

**TABLE???**  
**CONSTRUCTION EMISSIONS**  
**(POUNDS PER DAY)**

Construction	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM10	PM2.5
Maximum Daily Emissions	7	56	78	<1	12	5
SCAQMD Regional Threshold	75	100	550	150	150	55
<b>Significant?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

VOC: volatile organic compound; NO<sub>x</sub>: nitrogen oxides; CO: carbon monoxide; SO<sub>x</sub>: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less.

Note: totals may not add due to rounding.

Source: SCAQMD 2015a (thresholds). CalEEMod outputs are provided in Appendix **D**.

**Operational Emissions**

The operational emissions presented in Table **XX** show the mobile operational emissions from the “With Project” scenario emissions, the “Without Project” scenario emissions, and the net operational emissions resulting in 2035. The existing roadway LOS for the year 2035 would likely be LOS F, since the existing roadway LOS is LOS F. The future “With Project” LOS for 2035 would be LOS D. This improvement in LOS from increased roadway capacity from two lanes to four lanes would allow for increased average speeds. The existing miles per hour (mph) for Limonite Avenue is 15 mph. With the addition of two lanes, traffic would move five mph faster than existing speed, to 20 mph on average with the Project. This increase in speed would reduce emission rates. This emission reduction is reflected in the negative net operational emissions presented in Table **XX** for VOC, NO<sub>x</sub>, PM10, and PM2.5. As shown in Table **XX**, the net operational emissions would be substantially less than the SCAQMD’s operational thresholds for all criteria pollutants. Therefore, the Project’s operational impact on regional emissions would be less than significant, and no additional mitigation is required.

**TABLE XX**  
**PEAK DAILY OPERATIONAL EMISSIONS**

Source	Emissions (lbs./day)				
	VOC	NO <sub>x</sub>	CO	PM10	PM2.5
“With Project” 2035 Project Emissions	0.72	2.96	14.42	0.05	0.05
“Without Project” 2035 Project Emissions	0.88	3.99	14.23	0.06	0.06
<b>Net Operational Emissions</b>	-0.16	-1.04	0.19	-0.01	-0.01
<i>SCAQMD Significance Thresholds (Table 4)</i>	55	55	550	150	55
<b>Significant Impact?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

lbs./day: pounds per day; VOC: volatile organic compounds; NO<sub>x</sub>: nitrogen oxides; CO: carbon monoxide; SO<sub>x</sub>: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

Note: CalEEMod model data sheets are included in Attachment A.

## GHG

Operational GHG emissions would come primarily from vehicle trips. Estimated Project operational GHG emissions are shown in Table 10. The emissions for the “With Project 2035” and “Without Project 2035” are shown, as well as the net operational emissions, assuming reduction of the “Without Project” emissions from the “With Project” emissions. As shown in Table 10, the “With Project” scenario would emit less GHG emissions than the “without Project” scenario, and therefore, the net operational emissions would be -105 MTCO<sub>2</sub>e/yr.

**TABLE 10  
ESTIMATED ANNUAL GREENHOUSE GAS  
EMISSIONS FROM PROJECT OPERATION**

Source	Emissions (MTCO <sub>2</sub> e/yr.)
With Project (2035)	1,370
Without Project (2035)	1,476
Net Operational Emissions	-105
MTCO <sub>2</sub> e/yr.: metric tons of carbon dioxide equivalent per year	
Notes:	
<ul style="list-style-type: none"> <li>• Totals may not add due to rounding variances.</li> <li>• Detailed calculations in Attachment A.</li> </ul>	

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. The SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008). Therefore, construction and operational emissions are combined by amortizing the construction emissions over an assumed 30-year project lifetime and adding the annualized construction emissions to the annual operational emissions. This combination is shown in Table 11 using the Project emissions. As shown in Table 11, emissions would be “negative” for the “With Project” scenario. The SCAQMD has proposed, but not adopted, a threshold of 10,000 MTCO<sub>2</sub>e per year for industrial projects. As shown, the estimated GHG emissions from the Project would be substantially less than this suggested threshold. The impact would be less than significant and no mitigation is required.

**TABLE 11  
ESTIMATED TOTAL PROJECT ANNUAL GREENHOUSE GAS EMISSIONS**

Source	Emissions (MTCO <sub>2</sub> e/yr <sup>a</sup> )
Construction Amortized	2 <sup>a</sup>
Net Operational Emissions (Table 10)	-105
<b>Total<sup>b</sup></b>	<b>-103</b>
MTCO <sub>2</sub> e/yr.: metric tons of carbon dioxide equivalent per year	
<sup>a</sup> Total derived by dividing construction emissions (see Table 9) by 30. <sup>b</sup> Total annual emissions is the sum of amortized construction emissions and operational emissions.	