of 75 ppb (0.075 ppm) and revoking the existing annual (0.03 ppm) and 24-hour (0.14 ppm) standards, effective August 2, 2010.



			Suspen	ded Particul	ates PM10 <sup>d)</sup>			Fine	e Particulates	PM2.5 <sup>e)</sup>		P	articulates T	SP f)	Le	ad <sup>f)</sup>	Su	ılfate <sup>f)</sup>
2010  Source/Receptor Area No. Location	Station No.	No. Days of Data	Max. Conc. in μg/m <sup>3</sup> 24-hour		Samples ag Standards  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 Fzederal Std > 35 µg/m <sup>3</sup> 24-hour	Annual Average Conc. (AAM) µg/m <sup>3</sup>	No. Days of Data <sup>c)</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
LOS ANGELES COUNTY 1 Central LA 2 Northwest Coastal LA County 3 Southwest Coastal LA County 4 South Coastal LA County 1 4 South Coastal LA County 2	087 091 820 072 077	56  55 58 59	42  37 44 76	0  0 0 0	0  0 0 2(3.4%)	27.1  20.6 22.0 27.3	335   338 351	39.2  35.0 33.7	27.1   28.3 26.5	2(0.6%)   0 0	11.9   10.5 10.4	53 59 55 60 57	105 82 85 129 130	53.3 40.8 36.7 45.5 50.8	0.02  0.01 0.01 0.01	0.01  0.01 0.01 0.01	9.1 7.5 9.7 11.8 12.2	0 0 0 0
6 West San Fernando Valley 7 East San Fernando Valley 8 West San Gabriel Valley 9 East San Gabriel Valley 1 9 East San Gabriel Valley 2	074 069 088 060 591	55  55 	51  70 	0  0 	1(1.8%)  5(9.1%)	29.6  29.8 	100 322 97 93 	40.7 43.7 35.2 44.4	30.4 31.8 24.0 35.4	1(1.0%) 4(1.2%) 0 1(1.1%)	10.2 12.5 10.2 10.9	 58 53 	 58 136	36.4 58.2	   	   	 7.7 6.4 	 0 0
<ul> <li>10 Pomona/Walnut Valley</li> <li>11 South San Gabriel Valley</li> <li>12 South Central LA County</li> <li>13 Santa Clarita Valley</li> </ul>	075 085 112 090	   57	   40	   0	   0	   21.0	 117 111 	34.9 38.2 	32.0 31.8	 0 1(0.9%) 	12.5 12.5 	 59 58 	 265 94 	86.1 49.2 	0.02 0.01	0.01 0.01 	 8.5 7.8 	0 0 
ORANGE COUNTY  16 North Orange County  17 Central Orange County  18 North Coastal Orange County  19 Saddleback Valley	3177 3176 3195 3812	57  58	 43  34	0  0	 0  0	22.4  18.1	331  116	31.7  19.9	25.2  17.3	0  0	10.2  8.0	  	  	  	  	  	  	  
RIVERSIDE COUNTY  22 Norco/Corona  23 Metropolitan Riverside County 1  23 Metropolitan Riverside County 2  23 Mira Loma  24 Perris Valley  25 Lake Elsinore  29 Banning Airport  30 Coachella Valley 1**	4155 4144 4146 4165 4149 4158 4164 4137	61 122  60 61  60 61	50 75  89 51  55 37	0 0  0 0	0 7(5.7%)  25(41.7%) 1(1.6%)  1(1.7%) 0	27.2 32.8  42.3 28.0  21.8 18.7	351 115 340   111	46.5 43.7 54.2 	32.0 27.3 36.1  12.6	4(1.1%) 2(1.7%) 8(2.4%)  0	13.2 11.0 15.2 	 60 59   	131 88  	64.3 45.0	 0.01 0.01  	0.01 0.01  	6.7 5.0 	 0 0   
30 Coachella Valley 2**  SAN BERNARDINO COUNTY  32 Northwest San Bernardino Valley	4157	119	107	0	6(5%)	29.3	1112	16.0	12.0	0	6.8	  59	  86	46.7	0.01	0.01	10.1	
33 Southwest San Bernardino Valley 34 Central San Bernardino Valley 1 34 Central San Bernardino Valley 2 35 East San Bernardino Valley 2 37 Central San Bernardino Mountains 38 East San Bernardino Mountains	5173 5817 5197 5203 5204 5181 5818	53 59 58 57	63 57 39	0 0 0 0 0	3(5%) 9(17%) 3(5.1%) 1(1.7%) 0	31.8 33.9 32.4 25.8 18.9	112 112 119   53	46.1 42.6 39.3  35.4	31.2 30.8 29.7  27.5	1(0.9%) 2(1.8%) 2(1.7%) 	13.0 12.0 11.1  8.4	61 60  	142 106  	73.3 57.7 	0.01   0.01  	0.01   0.01  	6.3	0 0 0  
DISTRICT MAXIMUM SOUTH COAST AIR BASIN ** Solton See Air Poein	ug/m³ Mia		107 89	0	25 34	42.3 42.3		54.2 54.2 Arithmetic	36.1 36.1	8	15.2 15.2	not mon	265 265	86.1 86.1	0.02	0.01 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/m³) was revoked in 2006.

