

MEMORANDUM

Date: July 18, 2023

To: City of Thousand Oaks, Attn. Justine Kendall, AICP

From: Envicom Corporation, Attn. Laura Kaufman, AICP

Subj: July 18 Additional Comment Letter – Latigo Hillcrest Project EIR / Supplemental

Responses

An additional Comment Letter was received by the City on July 18, 2023, at 1:39 p.m. from the offices of Michael M. Tsai, Attorney at Law, on the day of the City Council meeting where the project will be addressed. Responses are provided below (numbering continues from the prior received letters provided in the Final EIR Section 2.2, Specific Responses, plus the Supplemental responses dated July 11, 2023):

Comment Letter 15: Michael M. Tsai Attorney at Law (for "SWMSRCC"), July 18, 2023 (327 pages)

The vast majority of comments in these letters are verbatim to Comment Letter 14 (Supplemental Responses provided in the Additional Comment Letters Memo dated July 11, 2023), which in turn were largely verbatim from Comment Letter 4 by the same author, May 22, 2023, and Comment Letter 8 by the same author dated June 1, 2023.

The following responses address several additional commenter statements and provide additional clarification, by topic. The comments are paraphrased by topic below, with the full letter provided as an attachment to this memorandum.

Comment Regarding Pallid Bats

This comment states that the Draft Environmental Impact Report (EIR) and Final EIR do not indicate sufficient details about the November 15, 2022 general biological field reconnaissance survey that is discussed in the Draft EIR. Further the comment states the tree report did not include any information pertaining to the reconnaissance survey.

Response Regarding Pallid Bats

The date of the survey of the project site, a developed, mostly paved, urban in-fill site, is provided in the Draft EIR. The survey was conducted by a staff biologist at Envicom Corporation. The Tree Survey is not required to summarize the general biological field reconnaissance survey, and based upon Envicom Corporation's expertise, further reconnaissance surveys of the urbanized site were not warranted. The Draft EIR correctly states that compliance with the Migratory Bird Treaty Act



(MBTA) is required and the EIR provides a mitigation measure (BIO-1) requiring pre-construction pallid bat surveys. The full text of BIO-1 is provided for ease of reference:

MM BIO-1 - Pre-Construction Bat Surveys

No earlier than three days prior to ground or vegetation disturbing activities, and separately three days prior to demolition activities if occurring 14 days or more after ground or vegetation disturbing activities, a City-approved qualified biologist shall inspect the outside and inside of the vacant structure for sign of roosting bats, such as presence of guano or direct observations. A report of the bat survey results shall be submitted to the City for review and approval prior to ground and/or vegetation disturbance activities. If evidence of bat roosting is observed, building demolition shall not be allowed until a qualified biologist can verify that the roost is no longer active. Separate ground or vegetation disturbing activities may commence if determined appropriate by the biologist, with or without an avoidance buffer if found necessary. If necessary, bats may be evicted and building demolished following submittal and approval of a Bat Avoidance Plan by the California Department of Fish and Wildlife (CDFW).

The earlier Supplemental Responses state that bats were not observed on site, and with the mitigation measures, the project would have no significant impact to the bat. Specifically:

Bats are addressed in the Section 4.2, Biological Resources of the Draft EIR, and in the Final EIR (Response 4-9, 10-4, 12-1). As stated in Final EIR Response 10-4, there has been no evidence of pallid bat (a species of special concern, or SSC) presence, including the Phase I ESA survey inside of the building and the biologist's field reconnaissance on November 15, 2022 wherein the site was walked and native plant and animal species present were recorded, along with a review of the exotic landscaping plants present (see Draft EIR Section 4.2, page 4.2-1). The mitigation measure is provided in an abundance of caution. It requires that the pre-construction survey occur. The measure is sates that, "[n]o earlier than three days prior to ground or vegetation disturbing activities, and separately three days prior to demolition activities if occurring 14 days or more after ground or vegetation disturbing activities." Also as stated in the mitigation measure, the CDFW approves Bat Avoidance Plans with allow for eviction of bats from a building to be demolished and avoiding the potential for significant impacts. Such a plan would be required by the measure, and thus the measure follows CDFW procedures to assure no significant impacts. The timing of the measure is prior to ground or vegetation disturbing activities, and thus would be prior to any potential impact.

The commenter does not provide substantial evidence of significant impacts with regard to pallid bats.

Comment Regarding Air Quality Impact From Trees

The commenter states that the Final EIR response that cites the City's Protected Tree Ordinance and replacement ratios for protected tree removals is deficient. The commenter criticizes the responses as not stating the age of the replacement trees, and indicates that "new trees may not immediately, if ever, mitigate the impacts."



Response Regarding Air Quality Impact From Trees

The 3:1 replacement ratio for protected trees, the specified size of the trees to be replaced, plus the City requirement for ongoing monitoring requirements for replacement trees, there is no expectation that the protected tree replacements would provide less air quality benefit than the existing protected trees. While the specific age is not indicated, trees may grow at differing rates, and thus the size criteria is most relevant and useful, along with the replacement ratio. No significant adverse air quality impact would be anticipated from tree removals. As stated in the earlier responses, the commenter does not provide substantial evidence that removal of trees on a less than 10-acre urban infill site in a City with millions of trees, would result in a net decrease in air quality (and presumably GHG though not mentioned in the comment) benefits.

Comment Regarding Traffic

The commenter repeats earlier comments about traffic congestion and vehicle miles traveled (VMT). Regarding traffic congestion, the author asserts that the Project is anticipated to have 1,788 average daily trips [ADT], "which further indicates the project may have a significant traffic impact." Regarding VMT, the commenter states that the Draft EIR is confusing in stating that VMT impacts would be less than significant. The commenter states that the thresholds used should be those offered by the state. The commenter further states that the Final EIR responses does not address the project's potential impacts to construction and operations.

Response Regarding Traffic and VMT

The commenter does not provide substantial evidence of significant impacts with regard to traffic and VMT. The Draft EIR adheres to adopted City policy regarding the analysis of projects with regard to these issues. VMT is the primary measure for this issue under CEQA. Nevertheless, with regard to traditional concerns about traffic, the analysis discusses City policy regarding level of service, and no significant impact was found. VMT is a measure of operational traffic. Driveway turning movements were also discussed and were not found to be of concern by the City for either construction or operations. To provide some additional detail, our earlier response included the following:

The state of California has clarified that the focus of transportation analysis under CEQA, in the interest of sustainable communities, greenhouse gas (GHG) reduction, and livable cities, among other reasons, has shifted from traffic congestion to vehicle miles traveled (VMT). Senate Bill 743 required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. For land use development projects, OPR identified VMT as a new metric for transportation analysis.

Nevertheless, the issue of traffic congestion was analyzed by the City of Thousand Oaks in its evaluation of the proposed projects. That analysis showed, compliant with City policy, that all intersections potentially affected by the proposed project, would operate at recommended City Levels of Service (LOS), which are LOS C for most intersections, and LOS D for the intersection of Rancho Conejo Boulevard and Hillcrest Drive, as well as specific intersections on Thousand Oaks Boulevard. (See Draft EIR Section 4.11, Transportation. Thus, the project would comply with traffic congestion-related policy of the City of Thousand Oaks. Further, the Draft EIR Transportation Section evaluates potential geometric hazards (Subsection 4.11.3.3). The City



Department of Public Works studied the anticipated inbound and outbound traffic onto Hillcrest Drive at the proposed project driveways and found no functional concerns at either driveway. The commenter provides no substantial evidence of significant traffic congestion impacts.

The project VMT analysis was prepared based on City of Thousand Oaks Administrative Policies and Procedures, compliant with SB 743, and reviewed and approved by the City Department of Public Works. The OPR suggested thresholds are not mandatory and individual jurisdictions may establish thresholds for use within their jurisdiction. In fact, the CEQA Guidelines, Section 15064.3, suggests various approaches, including a qualitative approach. Section 15064.3(b)(4) states, "lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure." The estimated VMT for project was calculated utilizing the Ventura County Transportation Model (VCTM), a land use model that is based on the SCAG's travel demand model, as stated in Draft EIR Subsection 4.11.3.2. As shown in Table 4.11-3, the project's residential and commercial average daily VMT would be 32 percent and 18 percent less, respectively than the Citywide average. The state thresholds recommend a 15 percent decrease, and thus if those thresholds were utilized to compare to the Citywide average, the project's impact would be even further below thresholds. The commenter does not provide substantial evidence of a significant VMT impact.

ATTACHMENT:

Attachment A: Michael M. Tsai Attorney at Law (for "SWMSRCC"), July 18, 2023 (327 pages)

City of Thousand Oaks Administrative Polices and Procedures, Subject: Vehicle Miles Traveld (VMT) Analysis for CEQA Compliance, APP No: 12-14-007, June 29, 2020.



ATTACHMENT A

139 South Hudson Avenue Suite 200 Pasadena, California 91101

P: (626) 314-3821 F: (626) 389-5414 E: info@mitchtsailaw.com

VIA E-MAIL

July 18, 2023

Justine Kendall, AICP, Associate Planner Community Development Department 2100 Thousand Oaks Boulevard Thousand Oaks, CA 91362

Em: jkendall@toaks.org

Laura Maguire, City Clerk City of Thousand Oaks 2100 Thousand Oaks Boulevard Thousand Oaks, CA 91362

Em: cityclerk@toaks.org

RE: <u>City of Thousand Oaks' 2150 West Hillcrest Drive Mixed Use</u>

<u>Project</u>

Dear Justine Kendall,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("Southwest Mountain States Carpenters" or "SWMSRCC"), my Office is submitting these comments for the City of Thousand Oaks' ("City") Draft Environmental Impact Report ("DEIR"), May 2023 Final Environmental Impact Report ("FEIR"), and July 2023 Revised FEIR ("July 2023 Revised FEIR" or "Revised FEIR") for the July 18, 2023 City Council meeting for the 2150 West Hillcrest Drive Mixed Use Project ("Project" or "Latigo Hillcrest Project").

The Project proposes to construct two (2) new podium buildings that include a four-story (4) mixed-use building that contains 333 multi-family residential units, common areas, and amenities, as well as about 5,300 square feet of commercial space with alcohol consumption use above semi-subterranean parking structures, along with the removal of seventeen (17) coast live oak trees and encroachment into eleven (11) coast live oak trees in the protected zone.¹ The Project is proposed at the site of a

_

¹ Draft Environmental Impact Report Notice of Availability (Apr. 7, 2023), at p. 1.

"long-vacant welcome center property" used as the headquarters for the Amgen biotech company campus and was previously entitled by the City for a 333-unit housing development with 20% of units (i.e., 67 units) set aside as affordable.², ³

The Applicant Latigo has just completed another 142-unit luxury mixed-use Santal project at 299 E. Thousand Oaks Blvd, across the street from Tarantula Hill Brewery near Moorpark Road.⁴

The Southwest Mountain States Carpenters is a labor union representing 63,000 union carpenters in 10 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of SWMSRCC live, work, and recreate in the City and surrounding communities and would be directly affected by the Project's environmental impacts.

The Southwest Mountain States Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Mountain States Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

² See, Exhibit D, also available at: https://www.toacorn.com/articles/developer-buys-amgen-property-for-25m/, accessed 5/26/2023.

³ Per the EIR, the Project is only proposing 30 affordable units for very low income families. DEIR, 1.0-1.

⁴ *Id.*, see also **Exhibit E**, also available at: https://www.toacorn.com/articles/a-7000-apartment-boulevard-builder-may-break-record-books/, accessed 5/26/2023; and **Exhibit F** (Latigo's projects, including in Thousand Oaks), available at https://www.latigo-group.com/current-developments, accessed 5/26/2023.

Moreover, the Southwest Mountain States Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, § 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY'S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board

and the University of California, Berkeley Center for Labor Research and Education concluded:

[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California's workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.⁵

Furthermore, workforce policies have significant environmental benefits given that they improve an area's jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the "[u]se of a local state-certified apprenticeship program" can result in air pollutant reductions.⁶

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.⁷

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must

⁵ California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf.

⁶ South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, available at http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10.

⁷ California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, *available at* https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf

match those held by local residents.⁸ Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

II. THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT'S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several

⁸ Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, *available at* http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf.

construction sites have been identified as sources of community spread of COVID-19.9

Southwest Mountain States Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. SWMSRCC requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Mountain States Carpenters' experience with safe construction site work practices, SWMSRCC recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.
- There will be clear signage posted at the project site directing you through temperature screening.

⁹ Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

• Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.¹⁰

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Mountain States Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.¹¹

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities.

¹⁰ See also The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions Sites, available at https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

¹¹ For details concerning Southwest Carpenters' ICRA training program, *see* https://icrahealthcare.com/.

ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

III. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. <u>Background Concerning the California Environmental Quality Act</u>

The California Environmental Quality Act is a California statute designed to inform decision-makers and the public about the potential significant environmental effects of a project. 14 California Code of Regulations ("CEQA Guidelines"), § 15002, subd. (a)(1). 12 At its core, its purpose is to "inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made." *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.

1. Background Concerning Environmental Impact Reports

CEQA directs public agencies to avoid or reduce environmental damage, when possible, by requiring alternatives or mitigation measures. CEQA Guidelines, § 15002, subds. (a)(2)-(3); see also Berkeley Keep Jets Over the Bay Committee v. Board of Port Comes (2001) 91 Cal.App.4th 1344, 1354; Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553; Laurel Heights Improvement Assn., 47 Cal.3d at p. 400. The EIR serves to provide public agencies and the public in general with information about the effect that a proposed project is likely to have on the environment and to "identify ways that environmental damage can be avoided or significantly reduced." CEQA Guidelines, § 15002, subd. (a)(2). If the project has a significant effect on the environment, the agency may approve the project only upon finding that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns" specified in Public Resources Code section 21081. See CEQA Guidelines, § 15092, subds. (b)(2)(A)-(B).

The CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 et seq., are regulatory guidelines promulgated by the state Natural Resources Agency for the implementation of CEQA. Cal. Pub. Res. Code, § 21083. The CEQA Guidelines are given "great weight in interpreting CEQA except when . . . clearly unauthorized or erroneous." Center for Biological Diversity v. Dept. of Fish & Wildlife (2015) 62 Cal.4th 204, 217.

While the courts review an EIR using an 'abuse of discretion' standard, the reviewing court is not to *uncritically* rely on every study or analysis presented by a project proponent in support of its position. *Berkeley Jets*, 91 Cal.App.4th at p. 1355 (quoting *Laurel Heights Improvement Assn.*, 47 Cal.3d at pp. 391, 409 fn. 12) (internal quotations omitted). A clearly inadequate or unsupported study is entitled to no judicial deference. *Id.* Drawing this line and determining whether the EIR complies with CEQA's information disclosure requirements presents a question of law subject to independent review by the courts. *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 515; *Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 102, 131. As the court stated in *Berkeley Jets*, prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process. 91 Cal.App.4th at p. 1355 (internal quotations omitted).

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. Communities for a Better Environment v. Richmond (2010) 184 Cal. App. 4th 70, 80 (quoting Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal. 4th 412, 449-450). The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been considered. Id. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the project can be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made. Id.

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard under which an EIR must be prepared whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602; *Friends of "B" St.* v. *City of Hayward* (1980) 106 Cal.3d 988, 1002.

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." PRC, § 21151; see No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.App.3d 68, 75; accord Jensen v. City of Santa Rosa (2018) 23 Cal.App.5th 877, 884. Under this test, if a proposed project is not

exempt and may cause a significant effect on the environment, the lead agency must prepare an EIR. PRC, §§ 21100 (a), 21151; CEQA Guidelines, § 15064 (a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. *Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 785. In such a situation, the agency must adopt a negative declaration. PRC, § 21080, subd. (c)(1); CEQA Guidelines, §§ 15063 (b)(2), 15064(f)(3).

