

# **Addendum to the Previously Certified Harmony Grove Village Final Environmental Impact Report (PDS2024-STP-24-007)**

## **Technical Memorandum to Appendix E: Air Quality Technical Report August 2025**

This technical memorandum evaluates the Harmony Grove Village Live/Work Project (Project) modifications included in the Addendum to the Final Environmental Impact Report (FEIR) certified in February 2007 with respect to air quality. An Air Quality Technical Report dated June 2006 was included as Appendix E in the FEIR.

### Background

The Harmony Grove Village FEIR (SCH No. 2004071004) analyzed the environmental effects of the Harmony Grove Village Specific Plan (Specific Plan) development located on approximately 468 acres in an unincorporated portion of San Diego County (County) within the North County Metropolitan Subregional Plan planning area. The Harmony Grove Village Specific Plan area is bounded by the City of Escondido to the east and the City of San Marcos to the north-northwest. The Harmony Grove Village Specific Plan, as originally approved, consisted of a mixed-use rural residential village consisting of 742 residential dwelling units, 45,000 square feet (s.f.) of commercial/retail uses (consisting of 25,000 s.f. of general commercial and another 16,500 s.f. of live/work space in the Village Center and 3,500 s.f. of retail associated with equestrian facilities), open space and park and recreational uses, an on-site wastewater reclamation facility, and various equestrian facilities, including an equestrian ranch for horse boarding and lessons. The proposed development also incorporated a number of related amenities and facilities, including park and recreation areas, a fire station, and an on-site wastewater reclamation facility (including a pump station and wet weather storage). The FEIR was certified and approved by the County Board of Supervisors in January 2007 in accordance with the California Environmental Quality Act (CEQA).

The approved Harmony Grove Village Specific Plan designates two acres near the intersection of Country Club Drive and Country Living Way for up to 25,000 s.f. of office/retail use, with the caveat that the properties may instead be used for live/work units if there is not sufficient demand for retail and office uses. The Project applicant has determined that use of the property for office/retail is not economically viable and therefore wishes to develop live/work units at the Project site. The current proposal includes the development of up to 32 live/work units on the two acres currently designated for office/retail uses. The units would be developed as single-family home building types, with attached garages and separate entrances for the workspaces. Units would range from approximately 2,200 to 2,700 s.f. and would be compatible with the adjacent live/work homes completed and occupied at Harmony Grove Village. Both lots have been previously graded as part of overall Specific Plan development. Figure 1, *Site Plan*, provides the proposed site plan for the live/work units. The Project would require General Plan, Community Plan, and Specific Plan amendments with a Site Plan application to remove a Specific Plan footnote indicating that the 32 live/work units are counted within the 742 maximum residence total, and to allow individual units as condominiums on the Project site.

### Summary of Project Changes (Relevant to Air Quality)

The proposed Project changes result in a land use change for a 2.9-acre area within the Harmony Grove Village Specific Plan from 25,000 s.f. of commercial retail space to up to 32 live/work dwelling units. While this analysis conservatively assumes development of all 32 units that would be allowable under the

Specific Plan, the Tentative Map proposes a total of 27 units. This Project does not propose changes to other on- or off-site components of the Specific Plan, such as the water reclamation facility, roadway improvements, or equestrian facilities.

## Analyses

### *Construction-Related Emissions*

This Project does not propose changes to the water reclamation facility, roadway improvements, or equestrian facilities included in the Specific Plan. As such, the analysis of the construction impacts of the water reclamation facility, pump station, and equestrian facilities contained in the 2007 FEIR related to air quality would not be changed by the Project (**Impact AQ I-2** and **Impact AQ I-5**).

The 2007 FEIR concluded that criteria pollutant emissions during construction would constitute a significant but temporary impact on ambient air quality (**Impact AQ I-1**). Even with application of best management practices (BMPs) to control emissions of fugitive dust, emissions of criteria pollutants during construction would exceed the applicable significance thresholds. In addition, the 2007 FEIR found that Specific Plan construction would result in a temporary but cumulatively significant impact on air quality (**Impact AQ I-4**). The 2007 FEIR additionally concluded that due to the distance of sensitive receptors and the temporary nature of construction, odors associated with construction would not be significant.

Construction of the Project would occur in the same general locations and require the same types of activities as the previously approved commercial development analyzed in the current Project location in the 2007 FEIR. Construction emissions are anticipated to be reduced compared to what was previously analyzed due to the delay in the start of construction yielding a more modern and cleaner-burning construction equipment fleet mix than assumed in the FEIR analysis. In addition, mass grading has previously occurred on the parcels comprising the Project site; therefore, the Project would require less intensive construction activities such as fine grading, physical building construction, and application of architectural coatings. These construction activities would also be required by the previously approved commercial use and would therefore produce similar construction-related emissions and odors compared to the construction of the currently proposed live/work units. Overall, construction of the Project would not result in new or substantially increased air quality impacts compared to what was concluded in the 2007 FEIR. Nonetheless, the proposed Project would implement the following construction BMPs similar to those identified in the 2007 FEIR, as updated to reflect current construction regulations and site conditions:

- Multiple applications of water during ground disturbance in accordance with San Diego Air Pollution Control District Rule 55;
- Paving, chip sealing, or chemical stabilization of internal roadways after completion of grading;
- Use of sweepers or water trucks to remove “track-out” at any point of public street access;
- Stabilization of dirt storage piles by chemical binders, tarps, fencing, or other erosion control; and
- Reduction of idling times for construction equipment below 5 minutes in accordance with California Code of Regulations Title 13 Sections 2449(d)(3) and 2485.