State standard is annual average (AAM)  $> 20 \,\mu\text{g/m}^3$ . 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)  $> 15.0 \,\mu\text{g/m}^3$ . State standard is annual average (AAM)  $> 12.0 \,\mu\text{g/m}^3$ .

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.

Printed on Recycled Paper

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 <a href="http://www.arb.ca.gov/research/aaqs/aaqs2.pdf">http://www.arb.ca.gov/research/aaqs/aaqs2.pdf</a>.

Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD <a href="http://www.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx">http://www.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx</a> or at <a href="http://www.aqmd.gov/map/MapAQMD2.pdf">http://www.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx</a> or at <a href="http://www.aqmd.gov/map/MapAQMD2.pdf">http://www.aqmd.gov/map/MapAQMD2.pdf</a>. A map is also available free of charge from the AQMD Public Information Center at 1-800-CUT-SMOG.

2011		Ca Mon	rbon oxide <sup>a)</sup>					Ozone						Nitroge	n Dioxide	b)	Su	lfur Dio	xide <sup>c)</sup>
<b>2011</b>									No. Day	s Standard I	Exceeded	=							
	Ct-ti	No. Days	Max Conc. in	No. Days	Max. Conc. in	Max. Conc. in	Fourth High Conc.	Health Advisory ≥ 0.15	Old Federal > 0.124	Current Federal > 0.075	Current State > 0.09	Current State > 0.070	No. Days	Max Conc. in	98 <sup>th</sup> Percentile Conc.	Annual Average <u>AAM</u>	No. Days	Max. Conc. in	99 <sup>th</sup> Percentile Conc.
Source/Receptor Area No. Location	Station No.	of Data	ppm 8-hour	of Data	ppm 1-hour	ppm 8-hour	ppm 8-hour	ppm 1-hour	ppm 1-hour	ppm 8-hour	ppm 1-hour	ppm 8-hour	of Data	ppb 1-hour	ppb 1-hour	Conc. ppb	of Data	ppb 1-hour	ppb 1-hour
LOS ANGELES COUNTY																			
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	254		260		0.062	0.057					0	250		74.0	21.2	250	42.2	
4 South Coastal LA County 3	033	354	3.3	360	0.074	0.063	0.057	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 9 East San Gabriel Valley 1	088 060	365 365	2.2 1.4	365 365	0.107 0.111	0.084 0.092	0.077 0.082	0	0	5 12	5 13	13 19	359 356	87.3 79.5	72.8 65.1	20.3 19.0			
9 East San Gabriel Valley 1 9 East San Gabriel Valley 2	591	362	1.4	362	0.111	0.092	0.082	0	4	30	35	40	361	79.3 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	073	365	2.4	362	0.119	0.096	0.061	0	0	0	13	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			
		303	0.0	303	0.111	0.122	0.101	V	J	50	31	32	300	00.1	10.0	13.3			
ORANGE COUNTY  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	365	0.093	0.074	0.069	0	0	0	0	1	365	73.8	60.8	16.8			
18 North Coastal Orange County	3195	344	2.2	360	0.088	0.072	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							1.0
RIVERSIDE COUNTY		303	0.0	303	0.071	0.005	0.071	0	· ·		U	<u> </u>							
22 Norco/Corona	4155																		
23 Metropolitan Riverside County 1	4144	365	1.4	365	0.128	0.115	0.106	0	1	67	52	92	359	63.3	56.5	16.6	365	51.3	12.5
23 Metropolitan Riverside County 2	4146	365	1.5		0.120	0.113	0.100						364	57.1	50.4	16.9		J1.J	12.5
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							
SAN BERNARDINO COUNTY																			
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																		
DISTRICT MAXIMUM			4.7		0.160	0.136	0.113	1	8	84	64	103		109.6	74.0	24.6		51.3	24.7
SOUTH COAST AIR BASIN			4.7		0.160	0.136	0.113	1	16	106	90	125		109.6	74.0	24.6		51.3	24.7
nom Dorta Day Millian marta of air by	,		amb Doute I	D.111	n manta afair	her riolismo		\	al Amithmaat		- n	allutont not							

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

c) - The federal  $SO_2$  1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average  $SO_2 > 0.25$  ppm (250 ppb) and 24-hour average  $SO_2 > 0.04$  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 <a href="http://www.aqmd.gov/aqmp/2012aqmp/DraftFinal/appII.pdf">http://www.aqmd.gov/aqmp/2012aqmp/DraftFinal/appII.pdf</a>. Maps showing the source/receptor area boundaries can be accessed via the Internet by entering your address in the AQMD <a href="http://www.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx">http://www.aqmd.gov/webappl/gisaqi2/VEMap3D.aspx</a> or at <a href="http://www.aqmd.gov/map/MapAOMD2.pdf">http://www.aqmd.gov/map/MapAOMD2.pdf</a>. 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.