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." PRC, § 21068; CEQA Guidelines, § 15382. A project may have a significant effect on the environment if there is a reasonable probability that it will result in a significant impact. No Oil, Inc., 13 Cal.3d at p. 83 fn. 16; see Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. CEQA Guidelines, § 15063(b)(1); see County Sanitation Dist. No. 2 v. County of Kern (2005) 127 Cal.App.4th 1544, 1580.

This standard sets a "low threshold" for preparation of an EIR. Consolidated Irrigation Dist. v. City of Selma (2012) 204 Cal.App.4th 187, 207; Nelson v. County of Kern (2010) 190 Cal.App.4th 252; Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 928; Bowman v. City of Berkeley (2004) 122 Cal.App.4th 572, 580; Citizen Action to Serve All Students v. Thornley (1990) 222 Cal.App.3d 748, 754; Sundstrom, 202 Cal.App.3d at p. 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See Jensen, 23 Cal.App.5th at p. 886; Clews Land & Livestock v. City of San Diego (2017) 19 Cal.App.5th 161, 183; Stanislaus Audubon Society, Inc. v. County of Stanislaus (1995) 33 Cal.App.4th 144, 150; Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles (1982) 134 Cal.App.3d 491; Friends of "B" St., 106 Cal.App.3d 988; CEQA Guidelines, § 15064(f)(1).

For the reasons set forth below, the Project may have a significant effect on the environment. As such, the DEIR must be revised and recirculated to adequately account for the Project's potential environmental effects.

B. The Project May Have a Significant Effect on Biological Resources

The Project may have a significant effect on biological resources for a number of reasons.

1. Bats, Birds and Wildlife Species.

The DEIR ultimately concludes that the Project will either have no impact, a less than significant impact, or a less than significant impact after mitigation, despite acknowledging facts showing that the Project may indeed have impacts. ¹³ Specifically, with regards to the Project's potential impact on native species, the DEIR notes that the Project Site contains mature trees that could potentially be used by the Cooper's hawk (*Accipter cooperii*), a species listed on the California Department of Fish and Wildlife ("**CDFW**") Watchlist, for nesting. ¹⁴

Furthermore, the DEIR notes that "the pallid bat (*Antrozous pallidus*), a CDFW Species of Special Concern, is known to roost in vacant structures and could therefore potentially roost in the building on site.¹⁵ Yet, the DEIR merely relies on the Project's compliance with the Migratory Bird Treaty Act ("**MBTA**") to conclude that this would reduce to a level of less than significant the Project's potential impact to the Cooper's hawk and other birds that have potential to nest at the Project Site.¹⁶ However, mere reliance on a project's regulatory compliance is insufficient to conclude that the Project's potential impacts would be reduced to a level of less than significant. Even further, regarding the Project's potential impact on pallid bats, the DEIR proposes the implementation of mitigation measure BIO-1, which states that

[n]o earlier than three days prior to ground or vegetation disturbing activities, and separately three days prior to demolition if occurring 14 days or more after ground or vegetation disturbing activities, a City-approved qualified biologist shall inspect the outside and inside of the vacant structure for sign of roosting bats, . . . [and a] report of the bat survey results shall be submitted to the City for review and approval prior to ground and/or vegetation disturbance activities. If evidence of bat roosting is observed, building demolition shall not be allowed until

¹³ Draft Environmental Impact Report (Apr. 2023), pp. ES-6-7.

¹⁴ *Id.* at p. 4.2-11.

¹⁵ *Id.* at pp. 4.2-11-12.

¹⁶ *Id*.

a qualified biologist can verify that the roost is no longer active. Separate ground or vegetation disturbing activities may commence if determined appropriate by the biologist, with or without an avoidance buffer if found necessary. If necessary, bats may be evicted and building demolished following submittal and approval of a Bat Avoidance Plan by California Department of Fish and Wildlife (CDFW).¹⁷

However, the proposed mitigation measure is deficient for a number of reasons. First, the mitigation measure relies on potentially the Applicant's own qualified biologist¹⁸ inspecting the Project Site *after* the Project has already been approved. Yet, it is settled that a mitigation measure is inappropriate if all it does is require a report to be prepared and followed, or allow approval by a public agency without setting any standards. *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 195, citing to *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794 (court found the mitigation measure inadequate where it did not identify any specific mitigation measures and did not provide any standards for the community development department to adhere to in deciding whether the developer-proposed mitigation is sufficient.)

In the City's May 2023 Final Environmental Impact Report, the City responded to SWMSRCC's May 22, 2023 comment pertaining to the pallid bats, stating in Response 4-9 that

"[t]he EIR considers potential impacts to bird species, including the hawk, to be less than significant with regulatory compliance with the MBTA. However, while pallid bats are not known to be present, the EIR includes a mitigation measure to assure no potential impacts. Mitigation measure BIO-1 specifically requires a 'a [sic] City-approved qualified biologist' and also that the biologist report will be reviewed by the City. Thus, the concern about lack of City involvement is unfounded."

May 2023 FEIR, p. 2.0-6-7. [Emphasis added.]

¹⁷ *Id.*

¹⁸ While the mitigation measure indicates that the biologist should be "City-approved" – it does not mean the biologist will be provided by the City itself. In other words, just by requiring City' approval of the biologist, the City is not committing to this mitigation measure itself. Instead, it remains the Applicant's commitment to hire a biologist.

However, the City's FEIR response to SWMSRCC's comment misinterprets in part the issue at hand. As highlighted in SWMSRCC's May 22, 2023 comment letter, the first issue here pertains to the fact that the referenced qualified biologist would conduct an inspection of the Project Site after the Project has already been approved. See, SWMSRCC May 22, 2023 Comment Letter p. 11. The City should require that a survey of the Project Site be conducted prior to any adoption of the Project's Environmental Impact Report so that it can be determined whether pallid bats do in fact exist at the Project Site.

Furthermore, and as previously discussed in the SWMSRCC's prior comments, incorporated by reference herein, the mitigation measure is illusory on its face by including numerous "if"s and conditioning on the measure's compliance on the biologist's discretion. Yet, CEQA requires mitigation measures to be **specific** and fully enforceable. In the words of the court in an analogous situation:

In addition, the agency "shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures" (§ 21081.6, subd. (b))⁴ and must adopt a monitoring program to ensure that the mitigation measures are implemented (§ 21081.6, subd. (a)). The purpose of these requirements is to ensure that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded. (See § 21002.1, subd. (b).¹⁹

.... However, the circumstances here do not support a finding that the city has made a binding commitment to implement the mitigation measures or, more appropriately, that they are incorporated into the project or required as a condition of project approval in a manner that will ensure their implementation.

Federation of Hillside and Canyon Associations v. City of Los Angeles (2000) 83 Cal.App.4th 1252, 1260–1261.

However, the City fails to address this particular point in its FEIR responses to comments. *See*, FEIR, pp. 2.0-6-7.

¹⁹ See, https://wildlife.ca.gov/Conservation/Mammals/Bats/Report-Colony.

Next, and as previously raised by this office, the Draft EIR concludes that the bats may, if necessary, be evicted if a Bat Avoidance Plan has been approved. However, this does not actually mitigate the Project's potential impacts to the bats and relies on some later inspection to be taken after the Project's approval. Although the City's FEIR addresses the oversight by the City and CDFW in its response to these issues, it fails to address the fact that the use of a qualified biologist to inspect the Project Site after the Project's approval or the fact that the bats still may, if necessary, be evicted pursuant to BIO-1, suggest that impacts to the bat species would not actually be mitigated.

Neither does the EIR accurately disclose, or account for, the fact that CDFW and other agencies afford specific protections to bats, in light of their declining numbers. Indeed, California Department of Fish and Wildlife alarms about the devastating decline in bat population and calls for reports of bat colonies to ensure their protection. Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment. Fish & Game Code, § 4150; Cal. Code of Regs, § 251.1. Several bat species are considered SSC and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the City (CEQA Guidelines, § 15065). To protect this declining population of bats and mitigate impacts on bats and other species, including both individual and cumulative impacts, CDFW requires specific mitigation measures and accurate disclosures that the EIR must follow here.²¹

Therefore, mitigation measure BIO-1 is insufficient and does not adequately mitigate the Project's potential environmental impact on native species to a level of less than significant.

²⁰ See, https://wildlife.ca.gov/Conservation/Mammals/Bats/Report-Colony

²¹ See, **CDFW's March 9, 2021 comment** re impacts and mitigation measures for bats and other wildlife species, at pp. 10-12, available at: https://files.ceqanet.opr.ca.gov/267688-1/attachment/pupolhNfxVnGXGh y--

NmIniSZdkINKbP7Rd3KhoqNm5askrIKMWHWq4quU921GmM70w16t744YXzFde0; and CDFW's April 27, 2021 comment re impacts and mitigation measures for bats and other species, as well as the cumulative impacts and the need for mitigation measures to be specific and fully responsible, especially at pp. 3-7, available at https://files.ceganet.opr.ca.gov/268673-

^{1/}attachment/p3UvwNo4JJhyoApargV5SY3MXoanD96K9Zsz50CrCJvM0tHfXcsVbxp6lrsl 30NgpxKzGB5or5iXpco 0

Finally, the City further responded to the pallid bat argument in its July 2023 Revised Final EIR by pointing to a November 15, 2022 field reconnaissance survey conducted at the Project Site by a biologist to assert that there was no evidence of pallid bat presence at the Site. Revised FEIR, p. 2.0-14.

However, the EIR fails to provide any details about how the November 15, 2022 general biological field reconnaissance was conducted, aside from stating that "the site was walked and native plant and animal species present were recorded, along with a review of the exotic landscaping plants present."²² Based on this vague description of the November 15, 2022 field survey, it is unclear what the duration of the field survey was or what exactly it entailed. Various animal species could present themselves at different times of the day and may not have been readily observable at the time the field survey was conducted. Even further, one site visit alone is insufficient to conclude that no bat species were present at the Project Site.

Even further, the DEIR's Appendix D for Biological Resources only provides an Oak Tree Report prepared by TREES, etc. which was prepared on August 23, 2022 and most recently revised on March 27, 2023. However, this Tree Report does not contain information pertaining to the November 15, 2022 field survey or state with any specificity what the parameters were for this field survey.

Therefore, without further information, the City does not have sufficient evidence to conclude that there has been no evidence of pallid bat presence at the Project Site, as the City states in FEIR Response No. 10-4.

As such, the DEIR should be revised and recirculated to properly address the outstanding concerns with regards to the Project's potential impact on pallid bats.

2. Protected Trees

The Project calls for the removal of at least seventeen (17) *protected* coast live oak trees and the encroachment into the protected zone of eleven (11) coast live oak trees at the Project Site, which requires a Protected Tree Permit.²³ Thus, such a permit is granted with various conditions, namely the replacement of the removed trees at a ratio set by the Oak Tree Preservation and Protection Guidelines or payment of an inlieu fee if replacement is not possible.²⁴

²² DEIR, *supra*, at p. 4.2-1.

²³ *Id.* at p. 4.2-3, 4.2-14

²⁴ Id.

First, there are a multitude of issues associated with planting new trees. For instance, there is the strong possibility that many of the trees will not survive. As noted by Lara Roman, a U.S. Forest Service researcher who studies tree mortality, "planting a massive number of trees is not necessarily a positive investment if not enough of them survive to become mature plants."²⁵

Second, the Project may affect, albeit not replace, other protected trees. It is also possible that the replanted trees may not have the proper position to survive. The EIR's mitigation measure of tree-replacement does not account for such details; yet it should, as detailed in the CDFW's comments, including on projects' impacts on protected coast live oaks, as here.²⁶

Third, "there's also a carbon cost to tree-planting, meaning that trees have to survive years before they offset that cost. The largest environmental gain comes when trees mature, sometimes decades after they're planted." Thus, the new trees will not immediately, or maybe even ever, mitigate the impacts associated with removing the already mature trees.

Although the City's FEIR response to this comment in Response 4-10 addresses a tree replacement ratio and/or payment of an in-lieu fee as permitted by Resolution 2010-014 – Oak Tree Preservation and Protection Ordinance, and although the City again addressed this comment in its July 2023 FEIR Response to Comments No. 10-5 by asserting that the ratio of replacement for the Project is 3:1 and therefore the City is not concerned that the Project will cause a net loss of trees or project-related loss of air quality benefits from trees (July 2023 Revised FEIR, p. 2.0-15), this response remains deficient. According to the Tree Replacement Program in Appendix D of the DEIR, although it does indeed state that the seventeen (17) trees proposed for removal with "a minimum of thirty-four 24" box specimen [and] seventeen 36" box

²⁵ Bloomberg, The Darker Side of Tree-Planting Pledges (June 30 2021), available at https://www.bloomberg.com/news/features/2021-07-30/what-happens-after-pledges-to-plant-millions-of-trees?srnd=citylab.

²⁶ See, **CDFW's 2022 Comment Letter** re Tree-Replacement Ratios depending on size of the saplings, esp. pp. 5-7: https://files.ceqanet.opr.taluU5EZIxSvZxKY3isuAAdh9kOduSlaABCmDmtJeYbItff0 https://sisuaAdh9kOduSlaABCmDmtJeYbItff0 https://sisuaahadh9kOduSlaABCmDmtJeYbItff0 https://sisu

specimen Oaks as mitigation 'replacements'" (DEIR Appendix D, Oak Tree Report, p. 8), the Program fails to specify the age of the new trees to be added. Thus, as noted above, the new trees may not immediately, if ever, mitigate the impacts associated with already removing the mature trees. Therefore, Response No. 10-5 still fails to adequately address this concern and the Project's significant air quality impact resulting from the tree removal.

Therefore, should the tree removal take place, it may very well result in significant air quality impacts and biological resources impacts and the proposed new trees cannot properly mitigate the impact on air quality of removing the existing trees. The EIR should adequately disclose, and account for, the Project's biological and air quality impacts associated, *inter alia*, with the removal or adverse impact to the trees on site.

C. The Project May Have a Significant Traffic Impact

The very nature of the four-story (4) mixed-use building that will include 333 multi-family residential dwelling units and commercial retail and restaurant space²⁸ and the fact that it is proposed on a long-vacant office site, indicates that the Project may have a significant traffic impact. In fact, according to the DEIR's Transportation analysis and Traffic, Circulation and Vehicle Miles Traveled ("VMT") Study, the Project is anticipated to generate 1,788 average daily trips,²⁹ which further indicates that the Project may have a significant traffic impact.

That the Project may have significant traffic impacts is also suggested by the Applicant's own statements that its commercial component, including the restaurant/bar is anticipated to be very busy: "restaurant/bar where people working at Amgen headquarters and other nearby companies (Skyworks is just down the street) can get together at lunch and after work." ³⁰

In addition, the Project may have a significant cumulative traffic impact along with other related projects, including but not limited to the ones proposed or built by the same Applicant, such as the Santal development in Thousand Oaks, as mentioned *supra*. Yet, there is no evidence the DEIR considered a full list of related projects or

²⁸ *Id.* at p. ES-1.

²⁹ *Id.* at p 4.1-13; Appendix H, 2150 Hillcrest Drive Traffic, Circulation and Vehicle Miles Traveled (VMT) Study ("**Traffic Study**") (Mar. 23, 2023), p. 8.

³⁰ See, Exhibit D

the Santal project, in its cumulative related projects' list. DEIR, at 3.0-3—3.0-6 & Figure 3-1.

Even further, the DEIR's Transportation analysis is deficient as it fails to include any analysis on the Project's potential impacts during the *construction* or *operation* phases of the Project. Although the City acknowledges this comment in the FEIR Response to Comment No. 8-12, the actual response fails to address this issue altogether and the EIR continues to fail to address the Project's potential impacts during construction or operation.³¹ Therefore, the EIR must be revised and recirculated to account for this issue.

