

Localized Impacts. CO concentrations in 2016 are expected to be lower than existing conditions due to stringent State and federal mandates for lowering vehicle emissions. Although traffic volumes would be higher in the future both without and with the implementation of the proposed project, CO emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems, as well as from normal turnover in the vehicle fleet. Accordingly, increases in traffic volumes are expected to be offset by increases in cleaner-running cars as a percentage of the entire vehicle fleet on the road.

TABLE 4.2-7: DAILY OPERATIONS EMISSIONS						
Emission Source	Pounds per Day					
	VOC	NO_x	CO	SO_x	PM_{2.5}	PM₁₀
Proposed Project /a/						
Mobile Sources	136	116	881	<1	46	243
Area Sources	<1	12	10	1	<1	<1
<i>Total Emissions</i>	136	128	891	1	47	243
Existing Land Uses /b/						
Mobile Sources	57	53	404	<1	22	112
Area Sources	<1	5	4	<1	<1	<1
<i>Total Emissions</i>	57	58	408	<1	22	112
Net Emissions	79	70	465	<1	25	131
SCAQMD Threshold	55	55	550	150	55	150
Exceed Threshold?	Yes	Yes	No	No	No	No
<small>/a/ Proposed project land use sources include emissions associated with a 12,000-student junior college and 163 employees at the warehouse land use on the west side of the project site. /b/ Existing land use sources include a 4,056-student junior college and 640,400-squarefoot warehouse. SOURCE: TAHA, 2009.</small>						

The State one- and eight-hour CO standards may potentially be exceeded at congested intersections with high traffic volumes. An exceedance of the State CO standards at an intersection is referred to as a CO hotspot. The SCAQMD recommends a CO hotspot evaluation of potential localized CO impacts when V/C ratios are increased by two percent at intersections with a LOS of D or worse. SCAQMD also recommends a CO hotspot evaluation when an intersection decreases in LOS by one level beginning when LOS changes from C to D.

Based on the traffic study, the selected intersections are as follows:

- Alameda Street/Firestone Boulevard – PM Peak Hour
- Santa Fe Avenue/Firestone Boulevard – AM and PM Peak Hour
- Long Beach Boulevard/Firestone Boulevard – AM and PM Peak Hour
- State Street/Firestone Boulevard – PM Peak Hour
- Alameda Street/Southern Avenue-92nd Street – PM Peak Hour

The USEPA CAL3QHC micro-scale dispersion model was used to calculate CO concentrations for 2016 conditions. CO concentrations at the analyzed intersections are shown in **Table 4.2-8**. One-hour CO concentrations under project conditions would range from approximately 6 to 7 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations under project conditions would range from