

Appendix D-1:  
AQ Memo



DOUGLASKIM+ASSOCIATES,LLC

**To: Stacie Henderson**  
**From: Douglas Kim, AICP**  
**CC:**  
**Date: February 24, 2020**  
**Re: 3003 Runyon Canyon Road Project**

This memo summarizes an assessment of construction and operations emissions from the proposed project at 3003 Runyon Canyon Road. This analysis includes the following:

- Adjusting the start of construction to July 1, 2020 with an operational year of 2021. These are conservative assumptions that would be valid if the project were to start construction later and/or begin operation after 2021.
- Haul emissions associated with export of 16,529 cubic yards of soil using haul trucks with 14 cubic yards of capacity.
- Operational emissions from a refined inventory of sources. This conservative analysis adds several assumptions to the default operational assumptions for a single-family home in the CalEEMod model. This includes an analysis of emissions from electric charging of two Tesla vehicles, a doubling of use of electricity to convey water to the site, and the use of a diesel-powered generator one hour each day.

### Construction

If the Zoning Administrator's Determination is denied, haul trucks (if required) will travel on approved truck routes designated within the City. Assuming a capacity of 14 cubic yards per haul truck, the export of 16,529 cubic yards would require 1,181 haul trips. Further, the analysis includes a conservative assumption of 25-miles to an off-site landfill. As shown in Table 1, below, construction emissions would be below the SCAQMD's recommended thresholds of significance and would therefore be considered less than significant.

Table 1  
Estimated Daily Construction Emissions - Unmitigated

Construction Phase Year	Pounds Per Day					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2020	4	45	22	<1	20	12
2021	4	19	18	<1	1	1
Maximum Regional Total	4	45	22	<1	20	12
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Maximum Localized Total	4	46	22	<1	9	6
Localized Significance Threshold	--	126	3,016	--	80	28
Exceed Threshold?	N/A	No	No	N/A	No	No
Source: DKA Planning, 2020 based on CalEEMod 2016.3.2 model runs. Localized significance thresholds (LST) analyses based on 2-acre site with 200-meter distances to receptors in Central LA County source receptor area. SCAQMD LST thresholds are established for 1, 2, and 5 acres. Reliance on the smaller threshold of 2 acres ensures that the analysis holds the Project's impacts to a threshold more stringent than would otherwise be the case.						

### Operation

While the proposed project's interior space would total 14,535 square feet (including all indoor livable space, mechanical/electrical areas, and the garage), this analysis conservatively assumed up to 16,000 square feet of floor area.<sup>1</sup> This operations analysis relies on default assumptions in the CalEEMod model for single-family homes; as such, air quality emissions from the following sources are assumed to be included in the analysis:

- Emissions from electricity use from an elevator, audio/video equipment, irrigation equipment, pool pumps, and other mechanical equipment.

However, some additional assumptions were made given the project's description, including:

- Use of a portable generator fired by diesel fuel one hour per day to convey water to water tank or other operational need.

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<sup>1</sup> While there is also 7,949 sf of covered patio area, there are no emissions from combustion of natural gas to heat or cool this space. As such, this space was not included in the analysis of area, energy, or stationary source emissions.

- Electricity demand from charging two Tesla vehicles. This assumes each Tesla requires 100 kWh to fully charge an extended range vehicle twice per week. This additional electricity demand was added to non-Title 24 electricity intensity.
- A conservative assumption that the home would consume twice the indoor and outdoor water use of an average home, as well as twice the electricity intensity to supply water to the home.
- The use of one wood-fired fireplace in the house, and a propane-fueled outdoor fireplace/pit.

As noted in Table 2, operations emissions from all on-site sources would not result in significant regional or localized emissions. Therefore, the Project's operational air quality impacts would continue to be less than significant.

Table 2  
Estimated Daily Operations Emissions - Unmitigated

Emissions Source	Pounds Per Day					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Sources	5	<1	5	<1	1	1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	<1	<1	<1	<1	<1	<1
Stationary Sources	<1	<1	1	<1	<1	<1
Net Regional Total	5	1	6	<1	1	1
Regional Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Net Localized Total	5	1	5	<1	1	1
Localized Significance Threshold	--	80	498	--	20	7
Exceed Threshold?	N/A	No	No	N/A	No	No

Source: DKA Planning 2020 based on CalEEMod 2016.3.2 model runs. LST analyses based on 2-acre site with 200-meter distances to receptors in Central LA County source receptor area. SCAQMD LST thresholds are established for 1, 2, and 5 acres. Reliance on the smaller threshold of 2 acres ensures that the analysis holds the Project's impacts to a threshold more stringent than would otherwise be the case.