Even further, the DEIR confusingly and misleadingly argues the Project will have less than significant impacts under the VMT and, doing so, it (1) fails to present what the known VMT thresholds of significance are, per the OPR Guidance; and (2) relies on some administrative policies the City adopted to determine thresholds of significance for VMTs, which the DIER cites to no reference or link to ascertain. DEIR, at 4.11-8—9.

The DEIR fails to disclose the applicable and verifiable standard of determining traffic impacts under the VMT standard. As such, in addition, to achieve the legislative goals of reducing traffic impacts under SB 743, the Office of Planning and Research ("**OPR**") issued its 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA,³² which recognizes that areas outside of metropolitan planning areas, especially rural counties, have fewer options for reducing VMT. (OPR Advisory, 15-16.) As such, VMT thresholds may be best determined on a case-by-case basis. (*Ibid.*) Yet, for non-rural areas, the land use project VMT thresholds recommended by OPR for projects in metropolitan planning organization (MPO) areas are listed below:

• For residential projects, OPR recommends a project threshold of 15 percent below the existing VMT per capita, either measured as a regional VMT per capita or as city VMT per capita. The VMT for the residential metric only includes VMT generated by residents, some of which starts and ends outside the area.

³¹ FEIR, *supra*, at p. 2.0-11.

³² See, *Technical Advisory on Evaluating Transportation Impacts in CEQA* (April 2018), pp. 12-14/pdf pp. 14-16, *available at*: https://opr.ca.gov/docs/20180416-743 Technical Advisory 4.16.18.pdf

- For **office** projects, OPR recommends a project threshold of **15 percent below** the existing **regional** VMT per employee. The VMT for the office metric only includes VMT generated by workers employed in the area.
- For **retail** projects, OPR recommends a project threshold of **any net increase** in total area VMT. Another VMT per capita threshold option is total VMT per service population (total of residents and employees). (*Ibid.* at 12-14.)

In addition, according to the OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA, "projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact." ³³

In light of the foregoing thresholds of significance suggested by OPR, the Project's which is both residential and retail of high intensity, including a restaurant/bar on a now vacant office site - generated net 1,788 average daily trips clearly exceeds the threshold of net increase in total area VMT for a retail project and fails to meet the 15 percent below the existing VMT per capita threshold of significance for a residential building. Specifically, the DEIR states that "[t]he project TAZ's daily residential VMT per capita and commercial VMT per capita employee would be approximately 32% and 18% less than the City-wide averages, respectively. As such, neither the VMT per capita nor VMT per employee would exceed the Citywide baselines, and project VMT impact would be less than significant."34 However, not only do the foregoing percentages exceed the OPR fifteen (15) percent recommended threshold for residential projects, which OPR states may indicate a significant traffic impact, 35 but the DEIR completely ignores this issue by instead concluding that the VMT per employee would exceed the baselines and therefore that the Project VMT would not have a significant impact. The aforementioned analysis shows that the City's VMT analysis and finding of no significant traffic impacts is flawed and omits critical analysis and information suggesting potential traffic impacts.

Therefore, the DEIR's and its transportation analysis are misleading, deficient and flawed, and must be revised and recirculated to fully account for and mitigate the Project's individual and cumulative impacts.

³³ Office of Planning and Research ("**OPR Guidelines**"), *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Dec. 2018), p. 10/pdf p. 12, *available at* https://opr.ca.gov/docs/20190122-743 Technical Advisory.pdf (accessed on May 23, 2023.)

DEIR, supra, at p. 4.11-8.
 OPR Guidelines, supra, at p. 15.

D. The Project May Cause Significant Air Quality, Greenhouse Gas Emission, Water Quality, Noise, and Human Health and Wildlife Impacts

There is an acknowledged direct correlation between the increase in traffic impacts and an increase in their associated air quality, greenhouse gas emission ("**GHG**"), and noise impacts. See e.g., *City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 413, "it is reasonable to assume" that a project enabling physical residential development would have reasonably foreseeable indirect air and other impacts.

As stated in the Office of Planning Research's ("OPR") technical advisory in 2018:

"VMT and Greenhouse Gas Emissions Reduction. Senate Bill 32 (Pavley, 2016) requires California to reduce greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2030, and Executive Order B-16-12 provides a target of 80 percent below 1990 emissions levels for the transportation sector by 2050. The transportation sector has three major means of reducing GHG emissions: increasing vehicle efficiency, reducing fuel carbon content, and reducing the amount of vehicle travel." ³⁶

Similarly, there is an acknowledged nexus between the increase of traffic and an increase in related air quality, GHG impacts, noise, water/flooding impacts and impacts on human health and natural environment, including wildlife and waterways. As described in the 2018 OPR Technical advisory:

"VMT and Other Impacts to Health and Environment. VMT mitigation also creates substantial benefits (sometimes characterized as "co-benefits" to GHG reduction) in both in the near-term and the long-term. Beyond GHG emissions, increases in VMT also impact human health and the natural environment. Human health is impacted as increases in vehicle travel lead to more vehicle crashes, poorer air quality, increases in chronic diseases associated with reduced physical activity, and worse mental health. Increases in vehicle travel also negatively affect other road users, including pedestrians, cyclists, other motorists, and many transit users. The natural environment is impacted as higher VMT leads to more collisions with wildlife and fragments habitat. Additionally,

³⁶ Office of Planning and Research, 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Dec. 2018) at 2, available at https://opr.ca.gov/docs/20190122-743 Technical Advisory.pdf

development that leads to more vehicle travel also tends to consume **more** energy, water, and open space (including farmland and sensitive habitat). This increase in impermeable surfaces raises the flood risk and pollutant transport into waterways."³⁷

In light of the understated and flawed traffic impact findings, detailed in Section E, *supra*, the DEIR's findings about the traffic-related impacts (air quality, noise, greenhouse gas emissions, etc.) are also understated and flawed. Derivatively, the Project may have adverse impacts on human beings.

In addition, in light of the DEIR's failure to account for the reasonably foreseeable intensity of the restaurant/bar uses, which will be serving many large nearby business structures, schools, and offices as contemplated by the Applicant, the Project may also have significant energy and water impacts. While the DEIR provides that the Project will not have gas appliances for the *residences*, it is apparent that the more intensive other land uses – i.e., restaurant/bar and others – will be using gas appliances. DEIR, 4.4-6.

In addition, "the commercial spaces would be open to the public, as well as the outdoor open spaces proximate to those uses. Additional indoor amenities would be provided to the residents." DEIR, ES-2. As such, the Project may also have significant energy and water impacts, in light of its amenities being open to the public.

Further, as noted above, the cumulative list of related projects to the Project is inaccurate and omits other related projects, especially by the Project Applicant here. This also suggests that the DEIR's conclusions about no impacts on air, GHG, and other impacts are flawed and unsupported.

In sum, the Project may have traffic, air, GHG, energy, water, noise and other impacts, including impacts on human beings and natural environment and the EIR fails to account for or mitigate those.

E. The Project May Have a Cumulative Impact

For purposes of cumulative impacts analysis, CEQA mandates to consider the impacts of the past, present, and reasonably foreseeable future projects. CEQA Guidelines §§ 15063(b)(1) (prepare an EIR "if the agency determines that there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the

³⁷ *Id.* at p. 3.

project is adverse or beneficial"); 15064(h) (need to consider cumulative impacts of past, other current and "probable future" projects). Even if the Project's impacts may not be significant, its incremental effects, when added to other past, present, and probable future projects, can be cumulatively significant. CEQA Guidelines §§15065(a)(3), 15130(b)(1)(A), 15355(b).

The DEIR identifies thirteen (13) different cumulative projects within a two-mile (2) radius of the Project Site, with the closest project being just 0.8 miles away at 1875 Newbury Road, Thousand Oaks.³⁸ Yet, the DEIR asserts that

the related projects are not reasonably close to the project site to have combined impacts that would make the project's lack of effects be of concern, and none of these related projects are expected to substantially add to a cumulatively shared impact with the project ... [and thus, n]o further analysis of cumulative impacts ... [is] required in the EIR.³⁹

However, the Project, along with the thirteen (13) other related projects collectively contribute to potentially significant impacts on air quality, noise, and traffic congestion in Thousand Oaks, and collectively burden utilities and public services' ability to adequately serve the Project Site.

In addition, as mentioned above, the DEIR's related project list is manifestly incomplete; it even omits the Applicant's own very recent project (*see*, **Exhibit F**), of which the City and the Applicant clearly had notice of.

Although the City's Response No. 8-14 in the FEIR states that "[t]he Draft EIR impact analysis section for each issue area, [sic] evaluates cumulative impacts relevant to that issue" and that "[t]he projects listed in Section 3.0, Cumulative Projects, are a [sic] considered where appropriate in each analysis. . . ." (FEIR, *supra*, p. 2.0-13), the Response still fails to acknowledge that the Cumulative Projects list in the EIR leaves out various other projects.

Thus, the Project may result in a cumulative impact, and the DEIR's cumulative impact analysis, based on erroneous assumptions and omissions of all related projects, is flawed as a matter of law, making the DEIR fail as an informational document.

³⁸ DEIR, *supra*, at p. 3.0-3.

³⁹ *Id.* at p. 4.13-12.

F. The Project May Have a Significant Hazards Impact

The Project may have a significant hazards impact. The Project proposes to demolish an existing office building that is estimated to have been constructed between 1978 and 1985. 40 The DEIR even admits that demolition of the existing structure at the Project Site could cause a release of hazardous materials, such as asbestos and lead, into the atmosphere. 41 The DEIR further asserts that in the Phase I Environmental Site Assessment ("ESA") that was prepared for the Project, no hazardous materials such as asbestos, LBP, lead, or mercury, among other things, were detected, and indicates that this conclusion was reached through an interior observation through interviews and records review. 42

Yet, there is ample scientific data that buildings built before the 1980s used asbestos and lead. (See **Exhibit G**.)⁴³

The DEIR then goes on to state that "[w]hile asbestos and [lead-based paint ("**LBP**")] bans were starting up in the 1970s and 1980s, not all asbestos materials were banned. Thus, it is assumed that the existing building on the project site could have asbestos and LBP from the original construction, which occurred between 1978 and 1985."⁴⁴

It is undisputed that both *lead* and *asbestos* are dangerous to people's health. While intact asbestos by itself may not be hazardous, damaged or disturbed asbestos may release asbestos fibers and become a health hazard.⁴⁵ Per Occupational Health and Safety Administration's ("**OSHA**") description:

What are the hazards of asbestos?

Asbestos is well recognized as a health hazard and its use is now highly regulated by both OSHA and EPA. Asbestos fibers associated with these health risks are too small to be seen with the naked eye. Breathing asbestos fibers can cause a buildup of scar-like tissue in the lungs called asbestosis

⁴⁰ Latigo Hillcrest Project Environmental Impact Report (Apr. 2023), pp. 4.4-1, 4.6-9.

⁴¹ *Id.* at p. 5.0-13.

⁴² *Id.* at p. 4.6-9.

⁴³ Also available at: https://www.mesothelioma.com/asbestos-exposure/jobsites/homes; and https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/Pages/home_test.aspx.

⁴⁴ LJ

⁴⁵ See, https://www.cpsc.gov/safety-education/safety-guides/home/asbestos-home; see also, medical conditions associated with asbestos: https://www.atsdr.cdc.gov/asbestos/health-effects asbestos.html

and result in loss of lung function that often progresses to disability and death. Asbestos also causes cancer of the lung and other diseases such as mesothelioma of the pleura which is a fatal malignant tumor of the membrane lining the cavity of the lung or stomach. Epidemiologic evidence has increasingly shown that all asbestos fiber types, including the most commonly used form of asbestos, chrysotile, causes mesothelioma in humans.

OSHA's Definition of "Asbestos" on its Official Website. 46

Similarly, lead is dangerous to people and their families. Per OSHA's report:

Lead has been poisoning workers for thousands of years. Lead can damage the central nervous system, cardiovascular system, reproductive system, hematological system, and kidneys. When absorbed into the body in high enough doses, lead can be toxic.

In addition, workers' lead exposure can harm their children's development. Short-term (acute) overexposure—as short as days—can cause acute encephalopathy, a condition affecting the brain that develops quickly into seizures, coma, and death from cardiorespiratory arrest.

Short-term occupational exposures of this type are highly unusual but not impossible. Extended, long-term (chronic) overexposure can result in severe damage to the central nervous system, particularly the brain. It can also damage the blood-forming, urinary, and reproductive systems. There is no sharp dividing line between rapidly developing acute effects of lead and chronic effects that take longer to develop.⁴⁷

OSHA also documents the adverse effects of lead on people's reproductive health:

REPRODUCTIVE RISKS

Lead is toxic to both male and female reproductive systems. Lead can alter the structure of sperm cells and there is evidence of miscarriage and stillbirth in women exposed to lead or whose partners have been exposed.

⁴⁶ See, United States Department of Labor, Asbestos, available at https://www.osha.gov/asbestos (accessed on Mar. 27, 2023.)

⁴⁷ See, OSHA Report, *Lead in Construction* (2004) p. 3, *available at* https://www.osha.gov/sites/default/files/publications/osha3142.pdf

Children born to parents who were exposed to excess lead levels are more likely to have birth defects, mental retardation, or behavioral disorders or to die during the first year of childhood.

Workers who desire medical advice about reproductive issues related to lead should contact qualified medical personnel to arrange for a job evaluation and medical followup--particularly if they are pregnant or actively seeking to have a child. Employers whose employees may be exposed to lead and who have been contacted by employees with concerns about reproductive issues must make medical examinations and consultations available.⁴⁸

For the foregoing reasons, the Project may have a significant hazard impact, including due to the disturbance of potential asbestos and lead and other chemicals as part of demolition.

The DEIR's or Phase I ESA's statements that no asbestos was discovered by interior observation lacks credence: visual observation or discussions with others cannot be conclusive proof of whether the building contains asbestos-related material.

Yet, the DEIR ultimately concludes that with regulatory compliance, no mitigation measures are required with regards to the Project's impacts pertaining to transport, use, or disposal/foreseeable upset and accident conditions. In light of the fact that the DEIR fully disclaims the existence of asbestos or other chemicals, its statement that regulatory compliance will help reduce their impacts lacks credibility as well. Simply put, asbestos removal requires delicate and detailed work ahead of demolition. Where the existence of asbestos is denied, there is no guarantee the Applicant will even comply with regulatory measures. Stated differently, the regulatory measures or compliance relied upon in the EIR is illusory and unenforceable and non-binding in light of the EIR's denial of presence of the noted chemicals on the Project site.

Thus, the EIR should be revised and recirculated to adequately account for and mitigate the potential hazards impact.

⁴⁸ *Id.* at p. 4.

IV. CONCLUSION

For the reasons set forth above, SWMSRCC respectfully requests that the City require the revision and recirculation of the Draft Environmental Impact Report pursuant to CEQA, consistent with the concerns and authority mentioned in this letter.

Sincerely,

Stephanie Papayanis

Attorneys for Southwest Mountain States Regional Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);

Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C);

April 22, 2022 Article re "Developer buys Amgen property for \$25M" (Exhibit D);

July 29, 2022 Article re "A \$7,000 apartment? Boulevard builder may break record books" (Exhibit E);

Current List of the Applicant Latigo Group's Development Projects (Exhibit F); and Article re: Asbestos Sources and Impacts (Exhibit G).



2656 29th Street, Suite 201 Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg. (949) 887-9013 mhagemann@swape.com

Paul E. Rosenfeld, PhD (310) 795-2335 prosenfeld@swape.com

March 8, 2021

Mitchell M. Tsai 155 South El Molino, Suite 104 Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai.