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).

		S	Suspende	l Particul	lates PM10	0 <sup>d)</sup>		Fine l	Particulat	es PM2.5 f)		Pa	rticulate	s TSP		Lead h)		PM10	Sulfate <sup>i)</sup>
2011 Source/Receptor Area	Station	No. Days of	Max. Conc. in µg/m <sup>3</sup>		Samples g Standards State > 50 µg/m <sup>3</sup>	Annual. Average Conc. e) (AAM)	No. Days of	Max. Conc. in μg/m <sup>3</sup>	98 <sup>th</sup> Percentile Conc. in µg/m <sup>3</sup>	No. (%) Samples Exceeding Federal Std > 35 µg/m <sup>3</sup>	Annual. Average Conc. (AAM)	No. Days of	Max. Conc. in µg/m <sup>3</sup>	Annual. Average Conc. (AAM)	Max. Monthly Average Conc.	Max. 3-Months Rolling Averages	Max. Quarterly Average Conc.	No. Days of	Max. Conc. in μg/m <sup>3</sup>
No. Location	No.	Data	24-hour	24-hour	24-hour	$\mu g/m^3$	Data	24-hour	24-hour	24-hour	$\mu g/m^3$	Data	24-hour	μg/m <sup>3</sup>	$\mu g/m^3$	μg/m <sup>3</sup>	$\mu g/m^3$	Data	24-hour
LOS ANGELES COUNTY						P-8					P-8			P-8	J-8	P-8	P-8		
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 g)	26.9 <sup>g)</sup>	$1(0.8\%)^{g}$	11.4 <sup>g)</sup>	57	154	72.5				60	6.6
9 East San Gabriel Valley 2	591				9(1370)	J2.1 													
10 Pomona/Walnut Valley	075														K				
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	0.011	0.010	0.010		
13 Santa Clarita Valley	090	58	45	0	0	20.8									0.014	0.010		58	6.1
	0,0	50	43	0	U	20.6									1			56	0.1
ORANGE COUNTY	3177																		
<ul><li>North Orange County</li><li>Central Orange County</li></ul>	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	3176				2(370)	24.0		39.2	20.1	2(0.076)	11.0								
19 Saddleback Valley	3812	61	48	0	0	19.2	110	33.4	28.8	0	8.6							61	4.8
	3012	01	40	U	U	19.2	110	33.4	26.6	U	0.0							01	4.0
RIVERSIDE COUNTY 22 Norco/Corona	4155	59	60	0	2(20/)	27.6												56	5.1
23 Metropolitan Riverside County 1	4133	112	82	0	2(3%) 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	4144				14(1370)	33.1	112	51.6	28.0	2(1.8%)	11.8	59	83	43.8	0.007	0.007	0.007		J.1 
23 Mira Loma	4165	59	79	0	25(42%)	41.3	343	56.3	36.6	8(3%)	15.3			43.0	0.007	0.000	0.000	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 g)	42 g)	0g)	0 g)	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 g)	3(3%)g)	28.5 g)				-								-	
	4157	1190	1000	00/	3(3%)	28.30	111	35.4	15.6	0	7.2							110	5.7
SAN BERNARDINO COUNTY																			
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		121					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		0.007		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 38 East San Bernardino Mountains	5181 5818	59	43	0	0	19.0		20.7	20.6		0.5							57	4.0
	2010						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
** Colton Coo Air Dogin	, 3	Mionoo	1	ia matan af			A A 3	M = A mm	1 A mithematic	M			Dallutant n		1				

<sup>\*\*</sup> 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/m³, at Mira Loma (155 µg/m³ is needed to exceed the PM10 standard).
- e) Federal annual PM10 standard (AAM > 50 μg/m³) was revoked in 2006. State standard is annual average (AAM) > 20 μg/m³.
- 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/m³, at Mira Loma. Federal annual PM2.5 standard is annual average (AAM) > 15.0 µg/m³. State standard is annual average (AAM) > 12.0 µg/m³.
- 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/m³); and PM2.5 (FRM) on July 5 at Station 060 (94.6 µg/m³). Also, the following high PM10 FEM data were excluded: July 3 (396 and 344 µg/m³) and August 28 (265 and 375 µg/m³), both dates recorded at Stations 4137 and 4157, respectively.
- h) Federal lead standard is 3-months rolling average  $> 0.15 \ \mu g/m^3$ ; state standard is monthly average  $\ge 1.5 \ \mu g/m^3$ . 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  $0.51 \ \mu g/m^3$  and  $0.46 \ \mu g/m^3$ , respectively.
- i) State sulfate standard is 24-hour  $\geq 25 \,\mu\text{g/m}^3$ . There is no federal standard for sulfate.

