

DATE: August 1, 2024
TO: Sam Kelly, EPD Solutions, Inc.
FROM: Haseeb Qureshi, Urban Crossroads, Inc.
JOB NO: 15382-09 RTC

MURRIETA ROAD WAREHOUSE, AIR QUALITY, HEALTH RISK, ENERGY AND GREENHOUSE GAS ASSESSMENT RESPONSE TO COMMENTS

Urban Crossroads, Inc. is pleased to provide the following Air Quality, Health Risk, Energy and Greenhouse Gas Assessment Response to Comments for Murrieta Road Warehouse development, which is located east of Geary Street, south of Ethanac Road, and west of Murrieta Road in the City of Menifee. A copy of the Golden State Environmental Justice comments is provided in Attachment A.

GOLDEN STATE ENVIRONMENTAL JUSTICE LETTER

COMMENT #1

Unsubstantiated Changes to Architectural Coating Emission Factors

Review of the CalEEMod output files demonstrates that the “15382 Murrieta Road Warehouse Construction” model includes changes to the default construction architectural coating emission factors (see excerpt below) (Appendix B, pp. 153).

Screen	Justification
Construction: Construction Phases	Construction schedule based on data provided by the Project applicant.
Construction: Off-Road Equipment	Crawler tractors used during site preparation and grading in lieu of tractors/loaders/backhoes in order to account for fugitive dust emissions. All equipment is assumed to operate for 8 hours per day.
Construction: Trips and VMT	Vendor trips assigned to site preparation, grading, building construction, and paving phases based on the duration of each phase.
Construction: Architectural Coatings	SCAQMD Rule 1113

As previously mentioned, the CalEEMod User’s Guide requires any changes to model defaults be justified.¹⁰ As stated in the “User Changes to Default Data” table, the justification provided for these changes is:

“SCAQMD Rule 1113” (Appendix B, pp. 153).

The DEIR incorporates the Plan, Program or Policy (“PPP”) AQ-2, which states:

“PPP AQ-2: Rule 1113. The Project is required to comply with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only “Low-Volatile Organic Compounds” paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used” (p. 13).

The model's reductions to the architectural coating emission factors are unsubstantiated for two reasons.

First, we cannot verify the accuracy of the revised architectural coating emission factors based on the South Coast Air Quality Management District ("SCAQMD") Rule 1113 alone. The SCAQMD Rule 1113 Table of Standards provides the required volatile organic compound ("VOC") limits (grams of VOC liter of coating) for 57 different coating categories.¹¹ The VOC limits for each coating varies from a minimum value of 50 g/L to a maximum value of 730 g/L. As such, we cannot verify that SCAQMD Rule 1113 substantiates reductions to the default coating values without more information regarding what category of coating will be used. As the DEIR fails to explicitly require the use of a specific type of coating which would adhere to a specific VOC limit, we are unable to verify the model's revised coating emission factors.

Second, as previously discussed, the output files for CalEEMod 2022.1 do not present the numeric changes to any model defaults. Upon further review of the output files, Table 5.5 contains the only mention of architectural coatings (see excerpt below) (Appendix B, pp. 160):

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	456,516	152,172	18,757

Table 5.5 only provides the *square footage* of area to be coated. Since the output files fail to demonstrate the architectural coating *emission factors* that the model relies on, we cannot verify that the values included in the model are accurate. As previously stated, the DEIR should have provided access to the model's ".JSON" output files, which allow third parties to review the model's revised input parameters. CalEEMod uses the architectural coating emission factors to calculate the Project's reactive VOC emissions. By including unsubstantiated reductions to the default architectural coating emission factors, the model may underestimate the Project's construction-related VOC emissions and should not be relied upon to determine Project significance.

RESPONSE #1

While the limits outlined in Rule 1113 do vary, the architectural coatings that would commonly be used as part of construction for this type of project would fall into the building envelope coatings, flat/nonflat coatings, floor coatings, concrete surface retarder, roof coatings, and "default" coating categories, all of which have a limit of 50 g/L. As such, the analysis assumed a VOC content of 50 g/L for interior and exterior architectural coatings for Project construction.

COMMENT #2

Underestimated Saturday and Sunday Operational Vehicle Trip Rates

According to the DEIR, the proposed Project is expected to generate 1,135 daily operational vehicle trips (see excerpt below) (p. 5.12-8, Table 5.12-3).

Table 5.12-2: Proposed Project Trip Generation

Land Use	Units	AM Peak Hour			PM Peak Hour					
		Daily	In	Out	Total	In	Out	Total		
Trip Rates										
TUMF Fulfillment Center Rates ¹	TSF	2.129	0.094	0.028	0.122	0.046	0.119	0.165		
Passenger Vehicles	TSF	1.750	0.079	0.024	0.103	0.040	0.104	0.144		
2-4 Axle Trucks	TSF	0.162	0.006	0.002	0.008	0.003	0.008	0.011		
5-Axle Trucks	TSF	0.217	0.008	0.003	0.011	0.003	0.007	0.010		
Total Vehicle Trip Generation										
Project Warehouse	533.252 TSF	1,135	50	15	65	25	63	88		
Vehicle Mix¹	% Daily	% AM	% PM							
Passenger Vehicles	82.20%	84.40%	87.30%	933	42	13	55	22	55	77
2-Axle Trucks	1.30%	1.100%	1.10%	15	1	0	1	0	0	1
3-Axle Trucks	2.50%	2.20%	2.20%	28	1	0	1	1	1	2
4-Axle Trucks	3.80%	3.30%	3.30%	43	2	0	2	1	2	3
5+-Axle Trucks	10.20%	9.00%	6.10%	116	5	1	6	2	4	5
	100.00%	100.00%	100.00%	1,135	50	15	65	25	63	88

TSF = Thousand Square Feet

¹ Trip rates and truck percentages from Exhibit 6 of the TUMF High-Cube Warehouse Trip Generation Study, January 29, 2019. 2, 3 and 4 axle trucks were split as follows: 50% 4-axle, 33.3% 3-axle, and 16.7% 2-axle.

The Project’s models should accurately reflect the above-mentioned operational daily vehicle trip rates. Review of the CalEEMod output files demonstrates that the “15382 Murrietta Road Warehouse Ops” model only includes a total of approximately 91 Saturday¹⁴ and 30 Sunday¹⁵ vehicle trips (see excerpt below) (Appendix B, pp. 196, 197, 235; Appendix F, pp. 183, 145).

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday
Unrefrigerated Warehouse-No Rail	933	75.2	29.9
User Defined Industrial	202	16.0	0.53
Parking Lot	0.00	0.00	0.00

The Saturday and Sunday trips are underestimated by a total of approximately 1,044 trips¹⁶ and 1,105 trips,¹⁷ respectively. As such, the trip rates input into the model are underestimated and inconsistent with the information provided by the DEIR.

CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the operational on-road vehicles.¹⁸ By including underestimated Saturday and Sunday operational vehicle trips, the model underestimates the Project’s mobile-source operational emissions and should not be relied upon to determine Project significance.

RESPONSE #2

For the Saturday/Sunday trip rates, these were calculated based on the ratio of weekday to weekend truck trips in the ITE Trip Generation Manual, 11th Edition. As such, this is based on

actual data for similar facilities, and consistent with the data published in the traffic study. This is to account for reduced operation at the facility that would occur on weekends vs. weekdays.

If you have any questions or comments, I can be reached at hqureshi@urbanxroads.com.

**ATTACHMENT A: GOLDEN STATE ENVIRONMENTAL JUSTICE
COMMENTS**