Soil Water Air Protection Enterprise ("SWAPE") is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas ("GHG") emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model ("CalEEMod") is a "statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects." CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.²

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.³

¹ "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

² "California Emissions Estimator Model." CAPCOA, 2017, available at: http://www.aqmd.gov/caleemod/home.

³ "CalEEMod User's Guide." CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled ("VMT") associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.⁴

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

```
"VMT<sub>d</sub> = \Sigma(Average Daily Trip Rate _i * Average Overall Trip Length _i) _n Where:
```

n = Number of land uses being modeled."5

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

```
"Emissions<sub>pollutant</sub> = VMT * EF<sub>running,pollutant</sub>

Where:

Emissions<sub>pollutant</sub> = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

EF_{running,pollutant} = emission factor for running emissions."
```

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction. In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence. The default number of construction-related worker trips is calculated by multiplying the

⁴ "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

⁵ "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

⁶ "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

⁷ "CalEEMod User's Guide." CAPCOA, November 2017, *available at*: http://www.aqmd.gov/docs/default-source/caleemod/01 user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

⁸ CalEEMod User Guide, available at: http://www.caleemod.com/, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.⁹ Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively."¹⁰ Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trip lengths are:

"[B]ased on the <u>location</u> and <u>urbanization</u> selected on the project characteristic screen. These values were <u>supplied by the air districts or use a default average for the state</u>. Each district (or county) also assigns trip lengths for urban and rural settings" (emphasis added). ¹²

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).¹³

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

⁹ "CalEEMod User's Guide." CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01 user-39-s-guide2016-3-2 15november2017.pdf?sfvrsn=4, p. 34.

¹⁰ "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

¹¹ "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

¹² "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, available at: http://www.agmd.gov/docs/default-source/caleemod/02 appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

¹³ "Appendix D Default Data Tables." CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8-miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7-miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan ("Project") located in the City of Claremont ("City"). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles. ¹⁴ In an effort to evaluate the potential for a local hire provision to reduce the Project's construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change						
Without Local Hire Provision						
Total Construction GHG Emissions (MT CO₂e)	3,623					
Amortized Construction GHG Emissions (MT CO₂e/year)	120.77					
With Local Hire Provision						
Total Construction GHG Emissions (MT CO2e)	3,024					
Amortized Construction GHG Emissions (MT CO₂e/year)	100.80					
% Decrease in Construction-related GHG Emissions	<i>17%</i>					

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project's urbanization level and location.

4

¹⁴ "Appendix D Default Data Tables." CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul Rosenfeld

M Homen

Paul E. Rosenfeld, Ph.D.

Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8	
County	Orange	19.8	14.7	
County	Placer-Lake	16.8	10.8	
County	Placer-Mountain	16.8	10.8	
County	Placer-	16.8	10.8	
County	Plumas	16.8	10.8	
County	Riverside-	16.8	10.8	
County	Riverside-	19.8	14.7	
County	Riverside-Salton	14.6	11	
County	Riverside-South	19.8	14.7	
County	Sacramento	15	10	
County	San Benito	16.8	10.8	
County	San Bernardino-	16.8	10.8	
County	San Bernardino-	19.8	14.7	
County	San Diego	16.8	10.8	
County	San Francisco	10.8	10.8	
County	San Joaquin	16.8	10.8	
County	San Luis Obispo	13	13	
County	San Mateo	10.8	10.8	
County	Santa Barbara-	8.3	8.3	
County	Santa Barbara-	8.3	8.3	
County	Santa Clara	10.8	10.8	
County	Santa Cruz	16.8	10.8	
County	Shasta	16.8	10.8	
County	Sierra	16.8	10.8	
County	Siskiyou	16.8	10.8	
County	Solano-	15	10	
County	Solano-San	16.8	10.8	
County	Sonoma-North	16.8	10.8	
County	Sonoma-San	10.8	10.8	
County	Stanislaus	16.8	10.8	
County	Sutter	16.8	10.8	
County	Tehama	16.8	10.8	
County	Trinity	16.8	10.8	
County	Tulare	16.8	10.8	
County	Tuolumne	16.8	10.8	
County	Ventura	16.8	10.8	
•	Yolo	15.8	10.8	
County				
County	Yuba	16.8	10.8	
Statewide	Statewide	16.8	10.8	

Worker Trip Length by Air Basin							
Air Basin	Rural (miles)	Urban (miles)					
Great Basin Valleys	16.8	10.8					
Lake County	16.8	10.8					
Lake Tahoe	16.8	10.8					
Mojave Desert	16.8	10.8					
Mountain Counties	16.8	10.8					
North Central Coast	17.1	12.3					
North Coast	16.8	10.8					
Northeast Plateau	16.8	10.8					
Sacramento Valley	16.8	10.8					
Salton Sea	14.6	11					
San Diego	16.8	10.8					
San Francisco Bay Area	10.8	10.8					
San Joaquin Valley	16.8	10.8					
South Central Coast	16.8	10.8					
South Coast	19.8	14.7					
Average	16.47	11.17					
Mininum	10.80	10.80					
Maximum	19.80	14.70					
Range	9.00	3.90					

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	Regional Shopping Center 56.00		1.29	56,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33

Climate Zone 9 Operational Year 2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/6/2021 1:52 PM

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/6/2021 1:52 PM

Page 3 of 44

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										МТ	/yr				
2021	0.1713	1.8242	1.1662	2.4000e- 003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 5	1,627.529 5	0.1185	0.0000	1,630.492 5
2024	4.1619	0.1335	0.2810	5.9000e- 004	0.0325	6.4700e- 003	0.0390	8.6300e- 003	6.0400e- 003	0.0147	0.0000	52.9078	52.9078	8.0200e- 003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 6	1,721.682 6	0.1294	0.0000	1,724.918 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										M	Г/уг				
2021	0.1713	1.8242	1.1662	2.4000e- 003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.529 1	1,627.529 1	0.1185	0.0000	1,630.492 1
2024	4.1619	0.1335	0.2810	5.9000e- 004	0.0325	6.4700e- 003	0.0390	8.6300e- 003	6.0400e- 003	0.0147	0.0000	52.9077	52.9077	8.0200e- 003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.682 3	1,721.682 3	0.1294	0.0000	1,724.918 3
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

Page 6 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/6/2021 1:52 PM

9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	 	0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste			i			0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/6/2021 1:52 PM

Page 9 of 44

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233	1 1 1	0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e- 004	7.5000e- 004	8.5100e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.5000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.2251	2.2251	7.0000e- 005	0.0000	2.2267
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e- 004	7.5000e- 004	8.5100e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.5000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.2251	2.2251	7.0000e- 005	0.0000	2.2267
Total	2.9000e- 003	0.0641	0.0233	2.0000e- 004	6.4100e- 003	2.1000e- 004	6.6200e- 003	1.7300e- 003	2.0000e- 004	1.9300e- 003	0.0000	19.6816	19.6816	1.2800e- 003	0.0000	19.7136

3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814
Total	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814
Total	7.7000e- 004	6.0000e- 004	6.8100e- 003	2.0000e- 005	1.9700e- 003	2.0000e- 005	1.9900e- 003	5.2000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7801	1.7801	5.0000e- 005	0.0000	1.7814

3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii				0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607
Total	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607
Total	1.6400e- 003	1.2700e- 003	0.0144	4.0000e- 005	4.1600e- 003	3.0000e- 005	4.2000e- 003	1.1100e- 003	3.0000e- 005	1.1400e- 003	0.0000	3.7579	3.7579	1.1000e- 004	0.0000	3.7607

3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 004	2.1000e- 004	2.4400e- 003	1.0000e- 005	7.7000e- 004	1.0000e- 005	7.7000e- 004	2.0000e- 004	1.0000e- 005	2.1000e- 004	0.0000	0.6679	0.6679	2.0000e- 005	0.0000	0.6684
Total	2.8000e- 004	2.1000e- 004	2.4400e- 003	1.0000e- 005	7.7000e- 004	1.0000e- 005	7.7000e- 004	2.0000e- 004	1.0000e- 005	2.1000e- 004	0.0000	0.6679	0.6679	2.0000e- 005	0.0000	0.6684

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 004	2.1000e- 004	2.4400e- 003	1.0000e- 005	7.7000e- 004	1.0000e- 005	7.7000e- 004	2.0000e- 004	1.0000e- 005	2.1000e- 004	0.0000	0.6679	0.6679	2.0000e- 005	0.0000	0.6684
Total	2.8000e- 004	2.1000e- 004	2.4400e- 003	1.0000e- 005	7.7000e- 004	1.0000e- 005	7.7000e- 004	2.0000e- 004	1.0000e- 005	2.1000e- 004	0.0000	0.6679	0.6679	2.0000e- 005	0.0000	0.6684

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e- 003	1.1192	0.2949	8.1700e- 003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e- 003	1.1192	0.2949	8.1700e- 003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.795 2	1,408.795 2	0.0530	0.0000	1,410.120 8

3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cil rioda	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864	 	0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e- 003	1.0924	0.2879	7.7400e- 003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e- 003	1.0924	0.2879	7.7400e- 003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e- 003	1.2051	0.3200	9.1400e- 003	0.3292	0.0000	1,327.336 9	1,327.336 9	0.0462	0.0000	1,328.491 6

3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968
Total	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000	 	 		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968
Total	3.7000e- 004	2.7000e- 004	3.1200e- 003	1.0000e- 005	1.0700e- 003	1.0000e- 005	1.0800e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.8963	0.8963	2.0000e- 005	0.0000	0.8968

3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
	0.0000		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706
Total	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706
Total	5.9000e- 004	4.1000e- 004	4.9200e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.4697	1.4697	4.0000e- 005	0.0000	1.4706

3.7 Architectural Coating - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
riading	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558
Total	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558
Total	0.0101	6.9900e- 003	0.0835	2.8000e- 004	0.0307	2.3000e- 004	0.0309	8.1500e- 003	2.2000e- 004	8.3700e- 003	0.0000	24.9407	24.9407	6.1000e- 004	0.0000	24.9558

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated						0.0000	0.0000	, ! ! !	0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	, ! ! !	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003	,	1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310	,	0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003	,	6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003	,	6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487	 	0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003	 	1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003	 	6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e +006	506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 36 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		, 			0.0000	0.0000	, 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	1 	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

CalEEMod Version: CalEEMod.2016.3.2 Page 37 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.4137		 			0.0000	0.0000	i i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998	 	 	 		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	1 1 1 1	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
"	585.8052	3.0183	0.0755	683.7567
	585.8052	3.0183	0.0755	683.7567

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)		51.2702	0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

CalEEMod Version: CalEEMod.2016.3.2 Page 40 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)			0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
Quality Restaurant	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

CalEEMod Version: CalEEMod.2016.3.2 Page 41 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	7/yr	
"	207.8079	12.2811	0.0000	514.8354
	207.8079	12.2811	0.0000	514.8354

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e						
Land Use	tons		MT/yr								
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834						
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513						
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464						
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430						
Hotel	27.38	5.5579	0.3285	0.0000	13.7694						
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712						
Regional Shopping Center	58.8	11.9359 0.7054		0.0000	29.5706						
Total		207.8079	12.2811	0.0000	514.8354						

Page 43 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/6/2021 1:52 PM

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e							
Land Use	tons		MT/yr									
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834							
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513							
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464							
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430							
Hotel	27.38	5.5579	0.3285	0.0000	13.7694							
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712							
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706							
Total		207.8079	12.2811	0.0000	514.8354							

9.0 Operational Offroad

ı	Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

CalEEMod Version: CalEEMod.2016.3.2 Page 44 of 44 Date: 1/6/2021 1:52 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Date: 1/6/2021 1:54 PM

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Date: 1/6/2021 1:54 PM

Page 3 of 35

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year		lb/day										lb/day						
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2		
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88		
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 21		
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1		
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88		

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Year		lb/day											lb/day						
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.797 4	6,234.797 4	1.9495	0.0000	6,283.535 2			
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88			
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.52 69	14,807.52 69	1.0250	0.0000	14,833.15 20			
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.398 9	2,361.398 9	0.7177	0.0000	2,379.342 1			
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.56 74	15,251.56 74	1.9503	0.0000	15,278.52 88			
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e			
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	 	50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Date: 1/6/2021 1:54 PM

Page 8 of 35

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust	11 11 11				3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549	 	3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust) 	i i			3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	 	1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		170.8155	170.8155	5.0300e- 003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.056 8	1,463.056 8	0.0927		1,465.375 0

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		204.9786	204.9786	6.0400e- 003		205.1296

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620	 	1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		227.7540	227.7540	6.7100e- 003		227.9217

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003	 	219.8941
Total	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		219.7425	219.7425	6.0600e- 003		219.8941

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236	 	3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429	 	8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982	 	3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190	 	8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000	1 1 1 1	0.0000	0.0000		 	0.0000		 	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003	 	158.8748
Total	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102	 	0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		158.7723	158.7723	4.1000e- 003		158.8748

3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000				 	0.0000	0.0000	1	0.0000	0.0000		1	0.0000	 	; ! !	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003	 	153.9458
Total	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1 1		 	0.0000	0.0000	i i	0.0000	0.0000		i i i	0.0000		i i	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003	 	153.9458
Total	0.0535	0.0329	0.4785	1.5400e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		153.8517	153.8517	3.7600e- 003		153.9458

3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	 	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	 	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	 	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401	,	1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	 	50,361.12 08

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/o	day							lb/c	lay		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003	! !	8.3400e- 003	8.3400e- 003	1 1 1	131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666	,	0.2666	0.2666	#	4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003	,	9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355	,	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	,	0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day				lb/day						
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Consumer Products	24.1085					0.0000	0.0000	 	0.0000	0.0000			0.0000		 	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424	 	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 35 Date: 1/6/2021 1:54 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day lb/day															
Architectural Coating	2.2670					0.0000	0.0000	! !	0.0000	0.0000			0.0000		 	0.0000
Consumer Products	24.1085	 	 	 		0.0000	0.0000	i i	0.0000	0.0000			0.0000		 	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	i i	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	i i	0.4574	0.4574		148.5950	148.5950	0.1424	 	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Page 3 of 35

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

Percent Reduction

0.00

0.00

0.00

0.00

0.00

0.00

0.00

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	/day							lb/	day		
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.493 7	6,221.493 7	1.9491	0.0000	6,270.221 4
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.34 24	14,210.34 24	1.0230	0.0000	14,235.91 60
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.417 8	2,352.417 8	0.7175	0.0000	2,370.355 0
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.30 99	14,630.30 99	1.9499	0.0000	14,657.26 63
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/d	lay					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Date: 1/6/2021 1:49 PM

Page 8 of 35

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003	 	160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e- 003	0.1677	1.3500e- 003	0.1690	0.0445	1.2500e- 003	0.0457		160.8377	160.8377	4.7300e- 003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.693 2	1,430.693 2	0.0955		1,433.081 2

3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003	 	193.1472
Total	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e- 003	0.2012	1.6300e- 003	0.2028	0.0534	1.5000e- 003	0.0549		193.0052	193.0052	5.6800e- 003		193.1472

3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003	 	214.6080
Total	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003		214.6080

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust) 	i i			8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e- 003	0.2236	1.8100e- 003	0.2254	0.0593	1.6600e- 003	0.0610		214.4502	214.4502	6.3100e- 003		214.6080

3.4 Grading - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621	 	1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965		1	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621	 	1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003	 	207.0563
Total	0.0896	0.0589	0.6784	2.0800e- 003	0.2236	1.7500e- 003	0.2253	0.0593	1.6100e- 003	0.0609		206.9139	206.9139	5.7000e- 003		207.0563

3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Oil Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.901 3	8,286.901 3	0.2282		8,292.605 8
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.97 63	12,075.97 63	0.4663		12,087.63 41

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	 	3,795.028 3
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.901 3	8,286.901 3	0.2282	 	8,292.605 8
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.97 63	12,075.97 63	0.4663		12,087.63 41