### *Operational Impacts*

This Project does not propose changes to the water reclamation facility, roadway improvements, or equestrian facilities components of the Specific Plan. As such, the operational analysis of pollutant emissions and odors from the water reclamation facility, pump station, and equestrian facilities contained in the 2007 FEIR would not be affected by the Project air quality analysis.

The 2007 FEIR concluded that Specific Plan emissions would exceed applicable thresholds in the near-term (2010). Since Specific Plan emissions were primarily associated with vehicle traffic, no feasible mitigation measures were identified to reduce the emissions associated with project operations to below a level of significance in the near-term (2010) (**Impact AQ I-3**). However, because vehicular emissions were projected to decrease over time with the phase-out of older vehicles and implementation of increasingly stringent emission controls, the 2007 FEIR found that future emissions (2030) would be below the screening-level thresholds. Overall, Specific Plan operational air quality impacts were considered significant and unmitigable, and no mitigation measures were identified.

The 2007 FEIR additionally found that no exceedances of the carbon monoxide (CO) standard were predicted, and Specific Plan buildout would not cause or contribute to a violation of an air quality standard. In addition, the 2007 FEIR conducted a quantitative evaluation of the potential for risks associated with exposure to diesel particulate emissions generated by vehicles from the proposed residences and concluded that the maximum excess cancer risk associated with exposure to diesel particulate from Specific Plan-generated trips would be below the County's significance threshold. The FEIR concluded impacts to sensitive receptors would be less than significant.

Based on the trip generation rates identified in the Substantial Conformance Review Memorandum prepared by Linscott, Law & Greenspan, Engineers ([LLG] 2024), the previously approved commercial use would produce 750 average daily trips (ADT), while the currently proposed Project would produce 368 ADT, resulting in a net decrease of 382 ADT. This reduction in vehicle trips would result in reduced mobile source emissions compared to what was previously analyzed as described further below. Associated reductions in vehicle diesel particulate matter and CO emissions near sensitive receptors would also occur, and sensitive receptor impacts would remain less than significant, consistent with the determination in the 2007 FEIR.

Operational emissions were compared for the previously approved commercial land use and the currently proposed live/work units using the California Emissions Estimator Model (CalEEMod) Version 2022.1. Both modeled land uses were assumed to have an opening year of 2026. Default model assumptions were used except for the following adjustments: (1) mobile sources were based on the Substantial Conformance Review Memorandum (LLG 2024) described above and (2) area source emissions were modeled assuming no fireplaces would be installed based on the proposed architectural plans.

The modeling results for the previously approved commercial land use and the currently proposed Project's operational emissions of criteria pollutants and precursors are shown in Table 1, *Maximum Daily Operational Emissions*. The complete CalEEMod output is provided as Attachment A.

**Table 1**  
**MAXIMUM DAILY OPERATIONAL EMISSIONS**

Category	Pollutant Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Previously Approved Land Use (25,000 s.f. Commercial)</b>						
Mobile	3.0	2.3	22.1	0.1	4.7	1.2
Area	0.7	--	1.1	<0.1	<0.1	<0.1
Energy	<0.1	0.2	0.2	<0.1	<0.1	<0.1
<b>Previously Approved Land Use Maximum Daily Emissions<sup>1,2</sup></b>	<b>3.8</b>	<b>2.5</b>	<b>23.3</b>	<b>0.1</b>	<b>4.7</b>	<b>1.2</b>
<b>Currently Proposed Land Use (32 Live/Work Units)</b>						
Mobile	1.4	1.0	9.7	<0.1	2.0	0.5
Area	2.0	--	2.0	<0.1	<0.1	<0.1
Energy	<0.1	0.3	0.1	<0.1	<0.1	<0.1
<b>Currently Proposed Land Use Maximum Daily Emissions<sup>1,2</sup></b>	<b>3.5</b>	<b>1.3</b>	<b>11.8</b>	<b>&lt;0.1</b>	<b>2.0</b>	<b>0.5</b>
<b>Net Maximum Daily Emissions</b>	<b>-0.3</b>	<b>-1.2</b>	<b>-11.5</b>	<b>-0.1</b>	<b>-2.7</b>	<b>-0.7</b>

Source: CalEEMod (output data are provided in Attachment A)

<sup>1</sup> Totals may not sum due to rounding.

<sup>2</sup> Maximum daily emissions of VOC and CO would occur during summer, maximum daily emission of NO<sub>x</sub> would occur during winter, emissions of SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are not seasonally dependent.

s.f. = square feet; VOC = volatile organic compounds; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = particulate matter 10 microns or less in diameter; PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter.

As shown in Table 1, the Project's operational emissions of criteria pollutants would decrease compared to operational emissions associated with the commercial land use approved for the Project site in the 2007 FEIR. Therefore, while Specific Plan operational emission impacts were identified as significant in the FEIR, the Project would not result in an increase in operational emissions.

### Conclusion

The Project-related modifications would not result in new or substantially more severe air quality impacts compared to what was concluded in the 2007 FEIR.