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096		3,676.641 7
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.731 8	7,983.731 8	0.2055		7,988.868 3
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.13 25	11,655.13 25	0.4151		11,665.50 99

3.6 Paving - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000		 	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102	 	0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043	
Total	0.0633	0.0400	0.4677	1.5000e- 003	0.1677	1.2800e- 003	0.1689	0.0445	1.1700e- 003	0.0456		149.5081	149.5081	3.8500e- 003		149.6043	

3.6 Paving - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1 1 1		 	0.0000	0.0000		0.0000	0.0000		 	0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228	! !	0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000	 			 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e- 003	0.1677	1.2600e- 003	0.1689	0.0445	1.1600e- 003	0.0456		144.8706	144.8706	3.5300e- 003		144.9587

3.7 Architectural Coating - 2024

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115		i i i			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	 	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	 	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	1	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	 	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376	,	1,546.226 2
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.286 0	1,545.286 0	0.0376		1,546.226 2

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696	#	2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003	#	29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355	,	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	,	0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003	*	29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	lay		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 35 Date: 1/6/2021 1:49 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 	 		0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Date: 1/12/2021 2:26 PM

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

3.2 Page 3 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/12/2021 2:26 PM

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2021	0.1704	1.8234	1.1577	2.3800e- 003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.441 2	1,342.441 2	0.1115	0.0000	1,345.229 1
2024	4.1592	0.1313	0.2557	5.0000e- 004	0.0221	6.3900e- 003	0.0285	5.8700e- 003	5.9700e- 003	0.0118	0.0000	44.6355	44.6355	7.8300e- 003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 4	1,418.655 4	0.1215	0.0000	1,421.692 5

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr							M	Г/уг		
2021	0.1704	1.8234	1.1577	2.3800e- 003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.440 9	1,342.440 9	0.1115	0.0000	1,345.228 7
2024	4.1592	0.1313	0.2557	5.0000e- 004	0.0221	6.3900e- 003	0.0285	5.8700e- 003	5.9700e- 003	0.0118	0.0000	44.6354	44.6354	7.8300e- 003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.655 0	1,418.655 0	0.1215	0.0000	1,421.692 1
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

Page 6 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/12/2021 2:26 PM

9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste			 			0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water			 			0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				MT	/yr						
Area	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.073 2	3,896.073 2	0.1303	0.0468	3,913.283 3
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.18 07	12,531.15 19	15.7904	0.1260	12,963.47 51

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

3.2 Page 9 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/12/2021 2:26 PM

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.3000e- 004	6.0900e- 003	2.0000e- 005	1.6800e- 003	1.0000e- 005	1.6900e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.5281	1.5281	5.0000e- 005	0.0000	1.5293
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.0496	0.0000	0.0496	7.5100e- 003	0.0000	7.5100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e- 004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e- 004	0.0496	0.0233	0.0729	7.5100e- 003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.9300e- 003	0.0634	0.0148	1.8000e- 004	3.9400e- 003	1.9000e- 004	4.1300e- 003	1.0800e- 003	1.8000e- 004	1.2600e- 003	0.0000	17.4566	17.4566	1.2100e- 003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.3000e- 004	6.0900e- 003	2.0000e- 005	1.6800e- 003	1.0000e- 005	1.6900e- 003	4.5000e- 004	1.0000e- 005	4.6000e- 004	0.0000	1.5281	1.5281	5.0000e- 005	0.0000	1.5293
Total	2.6500e- 003	0.0639	0.0209	2.0000e- 004	5.6200e- 003	2.0000e- 004	5.8200e- 003	1.5300e- 003	1.9000e- 004	1.7200e- 003	0.0000	18.9847	18.9847	1.2600e- 003	0.0000	19.0161

3.3 Site Preparation - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234
Total	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	 				0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e- 004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e- 004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.3 Site Preparation - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234
Total	5.8000e- 004	4.3000e- 004	4.8700e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2225	1.2225	4.0000e- 005	0.0000	1.2234

3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377	1 1 1	0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828
Total	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e- 003		0.0377	0.0377	1 1 1	0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e- 003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VVOINCI	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828
Total	1.2200e- 003	9.0000e- 004	0.0103	3.0000e- 005	2.8300e- 003	2.0000e- 005	2.8600e- 003	7.5000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.5808	2.5808	8.0000e- 005	0.0000	2.5828

3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590
Total	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e- 004		5.7200e- 003	5.7200e- 003		5.2600e- 003	5.2600e- 003	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e- 004	0.0807	5.7200e- 003	0.0865	0.0180	5.2600e- 003	0.0233	0.0000	19.0871	19.0871	6.1700e- 003	0.0000	19.2414

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590
Total	2.1000e- 004	1.5000e- 004	1.7400e- 003	1.0000e- 005	5.2000e- 004	0.0000	5.3000e- 004	1.4000e- 004	0.0000	1.4000e- 004	0.0000	0.4587	0.4587	1.0000e- 005	0.0000	0.4590

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e- 003	0.7557	6.2300e- 003	0.7619	0.2007	5.7400e- 003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e- 003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e- 003	0.1140	3.1800e- 003	0.1171	0.0329	3.0400e- 003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e- 003	0.7557	6.2300e- 003	0.7619	0.2007	5.7400e- 003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e- 003	0.8790	0.2336	8.7800e- 003	0.2424	0.0000	1,105.977 1	1,105.977 1	0.0451	0.0000	1,107.103 9

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e- 003	0.7377	5.9100e- 003	0.7436	0.1960	5.4500e- 003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864	 	0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e- 003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e- 003	0.1113	1.4600e- 003	0.1127	0.0321	1.4000e- 003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e- 003	0.7377	5.9100e- 003	0.7436	0.1960	5.4500e- 003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e- 003	0.8564	0.2281	6.8500e- 003	0.2349	0.0000	1,042.529 4	1,042.529 4	0.0392	0.0000	1,043.509 0

3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000		 			0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160
Total	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Off-Road	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227
Paving	0.0000	 	 		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e- 003	0.0663	0.0948	1.5000e- 004		3.3200e- 003	3.3200e- 003		3.0500e- 003	3.0500e- 003	0.0000	13.0175	13.0175	4.2100e- 003	0.0000	13.1227

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160
Total	2.8000e- 004	1.9000e- 004	2.2300e- 003	1.0000e- 005	7.3000e- 004	1.0000e- 005	7.3000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6156	0.6156	2.0000e- 005	0.0000	0.6160

3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000			1		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100
Total	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073
Paving	0.0000	I I I				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e- 004		5.1500e- 003	5.1500e- 003		4.7400e- 003	4.7400e- 003	0.0000	22.0292	22.0292	7.1200e- 003	0.0000	22.2073

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100
Total	4.4000e- 004	2.9000e- 004	3.5100e- 003	1.0000e- 005	1.2300e- 003	1.0000e- 005	1.2400e- 003	3.3000e- 004	1.0000e- 005	3.4000e- 004	0.0000	1.0094	1.0094	3.0000e- 005	0.0000	1.0100

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394
Total	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e- 003	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e- 005		1.0700e- 003	1.0700e- 003		1.0700e- 003	1.0700e- 003	0.0000	4.4682	4.4682	2.5000e- 004	0.0000	4.4745

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394
Total	7.4800e- 003	4.9300e- 003	0.0596	1.9000e- 004	0.0209	1.6000e- 004	0.0211	5.5500e- 003	1.5000e- 004	5.7000e- 003	0.0000	17.1287	17.1287	4.3000e- 004	0.0000	17.1394

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.498 6	7,620.498 6	0.3407	0.0000	7,629.016 2

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
Electricity Unmitigated						0.0000	0.0000	, ! ! !	0.0000	0.0000	0.0000	2,512.646 5	2,512.646 5	0.1037	0.0215	2,521.635 6
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	, ! ! !	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966	, , ,	0.0966	0.0966	0.0000	1,383.426 7	1,383.426 7	0.0265	0.0254	1,391.647 8

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/уг		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/уг		
Apartments Low Rise	408494	2.2000e- 003	0.0188	8.0100e- 003	1.2000e- 004		1.5200e- 003	1.5200e- 003		1.5200e- 003	1.5200e- 003	0.0000	21.7988	21.7988	4.2000e- 004	4.0000e- 004	21.9284
Apartments Mid Rise	1.30613e +007	0.0704	0.6018	0.2561	3.8400e- 003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e- 003	0.0230	0.0193	1.4000e- 004		1.7500e- 003	1.7500e- 003		1.7500e- 003	1.7500e- 003	0.0000	24.9983	24.9983	4.8000e- 004	4.6000e- 004	25.1468
High Turnover (Sit Down Restaurant)		0.0448	0.4072	0.3421	2.4400e- 003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e- 003	8.1300e- 003	445.9468
Hotel	1.74095e +006	9.3900e- 003	0.0853	0.0717	5.1000e- 004		6.4900e- 003	6.4900e- 003		6.4900e- 003	6.4900e- 003	0.0000	92.9036	92.9036	1.7800e- 003	1.7000e- 003	93.4557
Quality Restaurant	1.84608e +006	9.9500e- 003	0.0905	0.0760	5.4000e- 004		6.8800e- 003	6.8800e- 003		6.8800e- 003	6.8800e- 003	0.0000	98.5139	98.5139	1.8900e- 003	1.8100e- 003	99.0993
Regional Shopping Center	91840	5.0000e- 004	4.5000e- 003	3.7800e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.9009	4.9009	9.0000e- 005	9.0000e- 005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e- 003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.426 8	1,383.426 8	0.0265	0.0254	1,391.647 8

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e +006	506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Low Rise	106010	33.7770	1.3900e- 003	2.9000e- 004	33.8978
Apartments Mid Rise	3.94697e +006	1,257.587 9	0.0519	0.0107	1,262.086 9
General Office Building	584550	186.2502	7.6900e- 003	1.5900e- 003	186.9165
High Turnover (Sit Down Restaurant)		506.3022	0.0209	4.3200e- 003	508.1135
Hotel	550308	175.3399	7.2400e- 003	1.5000e- 003	175.9672
Quality Restaurant	353120	112.5116	4.6500e- 003	9.6000e- 004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e- 003	2.0600e- 003	241.7395
Total		2,512.646 5	0.1037	0.0215	2,521.635 6

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 36 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	-/yr		
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998	 	,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	 - 	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

CalEEMod Version: CalEEMod.2016.3.2 Page 37 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	7/yr		
Architectural Coating	0.4137					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998		 		 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e- 003	 	0.0143	0.0143	 	0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e- 003	3.7400e- 003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e- 004		0.0572	0.0572	1 1 1 1	0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e- 003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e- 003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
ı	585.8052	3.0183	0.0755	683.7567
	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927		0.0416	1.0300e- 003	7.5079
	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

CalEEMod Version: CalEEMod.2016.3.2 Page 40 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e- 003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e- 003	61.6019
High Turnover (Sit Down Restaurant)			0.3580	8.8200e- 003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e- 003	7.5079
Quality Restaurant	2.42827 / 0.154996		0.0796	1.9600e- 003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e- 003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

CalEEMod Version: CalEEMod.2016.3.2 Page 41 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	-/yr	
	207.8079	12.2811	0.0000	514.8354
	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Page 43 of 44

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Date: 1/12/2021 2:26 PM

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e					
Land Use	tons		MT/yr							
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834					
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513					
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464					
High Turnover (Sit Down Restaurant)		86.9613	5.1393	0.0000	215.4430					
Hotel	27.38	5.5579	0.3285	0.0000	13.7694					
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712					
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706					
Total		207.8079	12.2811	0.0000	514.8354					

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

CalEEMod Version: CalEEMod.2016.3.2 Page 44 of 44 Date: 1/12/2021 2:26 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	Regional Shopping Center 56.00		1.29	56,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Date: 1/12/2021 2:29 PM

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

.3.2 Page 3 of 35

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Date: 1/12/2021 2:29 PM

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
		·	

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day								lb/day							
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 6
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		lb/day									lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.416 6	6,163.416 6	1.9475	0.0000	6,212.103 9
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.48 90	12,150.48 90	0.9589	0.0000	12,174.46 15
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.180 8	2,313.180 8	0.7166	0.0000	2,331.095 5
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.44 03	12,493.44 03	1.9485	0.0000	12,518.57 07
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92	
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292	 	0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7	
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	 	50,361.12 08	
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86	

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807	 	50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Date: 1/12/2021 2:29 PM

Page 8 of 35

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003	 	117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.241 3	1,292.241 3	0.0877		1,294.433 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		117.2799	117.2799	3.5200e- 003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.521 2	1,409.521 2	0.0912		1,411.801 5

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		140.7359	140.7359	4.2200e- 003		140.8414

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000			
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4			
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4			

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lb/day										
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category				lb/d	lb/day											
Fugitive Dust) 	i i			8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/d	lb/day													
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		156.3732	156.3732	4.6900e- 003		156.4904

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000			
Off-Road	3.6248	38.8435	29.0415	0.0621	 	1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8			
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8			

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day														
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category	lb/day												lb/day							
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000				
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442	 	6,060.015 8				
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8				

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		150.8754	150.8754	4.2400e- 003		150.9813

3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Oil Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

3.6 Paving - 2023

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102	! !	0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000		1 1 1		 	0.0000	0.0000	1 1 1 1	0.0000	0.0000		 	0.0000		 	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228	! !	0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000]		 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		109.0150	109.0150	2.8600e- 003		109.0866

3.6 Paving - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		1			0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003	 	105.6992
Total	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228	! !	0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000	 			 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003	 	105.6992
Total	0.0403	0.0233	0.3384	1.0600e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		105.6336	105.6336	2.6300e- 003		105.6992

3.7 Architectural Coating - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	 	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	,	0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	,	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609	 	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	 	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280	,	1,127.458 3
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,126.758 3	1,126.758 3	0.0280		1,127.458 3

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	lay		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Consumer Products	24.1085					0.0000	0.0000	 	0.0000	0.0000			0.0000		 	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424	 	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 35 Date: 1/12/2021 2:29 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 			0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	 	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	 	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

|--|

10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
		1.00.0, 2.0,	1,00,00			

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)33Climate Zone9Operational Year2028

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Date: 1/12/2021 2:30 PM

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Page 3 of 35

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Date: 1/12/2021 2:30 PM

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.051 7	2,307.051 7	0.7164	0.0000	2,324.962 7
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.40 80	11,710.40 80	0.9617	0.0000	11,734.44 97
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.34 40	12,035.34 40	1.9482	0.0000	12,060.60 13
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.337 7	6,154.337 7	1.9472	0.0000	6,203.018 6
Year					lb/	day							lb/	day		
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953	 	47,972.68 39
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.37 87	74,422.37 87	2.8429	0.4832	74,637.44 17

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped

Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Date: 1/12/2021 2:30 PM

Page 8 of 35

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	 	1.4411	1.4411		3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513	i i	1.4411	1.4411	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.855 5	1,269.855 5	0.0908		1,272.125 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e- 003	0.1141	9.5000e- 004	0.1151	0.0303	8.8000e- 004	0.0311		110.4707	110.4707	3.3300e- 003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.326 2	1,380.326 2	0.0941		1,382.679 1

3.3 Site Preparation - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920	 	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003	 	132.6646
Total	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e- 003	0.1369	1.1400e- 003	0.1381	0.0363	1.0500e- 003	0.0374		132.5649	132.5649	3.9900e- 003		132.6646

3.4 Grading - 2021

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620	 	1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust	 				8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428	 	6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e- 003	0.1521	1.2700e- 003	0.1534	0.0404	1.1700e- 003	0.0415		147.2943	147.2943	4.4300e- 003		147.4051

3.4 Grading - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965	1 1 1	! !	0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.410 5	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003	 	142.2207
Total	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000	
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8	
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8	

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207	
Total	0.0665	0.0416	0.4861	1.4300e- 003	0.1521	1.2300e- 003	0.1534	0.0404	1.1300e- 003	0.0415		142.1207	142.1207	4.0000e- 003		142.2207	

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381	 	3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602	 	5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.075 0	3,789.075 0	0.2381		3,795.028 3
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.935 4	5,691.935 4	0.1602		5,695.940 8
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.010 4	9,481.010 4	0.3984		9,490.969 1

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096	 	3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442	 	5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.400 7	3,671.400 7	0.2096	 	3,676.641 7
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.797 4	5,483.797 4	0.1442	 	5,487.402 0
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.198 1	9,155.198 1	0.3538		9,164.043 7

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000	 				0.0000	0.0000	 	0.0000	0.0000			0.0000		 	0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e- 003	0.1141	9.0000e- 004	0.1150	0.0303	8.3000e- 004	0.0311		102.6928	102.6928	2.7000e- 003		102.7603

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000		i i		 	0.0000	0.0000	 	0.0000	0.0000		! ! ! !	0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000				 	0.0000	0.0000		0.0000	0.0000		! ! ! !	0.0000		 	0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e- 003	0.1141	8.8000e- 004	0.1150	0.0303	8.1000e- 004	0.0311		99.5045	99.5045	2.4700e- 003		99.5663

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	236.4115		, 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	, , ,	281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	 	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 	0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264	 	1,062.041 0
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e- 003	1.2266	0.3229	8.6800e- 003	0.3315		1,061.381 8	1,061.381 8	0.0264		1,062.041 0

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.80 05	47,917.80 05	2.1953		47,972.68 39

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		lb/day									lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003		1.8700e- 003	1.8700e- 003		29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		lb/day									lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e- 004		8.3400e- 003	8.3400e- 003		8.3400e- 003	8.3400e- 003		131.6662	131.6662	2.5200e- 003	2.4100e- 003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.916 4	4,209.916 4	0.0807	0.0772	4,234.933 9
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e- 004		9.5600e- 003	9.5600e- 003		9.5600e- 003	9.5600e- 003		150.9911	150.9911	2.8900e- 003	2.7700e- 003	151.8884
High Turnover (Sit Down Restaurant)		0.2455	2.2314	1.8743	0.0134		0.1696	0.1696	,	0.1696	0.1696		2,677.634 2	2,677.634 2	0.0513	0.0491	2,693.546 0
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e- 003		0.0355	0.0355	,	0.0355	0.0355	#	561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e- 003		0.0377	0.0377	,	0.0377	0.0377	#	595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center		2.7100e- 003	0.0247	0.0207	1.5000e- 004		1.8700e- 003	1.8700e- 003	,	1.8700e- 003	1.8700e- 003	*	29.6019	29.6019	5.7000e- 004	5.4000e- 004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day									lb/day						
Architectural Coating	2.2670				1 1	0.0000	0.0000		0.0000	0.0000			0.0000		1 1 1	0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424	 	152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 35 Date: 1/12/2021 2:30 PM

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day									lb/day						
Architectural Coating	2.2670					0.0000	0.0000	i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085		 	 		0.0000	0.0000	: : :	0.0000	0.0000			0.0000	 		0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400	i i	1.1400	1.1400	0.0000	18,000.00 00	18,000.00 00	0.3450	0.3300	18,106.96 50
Landscaping	2.4766	0.9496	82.4430	4.3600e- 003		0.4574	0.4574	i i	0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
		1.00.0, 2.0,	1,00,00			, , , ,

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%



SOIL WATER AIR PROTECTION ENTERPRISE

2656 29th Street, Suite 201 Santa Monica, California 90405 Attn: Paul Rosenfeld, Ph.D. Mobil: (310) 795-2335 Office: (310) 452-5555

Fax: (310) 452-5550 Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner

UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)

UCLA School of Public Health; 2003 to 2006; Adjunct Professor

UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator

UCLA Institute of the Environment, 2001-2002; Research Associate

Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist

National Groundwater Association, 2002-2004; Lecturer

San Diego State University, 1999-2001; Adjunct Professor

Anteon Corp., San Diego, 2000-2001; Remediation Project Manager

Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager

Bechtel, San Diego, California, 1999 – 2000; Risk Assessor

King County, Seattle, 1996 – 1999; Scientist

James River Corp., Washington, 1995-96; Scientist

Big Creek Lumber, Davenport, California, 1995; Scientist

Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist

Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). The Risks of Hazardous Waste. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & Rosenfeld, P.E. (2011). Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & Rosenfeld, P.E. (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & Rosenfeld, P.E. (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., Rosenfeld, P. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. WIT Transactions on Ecology and the Environment, Air Pollution, 123 (17), 319-327.

- Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.
- Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.
- Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.
- **Rosenfeld, P.E.,** J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.
- **Rosenfeld, P. E.,** M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.
- Sullivan, P. J. Clark, J.J.J., Agardy, F. J., Rosenfeld, P.E. (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing
- **Rosenfeld, P.E.,** and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.
- **Rosenfeld P. E.,** J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC)* 2004. New Orleans, October 2-6, 2004.
- **Rosenfeld, P.E.,** and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.
- Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.
- **Rosenfeld, P. E.**, Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.
- **Rosenfeld, P.E.,** Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.
- **Rosenfeld, P.E.**, and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.
- **Rosenfeld, P.E.,** and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.
- Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.
- Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.
- **Rosenfeld, P.E.,** and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

- Chollack, T. and **P. Rosenfeld.** (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.
- Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. Heritage Magazine of St. Kitts, 3(2).
- **Rosenfeld, P. E.** (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).
- **Rosenfeld, P. E.** (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.
- Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.
- **Rosenfeld, P. E.** (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

- **Rosenfeld, P.E.,** Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. 44th Western Regional Meeting, American Chemical Society. Lecture conducted from Santa Clara, CA.
- Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.
- Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.
- **Rosenfeld**, **P.E**. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, Lecture conducted from Tuscon, AZ.
- Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting. Lecture conducted from Tuscon, AZ.
- Wu, C., Tam, L., Clark, J., Rosenfeld, P. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution. Lecture conducted from Tallinn, Estonia.
- **Rosenfeld, P. E.** (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.
- **Rosenfeld, P. E.** (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The 23rd Annual International Conferences on Soils Sediment and Water. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. 2005 National Groundwater Association Ground Water And Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. 2005 National Groundwater Association Ground Water and Environmental Law Conference. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

- **Paul Rosenfeld, Ph.D.** (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.
- Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL.
- **Paul Rosenfeld, Ph.D.** and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants.*. Lecture conducted from Hyatt Regency Phoenix Arizona.
- **Paul Rosenfeld, Ph.D.** (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.
- **Paul Rosenfeld, Ph.D.** (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association. Lecture conducted from Barcelona Spain.
- **Rosenfeld, P.E.** and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.
- **Rosenfeld, P.E.** and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.
- **Rosenfeld. P.E.** (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.
- **Rosenfeld. P.E.** (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.
- **Rosenfeld, P.E.** (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.
- Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.
- **Rosenfeld, P.E.**, and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.
- **Rosenfeld, P.E.,** C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.
- **Rosenfeld, P.E.**, C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The District of New Jersey

Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.

Case No.: 2:17-cv-01624-ES-SCM Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles - Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles - Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In The Superior Court of the State of California, For The County of Los Angeles

Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC

Case No.: LC102019 (c/w BC582154)

Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division

Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants

Case Number: 4:16-cv-52-DMB-JVM

Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish

Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants

Case No.: No. 13-2-03987-5

Rosenfeld Deposition, February 2017

Trial, March 2017

In The Superior Court of the State of California, County of Alameda

Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants

Case No.: RG14711115

Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County

Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants

Case No.: LALA002187

Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County

Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants

Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County

Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants

Law No,: LALA105144 - Division A Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia

Robert Andrews, et al. v. Antero, et al.

Civil Action No. 14-C-30000

Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico

Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward

DeRuyter, Defendants

Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County

Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant

Case No 4980

Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida

Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.

Case Number CACE07030358 (26) Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma

Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City

Landfill, et al. Defendants. Case No. 5:12-cv-01152-C

Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas

Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.

Case Number cc-11-01650-E

Rosenfeld Deposition: March and September 2013

Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio

John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*

Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)

Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division

Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.

Case 3:10-cv-00622

Rosenfeld Deposition: February 2012

Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland

Philip E. Cvach, II et al., Plaintiffs vs. Two Farms, Inc. d/b/a Royal Farms, Defendants

Case Number: 03-C-12-012487 OT Rosenfeld Deposition: September 2013



1640 5th St.., Suite 204 Santa Santa Monica, California 90401 Tel: (949) 887-9013

Email: mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization Industrial Stormwater Compliance Investigation and Remediation Strategies Litigation Support and Testifying Expert CEOA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984. B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 present);
- Geology Instructor, Golden West College, 2010 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989– 1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 1998);
- Instructor, College of Marin, Department of Science (1990 1995);
- Geologist, U.S. Forest Service (1986 1998); and
- Geologist, Dames & Moore (1984 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shippard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

•	Expert witness testimony in a case of oil production-related contamination in Mississippi. Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

• Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities
 through designation under the Safe Drinking Water Act. He prepared geologic reports,
 conducted public hearings, and responded to public comments from residents who were very
 concerned about the impact of designation.

 Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed
 the basis for significant enforcement actions that were developed in close coordination with U.S.
 EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nationwide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the
 potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking
 water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aguifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.



Developer buys Amgen property for \$25M

Plans to build 330 apartments, retail *April 22, 2022*

By Kyle Jorrey tonewstip@theacorn.com



CHANGING HANDS—Amgen's former Building No. 34 has been sold to the Latigo Group, the same firm developing 299 E.

Thousand Oaks Blvd. Last year, Amgen received pre-approval from the council for a concept involving a mix of around 333 apartments and retail on the ground floor. Acorn file photo

If the pharmaceutical market ever dries up, Thousand Oaksbased Amgen might stand a good chance in real estate.

The biotech giant recently sold its old welcome center at 2150 W. Hillcrest Drive to a developer for \$25.5 million.

Latigo Group, the Los Angeles based firm behind the soon-to-be completed mixed-use development at 299 E. Thousand Oaks Blvd., said this week it intends to transform the site off Rancho Conejo Boulevard in Newbury Park into a "beautifully designed mixed-use project that will be an asset to Thousand Oaks and the surrounding community."

"The Latigo Group strives to create best-in-class properties, in collaboration with future residents and the community," said Mark Maron, co-founder and managing partner of Latigo, in

a statement.

Before the sale, Amgen received pre-approval from the City Council for up to 333 apartments at the 8.2-acre site, 20% of which were to be offered at below-market rate for income-eligible applicants.

That pre-approval now transfers to Latigo, which will begin the process of getting full entitlements from city staff, the Thousand Oaks Planning Commission and the City Council, which will have to sign off on a general plan amendment to change the property from industrial to mixed-use.

In an April 14 announcement, Latigo said the apartments will feature "top-tier amenities," including a swimming pool, fitness center, outdoor lounge areas and a pet spa.

As for the retail use, Latigo said it imagines a restaurant/bar where people working at Amgen headquarters and other nearby companies (Skyworks is just down the street) can get together at lunch and after work.

At the April 2021 hearing where the City Council gave the design concept pre-approval, Councilmember Al Adam said the long-vacant welcome center property—formerly Amgen Building No. 34—was the perfect candidate for housing, which the city is desperate to see built.

"With this piece so close to Amgen, it seems to me there's a great opportunity here for some workforce housing that would certainly benefit the Amgen corporation," Adam said.

It's unclear how Latigo's affordable housing plans will differ from Amgen's, which proposed either 28 units for very-low-income applicants or 50 units for low-income applicants. To qualify as low-income in Ventura County, a family of four must earn less than \$89,700 a year, according to annual limits set by the federal Department of Housing and Urban Development.

As for when Latigo's first mixed-use project in the city— 299 E. Thousand Oaks Blvd.— will begin leasing, a spokesperson said it would likely be this fall.

The company is building a three-story, 142-apartment complex with 11,000 square feet of retail space across the street from Tarantula Hill Brewery near Moorpark Road.

Maron said the commercial portion of the project is almost fully leased and will include a specialty coffee shop and sushi restaurant. Two other spaces are available.

Related Stories by Thousand Oaks Acorn

Go To The Business Section



New vision OK'd for high-profile T.O. Boulevard address

After 30 years in the possession of the Nazarbekian family, the largest vacant lot on Thousand Oaks Boulevard is expected...



A different kind of pitch comes to Peppertree

After several years of playing on a temporary field at Peppertree Playfield, the Thousand Oaks Titans, a local cricket club....



Local biotech scene enjoys banner day

Last Thursday offered further evidence that something special is underway in Thousand Oaks' oftoverlooked Rancho Conejo Industrial Area. Once a...

Load More



A \$7,000 apartment? Boulevard builder may break record books

July 29, 2022

By Kyle Jorrey tonewstip@theacorn.com



LUXURY LIVING—A third-floor unit at the new Santal development at 299 E. Thousand Oaks Blvd., which begins pre-leasing next month, features a 450-square-foot balcony overlooking the city's namesake thoroughfare and 13-foot-high ceilings. Another third-floor unit with a 628-square-foot deck is expected to be the costliest ever rented in T.O. MICHAEL COONS/Acorn Newspapers

Among the 142 apartments that will go on the market later this year at 299 E. Thousand Oaks Boulevard, a few stand out.

On the third floor of the four-story development is a unit that features a 628-square-foot wraparound deck with unparalleled views of the city's namesake thoroughfare. Inside, floor-to-ceiling windows fill the space with natural light; there are backlit mirrors in the bathroom, two-tone cabinets in the kitchen, quartz countertops and a wine cooler.

The blinds are electric and can be controlled along with many other features in the home via a smartphone app.

Mark Maron, managing partner of The Latigo Group, the developer behind the new construction, has taken to calling the space the "mack daddy" unit. It is one of two in the building with 13-

foot-high ceilings, enormous private decks and unobstructed sightlines.

"They're both phenomenal," Maron said.

At a time when much of the public discourse around housing is centered on affordability—the project does include 11 affordable units—the spaces are expected to shatter the record for the most expensive apartments ever listed in Thousand Oaks, a combination of market forces (rents citywide are at an all-time high) and the amenity-rich project Latigo is building.



TOP OF THE CITY—Construction is nearing completion at 299 E. Thousand Oaks Blvd. The mixed-use development features 142 units, 11 of which have been designated as "affordable" and will be leased for significantly less than the 131 market-rate apartments. MICHAEL COONS Acorn Newspapers

While declining to give the exact price, Maron hinted in June that one of the units on the third floor (the largest is 1,144 square feet) could fetch as much as \$7,000 a month based on comparable units at new luxury developments in Woodland Hills. The square footage does not include the deck.

Scott Whittaker, Latigo co-founder and partner, said the firm felt the need to create a couple units that were "above and beyond anything else."

In addition to three third-floor units that have large private decks and boulevard views, there are several premium units on the fourth floor, or penthouse level, that are also expected to fetch top

dollar.

While he acknowledges that the rents might be higher than most residents can afford, Maron said Santal, the name given to the new complex, is addressing an unmet need in Thousand Oaks, especially for those working in life sciences.

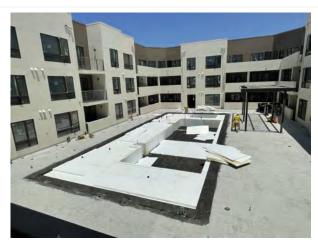
"People want high-quality apartments to live in. There's no reason for them to have to go to the west side of L.A., which many people at Amgen do," he said.

Whittaker said Santal will offer features that can't be found elsewhere in the Conejo Valley.

"Even some of the newer projects that have come on-line, they're not necessarily that bad from a quality standpoint, they just don't have amenities," Whittaker said. "They don't have a nice pool and a nice fitness center and smart technology and co-work space. They just lack all of that stuff."

For example, Santal, named for a fragrance that comes from sandalwood, will have its own patented scent.

"We're going to have diffusers actually pump out the scent that we create, which is very much inspired by Le Labo's Santal," said Danielle Maron, Latigo vice president.



At the center of the future complex, an "upscale a pool," the developers said. The project also includes a rooftop terrace with firepit and lounge seating, a robust fitness center and various covered seating areas on the first and second floor. KYLE JORREY/Acorn Newspapers

One of the biggest draws of Santal, according to the developer, is easy access to the commercial businesses on the ground floor. Two anchor tenants have already signed—Go Fish Sushi Bar, which has one location at Simi Valley Town Center, and JOi Cafe, a Westlake staple that is opening its second location—with two more tenants in the works.

"You can walk downstairs, get sushi, walk downstairs, get coffee, get grab-and-go stuff, or you can walk across the street to the brewery (Tarantula Hill)," Whittaker said. "It will be a little

community within itself."

The city's first mixed-use development, 1710 on the Boulevard, has had residential tenants for over a year but has yet to welcome a restaurant. A New York-style pizza place is said to be coming soon.

Mark Maron said he's determined to have every commercial space at Santal filled in short order.

"We're actively trying to fill up the retail space, which we will," he said.

Santal starts pre-leasing next month. Prospective tenants can go online and reserve a space in the building by putting down a deposit.

"We expect this thing to lease very, very quickly," Maron said.



The luxury apartment complex rises above E. Thousand Oaks Boulevard across from Tarantula Hill Brewing Company. Residents are expected to begin moving in sometime in October. Two restaurants, Go Fish Sushi and JOi Cafe, have already signed on to fill the commercial spaces on the bottom floor facing. MICHAEL COONS/Acorn Newspapers

Because competition for the apartments, especially the 11 that will charge a rate that is significantly below market is expected to be fierce, Latigo has brought on property manager Greystar to handle leasing.

Maron said Greystar has special software to detect falsified bank records, which will come in handy as they go through the process of proving that the applicants for the affordable units are income eligible. A married couple, for example, cannot make more than \$50,200 a year in combined income—the threshold to qualify as very-low income in Ventura County.

"The last thing you want is someone to be in there for fraudulent reasons," Maron said. "Those units are built the exact same way as every other unit, but obviously the rent is dramatically different."

Those wishing to apply for one of the 11 units are encouraged to go to santalthousandoaks.com once the site goes live Aug. 1.

If all goes according to plan, tenants will begin moving in Oct. 1. Maron said Latigo is planning a special opening night event to celebrate, when guests will be able to walk around the complex's courtyard and pool and dine at one of the restaurants.

Related Stories by Thousand Oaks Acorn

Go To The Front Section



Remembering Wesley

While much of the community spent the weekend celebrating Mother's Day, Kelly Welling spent it living every mother's nightmare. She...



Storm takes heavy toll on trees

A once-in-a-decade weather event last weekend punished the city's tree population and kept public works crews and first responders busy...



A different kind of pitch comes to Peppertree

After several years of playing on a temporary field at Peppertree Playfield, the Thousand Oaks Titans, a local cricket club,...

Load More



Home Our Properties > About TLG Our Team News Contact Us Investors

CURRENT DEVELOPMENTS





Location: Thousand Oaks, CA

Asset Type: Mixed-Use

Total Units: 142

Retail: 10,000 sq. ft.

Expected Completion: 2022

View Property



LYNWIND

Location: Davenport, FL **Asset Type:** Multi-Family

Total Units: 384

Expected Completion: 2023

View Property



Infield

Location: Kissimmee, FL **Asset Type:** Multi-Family **Total Units:** 384

Expected Completion: 2023

View Property





Home Our Properties > About TLG Our Team News Contact Us Investors





Location: St. Augustine, FL Asset Type: Multi-Family Total Units: 320 Expected Completion: 2023

View Property





FIORI

Location: Naples, FL
Asset Type: Multi-Family
Total Units: 303
Expected Completion: 2024

View Property





Hillcrest

Location: Thousand Oaks CA
Asset Type: Mixed-Use
Total Units: 333
Retail: 6,500 sq. ft.
Expected Completion: 2026

View Property





Home Our Properties > About TLG Our Team News Contact Us Investors

Asset Type: Multi-Family
Total Units: 444
Expected Completion: 2024

View Property



THE LATIGO GROUP

11845 WEST OLYMPIC BLVD, SUITE 515W | LOS ANGELES, CA 90064 | 310.504.2902 | INFO@LATIGO-GROUP.COM

Accessibility



LATIGO

Home Our Properties ~ About TLG Our Team News Contact Us Investors





Home → Asbestos Exposure → Exposure Sites by Type → Asbestos in the Home

Asbestos was used in many homes built before the 1980s. Some of those homes may still have flooring, ceiling tiles, insulation or other materials with asbestos. This puts residents at risk for mesothelioma and other asbestos-related diseases. Homeowners can take measures to prevent exposure.

Learn More About Asbestos
Exposure in the Home in Our
Free Guide



Request Your Free Guide >

01. DANGERS OF ASBESTOS IN HOMES

Why Is Asbestos in the Home Dangerous?

Asbestos materials in the home can pose a danger to residents.

Over time, asbestos-containing products can become worn or damaged. Disturbing these materials can cause microscopic asbestos fibers to become airborne. Anyone in the home may inhale or ingest the airborne fibers.

Asbestos exposure is linked to several diseases, including malignant mesothelioma.

Exposure to asbestos in the home may cause:

- Pleural mesothelioma
- Peritoneal mesothelioma
- Asbestos lung cancer
- Asbestosis

Preventing asbestos exposure, in the home or on the **jobsite**, is the best way to prevent asbestos-related diseases.

When Was Asbestos Used in Homes?

Asbestos was commonly used in thousands of products and home construction materials before the 1980s. From the 1930s to the 1970s, building materials, vinyl products and other products contained asbestos. New regulations in the 1970s and 1980s limited asbestos use. But stockpiles of asbestos materials may have found their way into homes up to the 1990s.

Jump to a topic

01. Dangers of Asbestos in Homes

02. Where Is Asbestos in Homes?

03. How to Identify Asbestos

04. Testing for Asbestos

05. Asbestos Exposure in Homes

06. How to Handle Asbestos in Homes

07. Actions to Protect Homeowners

Get Financial Assistance

According to the U.S. Environmental Protection Agency (EPA), more than 30 million tons of asbestos were used between 1900 and 1980. Some of these past uses are still in materials and products people may come into contact with today.

Asbestos is not banned in the United States, but the EPA did ban the use of asbestos in some new products after 1989. Older homes built before 1980 may be more likely to have asbestos, and there is less asbestos risk in newer homes.

02. WHERE IS ASBESTOS IN HOMES?

Where to Find Asbestos in Old Homes

Asbestos-containing materials may be found in all areas of older homes. From the 1930s through the 1970s, asbestos was included in many different building materials. The mineral was popular because of its durability and resistance to heat and chemicals.

Common asbestos-containing materials found in the home include:

- Asbestos rope/sheet
- Boiler insulation
- Ceiling tiles
- Cement roofing
- Cement sheets
- Duct/pipe insulation
- Furnaces
- Joint compound
- Millboard

- Rollboard
- Roof shingles
- Roofing felt
- Sheetrock
- Siding shingles
- Vermiculite attic insulation
- Vinyl floor tiles
- · Vinyl sheet flooring

The varied uses of asbestos before the 1980s put many in danger of asbestos exposure in their homes.

03. HOW TO IDENTIFY ASBESTOS

How to Identify Asbestos in the Home

Homeowners may want to know how to identify asbestos in their house. It is not possible to identify asbestos-containing materials with the naked eye. However, there are signs of asbestos homeowners can look for. These clues may hint toward the presence of the mineral in certain products.

For example, homes built before the 1980s likely have asbestos in them. If the home has popcorn ceilings or vinyl flooring, it may have asbestos. A simple rule is the newer a home is, the less likely it has asbestos materials. Homes built before 1980 should be assumed to contain the mineral somewhere.

There may be signs or visual clues of asbestos in the house, but homeowners should never touch anything they think may have the mineral. Homeowners should have a trained asbestos professional inspect and manage potential asbestos. Proper handling of the mineral will prevent asbestos exposure.

Visual Clues to Help Identify Asbestos in Houses

Homeowners may find visual clues that help identify asbestos in their homes. They won't be able to see asbestos itself because the mineral consists of microscopic fibers. However, the age of the home and some construction materials may suggest if a home has asbestos.

Another complication to visually finding asbestos is the different **types of asbestos** that may have been used. These asbestos types can range in color and appearance. But asbestos-containing products may not have visible asbestos fibers. In many cases, asbestos was used as a component in the product, making it impossible to see asbestos fibers. Still, some visual clues may suggest materials may contain asbestos.

Examples of Ways to Possibly Identify Asbestos in the Home

Popcorn Ceiling

The texture applied to walls and ceilings that was then painted over often contained asbestos. Popcorn ceilings were popular between 1945 and the early 1990s. Homeowners should assume all popcorn ceilings from this period contain asbestos.

Learn More About Popcorn Ceilings >

Dimpling of Construction Materials

Asbestos causes dimpling in certain products' surfaces.

Products that may show dimpling include shingles, roofing materials or pipe insulation. Dimpling may often mean the material has asbestos and should be tested by an asbestos professional.

Learn More About Asbestos in Construction Materials >

Homeowners should remember that asbestos is a microscopic fiber that becomes airborne after being disturbed. If homeowners suspect potential asbestos in their home, they should hire a professional to inspect materials and recommend next steps.

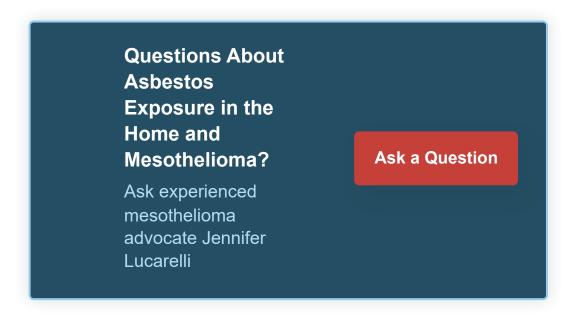
Check Surplus Materials for Labels Identifying Asbestos

Surplus materials may have asbestos in them. The packaging may help identify which products contain asbestos.

For example, spare boxes of vinyl floor tiles may have a stamp on the box or the back of the tiles that states they contain asbestos. These products came in a variety of shapes and sizes, and not all used asbestos in their production. A date included on the packaging may also indicate that they were manufactured during the height of asbestos use (1930s – 1980s).

Handling the tiles or other surplus materials may carry exposure risk. Homeowners should only inspect the outside of the packaging for a label. If there are no packages, it is best to assume any flooring or other construction materials installed before 1980 contain the mineral. Homeowners should treat these materials with caution.

While visual clues like labels can suggest the presence of asbestos in the home, it is not a fool-proof method to identify asbestos. Only asbestos abatement professionals can properly test for asbestos and safely handle any asbestos materials.



04. TESTING FOR ASBESTOS

How Do I Know if My House Has Asbestos?

The only way to know for sure if your house has asbestos is to test the home. The best way to test is to hire an asbestos abatement professional. Anyone with a home or planning to buy a house built before the 1980s may want to consider having their home tested, especially if they plan to remodel.

A trained asbestos abatement professional can test for asbestos while minimizing the risk of exposure. They will also offer advice on the proper way to handle any asbestos-containing products
present. Options may include leaving it as is, removing it or encapsulating it. Encapsulating asbestos involves leaving it in place and sealing it with a protective barrier.

Home asbestos tests are available. However, the homeowner could expose themselves and anyone living in the home to asbestos by using these tests. Many experts recommend leaving the asbestos testing to the professionals. They have the needed training to test for asbestos and handle next steps, such as removal, to prevent exposure.

How Much Does Professional Asbestos Testing Cost?

The cost of professional asbestos testing varies. The number of samples needed, type of testing completed on the samples and part of the country can all impact cost. According to data from Essel Environment, the national average for basic asbestos testing is \$600.

Comprehensive testing will cost more, but it is more in depth.

Comprehensive asbestos testing includes:

- Air quality testing
- Asbestos Hazard Emergency Response Act (AHERA) inspection
- Initial test and sampling
- Full inspection after asbestos is detected

Homeowners may consider having asbestos testing done before conducting any renovations or home projects. The cost for comprehensive testing may be worth the peace of mind from knowing that dangerous exposure could be prevented.

Comprehensive testing costs can vary depending on location. These examples can help homeowners understand the cost variations.

Example Costs of Professional Asbestos Testing

West Coast

Location: Los Angeles, California

Average Cost: \$2,668

Middle America

Location: Austin, Texas

Average Cost: \$2,420

East Coast

Location: New York State

Average Cost: \$3,534

Source: HowMuch.net

05. ASBESTOS EXPOSURE IN HOMES

How Does Asbestos Exposure Occur in Houses?

Asbestos exposure at home may happen whenever asbestoscontaining materials are disturbed or damaged. This can happen through normal wear and tear or as a result of renovations. Other common ways for asbestos products to be disturbed include:

- Maintenance projects
- A fire or natural disaster
- Flooding or water damage

According to one study, an estimated 20% of all **mesothelioma diagnoses** in industrialized countries happen outside of the workplace.

Asbestos exposure can occur anywhere in the house. Common sources of asbestos exposure in the home include:

- Attics
- Basements
- Ceilings
- Crawl spaces

- Floors
- Roofs
- Walls

Asbestos in the Attic

Asbestos may be in insulation found in the attic. One of the most notorious sources for asbestos came from vermiculite attic insulation.

This type of insulation looks like small pebbles that have been put down on the floor of the attic. Vermiculite attic insulation, such as **Zonolite insulation**, has well-documented ties to asbestos contamination.

The EPA suggests up to 70% of the vermiculite sold in the United States between 1919 and 1990 came from Libby, Montana. Much of it may have been contaminated with asbestos.

Learn More About Asbestos in Libby, Montana >

If a home has vermiculite insulation, homeowners should be careful not to disturb it. They should call an asbestos abatement professional to test and remove it. Because so much of the vermiculite came from Libby, homeowners should assume any vermiculite insulation contains asbestos.

Asbestos in the Walls of Homes

Homes built before the 1980s may have wallboards and texture that includes asbestos. Wallboards go by many different names, like drywall, gypsum board or sheetrock. During the manufacturing process, asbestos was mixed with other materials and sandwiched between two sheets of paper. Asbestos in wallboards can be disturbed when drilling through it or if the outer paper is damaged.

Asbestos cement sheets were also sometimes used for interior walls. On the outside of older homes, these sheets were used for roofing and siding. Over time, these materials can start wearing out, exposing residents to asbestos.

If a homeowner wants to remodel or needs to do maintenance, they should take precautions before starting on any work in homes built before the 1980s. A professional asbestos abatement company should test the area first.

Asbestos in Popcorn Ceilings and Vinyl Tiles

Popcorn ceilings and vinyl tile floors were popular starting in the 1940s. Both, however, may have asbestos in them.

Builders liked popcorn ceilings because they could hide some imperfections, and they provided some acoustical insulation. These types of ceilings could have 1 – 10% asbestos content. As they began to age and break down, pieces of the covering could flake off and become airborne.

Vinyl tiles provide an easy-to-maintain floor option. They can come in a variety of colors and patterns. However, during the manufacturing process, the vinyl may have been fused with asbestos. The adhesive used to glue the floor down may also have asbestos. If a homeowner ever wants to update the floor or needs to repair it, they risk exposure.

An asbestos abatement professional will be able to test and safely remove both popcorn ceiling and vinyl tiles.

Other Examples of Asbestos Exposure at Home

Insulation on Hot Water Pipes

Asbestos was commonly used as an insulator.

- The mineral can be found in pipe insulation in older homes.
- Homeowners should not remove or replace pipe insulation on their own in homes built before the 1980s.

Vehicle Repairs in the Home Garage

- Asbestos was often used in friction materials, such as car brakes, made before the 1980s.
- Brakes or other car parts from this period should not be repaired in home garages.
- Some foreign car parts may also still contain asbestos and should be handled by a mechanic.

06. HOW TO HANDLE ASBESTOS IN HOMES

What to Do if You Have Asbestos in Your Home

If a homeowner believes their home has asbestos materials, they should contact an asbestos professional to conduct a test. If the home does have asbestos, the homeowner may need to hire a contractor to remove it.

In general, asbestos materials are considered safe when they are in good condition and there are no signs of damage. If the material is damaged or worn, a professional may suggest removing or encapsulating the product. Encapsulation involves covering the materials with a sealant to prevent airborne fibers.

At no point should a homeowner attempt to remove asbestos on their own.

According to the Occupational Safety and Health Administration (OSHA), there is no safe level of asbestos exposure. Improper

asbestos handling could release fibers into the air, creating a health hazard.

Asbestos Safety Dos and Don'ts

Asbestos in the home can be very dangerous if disturbed or damaged. Homeowners need to know what to do if they suspect their home has asbestos.

Homes built before the 1980s may be built with asbestos-containing materials. Suspected asbestos-containing materials should be handled by professionals to avoid dangerous exposure.

How to Approach Asbestos in the Home

- Avoid asbestos-containing materials.
- Do not damage asbestos-containing materials.
- When buying a home, talk to the home inspector and realtor about any known asbestos in the home.
- Hire asbestos abatement professionals to complete all testing, removal or encapsulation of materials.
- If razing a home, have the <u>home inspected before</u>
 <u>demolition</u> to ensure all hazardous materials are handled properly.

How Not to Approach Asbestos in the Home

- Don't sand, saw, scrape, drill or otherwise disturb asbestoscontaining materials.
- Don't use a vacuum or broom to clean disturbed asbestos materials.
- Don't attempt to collect samples of suspected asbestoscontaining materials for testing.
- Don't have asbestos-containing materials removed by professionals unless encapsulation is impossible.
- Don't throw asbestos-containing materials in your regular trash.

Why You Shouldn't Use an At-Home Asbestos Test Kit

Asbestos materials are dangerous any time fibers are airborne. Unqualified homeowners attempting to test suspected asbestos materials on their own can cause a larger health hazard than undisturbed asbestos materials.

At-home test kits can put homeowners and their families at risk of dangerous exposure. To collect samples for testing, the suspected hazardous materials must be disturbed. This can cause fibers to become airborne. As such, it may be in the best interest of homeowners not to use an at-home asbestos test kit.

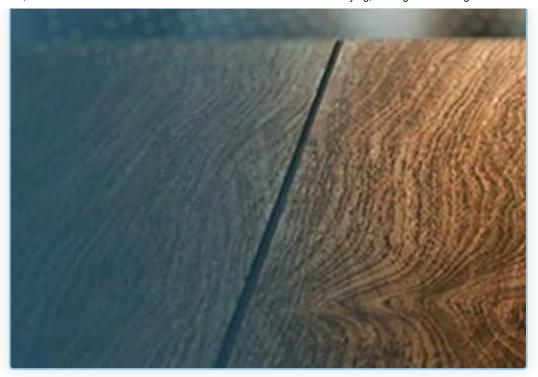
If an at-home asbestos test kit must be used, homeowners should:

- ✓ Turn off the heating and cooling system to prevent the fibers from traveling through the home
- ✓ Wear an N95 respirator
- Wear disposable gloves and wash hands afterward
- Ensure no one else is in the room
- ✓ Wet the material before testing it
- ✓ Dispose of asbestos material according to state and local laws

*More tips for at-home removal are on the U.S. Consumer Product Safety Commission's website.

Although at-home asbestos test kits may seem more economical than hiring a professional, the **costs related to asbestos-related diseases** are far greater.





07. ACTIONS TO PROTECT HOMEOWNERS

Preventing Asbestos Exposure in the Home

Preventing asbestos exposure at home is the best course of action homeowners can take to protect themselves and their families.

Homeowners should not attempt to remove asbestos from their homes on their own. Without proper handling and safety precautions, removing asbestos can cause exposure and lead to illness. It is important to hire a trained professional, so the asbestos materials can be handled and disposed of properly.

Many cities and states have regulations in place for the proper disposal of asbestos and materials containing asbestos. It is important to understand these asbestos regulations to protect anyone in the home, workers and neighbors from exposure.

Federal Regulations to Help Protect Homeowners From Asbestos Exposure

Federal regulations have reduced the amount of asbestos used in construction and manufacturing. In 1973, the United States used more than 800,000 tons of asbestos, compared to only a few hundred tons today. However, there is no full **ban on asbestos**.

Reducing asbestos use has helped, but homeowners are still at risk. It is imperative for homeowners to understand:

- Where asbestos-containing materials are most likely to be found
- What common products may contain the mineral
- How to protect themselves and others should they come into contact with asbestos

The EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) help protect air quality and reduce health risks presented by various contaminants, such as asbestos. These regulations create safety standards for many home projects, including renovations. NESHAP also covers asbestos waste transportation and disposal.

The U.S. Consumer Product Safety Commission also has several bans in place related to certain asbestos-containing materials, such as artificial ashes and embers found in gas fireplaces. The asbestos in artificial ashes and embers glowed red when heated to give the fake logs the illusion of burning. Both were banned in 1978.

Asbestos in the home can be serious. Asbestos regulations are an important part of safety.

Learn More About Asbestos Regulations >

What to Do if You Think You Have Been Exposed to Asbestos in the Home

Anyone who believes they have been exposed to asbestos while working on a project at home should consult their doctor. A doctor can help monitor for signs and **symptoms of mesothelioma** or other asbestos-related diseases.

Monitoring for mesothelioma may include regular imaging tests, such as X-rays or CT scans. Early detection may allow patients to have more treatment options, which may impact **life expectancy**.

Prevention is the best protection against asbestos exposure.

Homeowners who have a house built before the 1980s may want to speak with an asbestos abatement professional. Homeowners should also consult with a professional before undertaking repairs or a remodel of their older homes.

SOURCES [+]

Written by **Tara Strand**

Senior Content Writer

Reviewed by

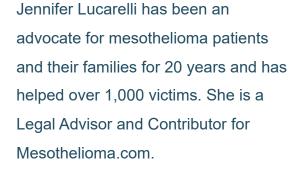
Jennifer Lucarelli

Legal Advisor and Contributor

Tara Strand specializes in researching and writing about asbestos, raising awareness and advocating for a ban.

Full Bio →

Editorial Guidelines (→



Full Bio

Navigation

Mesothelioma Patient
Resources

Treatment Blog

Asbestos Exposure
About Us

Veterans Contact Us

Our Mission

Mesothelioma.com is dedicated to providing the latest mesothelioma information and free resources while raising awareness of the dangers of asbestos. This site is sponsored by forprofit law firms engaged in asbestos litigation.

Legal Help

En Español:

¿Qué es el cáncer de mesotelioma?

Our Standards

The Mesothelioma.com editorial team works hard to offer current, factual, expert reviewed information about mesothelioma cancer and the risks of asbestos exposure.

Editorial Guidelines | Disclaimer | Privacy Policy

Contact Us

Phone

1-800-336-0086

Office

35 Thorpe Avenue, Suite 101 Wallingford, CT 06492

Accreditations

Join the conversation on social media



Copyright © 2023 by Mesothelioma.com. All Rights Reserved. The information Page last modified on March 27, 2023. contained on this site is proprietary and protected. Any unauthorized or illegal use, copying or dissemination will be prosecuted to the fullest extent of the law. All content on this site is provided for informational purposes only. It is not, nor

should it be taken as medical or legal advice. None of the content on this site is intended to substitute for medical advice, diagnosis or treatment.

Notice: This website and its content are sponsored by Early, Lucarelli, Sweeney, & Meisenkothen, LLC, and other for-profit law firms specializing in asbestos injury litigation. Attorney Advertising. Prior results do not predict a similar outcome. Please read our **disclaimer** and **privacy policy** for more information.

CHILDHOOD LEAD POISONING PREVENTION BRANCH

Testing Your Home for Lead

Why should I test my home for lead?

If you have children, lead in your home can cause serious long term health and behavior problems for them. Lead is a hazard to children under 6 years of age in particular. Lead in paint, dust, and soil is a problem for children because it gets in their bodies when they put their fingers, toys, or paint chips or dust into their mouths. Lead can also harm a pregnant woman and her developing fetus.

You should consider testing for lead if there are children in your home and:

- Your house was built before 1978, or
- Your house is near a freeway or busy roadway where leaded gasoline and its exhaust may have polluted the soil with lead.

If your house was built before 1978, it is especially important to test for lead if:

- Your house has peeling or chipping paint.
- Your house has bare soil in the yard where children play.
- You plan to repaint, remodel, or renovate the house.
- A child living in the house has had a blood lead test result indicating lead exposure.
- Your house was built before 1950 such homes almost always have some lead-based paint.

If you are buying or renting a home:

- Federal laws require the seller to give you an informational pamphlet and to tell you about any known lead hazards in the home. (These federal laws also give home buyers 10 days to inspect for lead. The law does not require landlords to allow a renter to inspect for lead.)
- Contact the National Lead Information Center at 1-800-424-LEAD for information and materials about real estate disclosure laws and for the EPA pamphlet Protect Your Family from Lead in Your Home.

Where should I test for lead?

The most important areas to test for lead are those areas where children spend a lot of time, such as bedrooms, playrooms, kitchens, and play-yards. It is especially important to test these areas if there is bare soil or if paint is peeling or chipping.

You should also test places where you plan to repaint or remodel. Test several different spots. If you are testing paint, test each different paint color. If you are testing soil, test different bare soil areas.

Some good places to test for lead-based paint are:

- Window frames and sills
- Doors, door jambs, and thresholds
- Trim and siding
- Kitchen cabinets
- Painted children's furniture
- Baseboards

Some good places to test for lead-contaminated soil are:

Around the foundation of the house

- Where children play
- Unpaved pathways
- Under windows or walls with peeling or chipping paint
- Where pets play or rest
- Areas near traffic

How do I test for lead?

There are two recommended ways to test your home for lead. Whenever you test for lead, it is important to find out how much lead is in the paint or soil you test.

- Get a laboratory analysis: For \$25 \$50, you can have a paint chip or soil sample tested by an accredited laboratory and get reliable results in 24 48 hours. Call the laboratory for details before you mail them your samples. Keep a sketch or list of the locations where you take samples.
 - Taking A Paint Sample: Tape a clean, plastic sandwich bag underneath some paint you want to test. Use a clean, sharp chisel or scraper to scrape a tablespoon size amount of paint into the bag. Try to scrape off all the layers of paint, not just the top coats lead is often in the bottom layer of paint. Try not to scrape off any of the wood or plaster that is under the paint. Seal the bag and label it. On the label, write where the sample was taken (example: Sample #1 kitchen window sill). Wash your hands and the scraper with soap and water after each paint sample you take.
 - Taking A Soil Sample: Using a clean trowel or large spoon, scoop about half a cup of soil from the top inch of the bare soil you want to test. Try not to scoop up plant leaves, roots, or other large pieces of debris. If there are paint chips in the soil, it is OK to include them in the sample. Place the soil into a clean, plastic sandwich bag. Seal the bag and label it. On the label, write where the sample was taken (example: Sample # 2 under children's swing set). Wash your hands and the spoon with soap and water after each soil sample you take.
- Hire a Certified Inspector/Assessor: You can hire a State-certified Inspector/Assessor to inspect your home for lead. Obtain at least two or three bids for a cost estimate of the work. Ask the Inspector/Assessor to write you a risk assessment report that will tell you if the lead levels in your home represent a hazard and what options you have for dealing with it.

The certified Inspector/Assessor can test your paint with an XRF (x-ray fluorescence) machine, for immediate results. He or she can also send paint, dust, and soil samples to a laboratory for testing. Make sure the Inspector/Assessor gives you a sketch or a description of where the samples were taken.

For a list of State-certified Inspector/Assessors, go to the State-certified Inspector/Assessor page on this site.

How can I tell if I have lead above the hazard level in my paint or soil?

The table below shows hazard levels of lead in paint, soil and dust, as determined by the California Department of Public Health (CDPH). The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing & Urban Development (HUD) may have different hazard level definitions.

Lead in Paint Hazard Levels	Lead in Bare Soil Hazard Levels	Lead in Dust Hazard Levels
 Lab test results of 5,000 ppm (parts per million) or more, or 0.5% or more (by weight) XRF test results of 1.0 milligrams of lead per square centimeter (1.0 mg/cm²) or more 	 Lab test results of 400 ppm or more in bare soil in areas where children play Lab test results of 1,000 ppm or more in all other areas 	 Dust from interior floors with 40 micrograms of lead per square foot (40 mcg/ft²) or more Dust from interior horizontal surfaces with 250 micrograms of lead per square foot (250 mcg/ft²) or more

	-01:-1
	 Dust from exterior floors and
	exterior horizontal window
	surfaces with 400 micrograms
	of lead per square foot (400
	mcg/ft ²) or more

Important: No matter what your test results are, the condition of your house's paint and soil is important. If the soil is covered by grass, bushes or permanent ground coverings, even high levels of lead in the soil may not be hazardous to children. If you are not planning to remodel and the paint is in good condition - not chipping or peeling - it may not be a lead hazard, even if it contains high levels of lead. If the paint is peeling or chipping, if it is on doors and windows where normal wear and tear causes chipping, or if you plan to remodel the area, you should take steps to prevent the lead from poisoning your children.

<u>Warning</u>: Lead test results are only as good as your testing procedures. The results will not tell you about the lead content of painted surfaces or soil that you did not test. Hire a State-certified Inspector/Assessor to make sure you get accurate testing results.

Can I just use a lead test kit from a paint store?

Kits for testing paint and ceramics are available at most paint and hardware stores for \$8 - 10. They have chemicals that change color when rubbed against a surface that contains lead.

- These kits can only tell you if there is lead in the paint you tested.
- They will not tell you how much lead is in the paint or if it is a hazard.
- You can not use them to test for lead in soil.

If you decide to use a lead test kit to test your paint, follow the directions on the package very carefully. Be sure to test the bottom layers of paint. To do this, use a sharp knife to cut a slanted notch through all the paint layers on the spot you want to test. Test all the layers of paint in the notch. Look for the color change indicated by the test kit.

If your house was built before 1978 and your lead test kit comes out negative (does not change color), you should have an accredited lab test the paint to make sure the lead test kit worked properly. Paint on structures built prior to 1978 is legally presumed to be lead-based, unless a state-certified Inspector/Assessor has quantitative testing to show otherwise.

What should I do next?

If the lead in your paint or soil exceeds the hazard levels listed above, you should:

- Contact your family doctor or your local health department and get blood lead tests for your children who are 6 years of age or under. Discuss whether other family members should be tested.
- Find out about everyday things you can do to prevent lead poisoning.
- Consider hiring a State-certified lead Inspector/Assessor to inspect your home for lead.
- Hire a State-certified lead contractor to reduce the lead hazards in your home and yard.
- If you plan to repaint or remodel your home, hire a State-certified lead contractor. If you plan to do the work yourself, get the EPA's free how-to booklet, Reducing Lead Hazards When Remodeling Your Home (PDF) and contact your local health department to find out about lead-safe work practices to prevent poisoning yourself or your children.

If you are concerned about unsafe lead work creating a hazard, contact your local building department (PDF) or local health department lead program.

Page Last Updated : February 24, 2023