

# **Air Quality and Greenhouse Gas Analysis**

## **West Oaks Townhomes Project**

Prepared for:

**BRENTWOOD DEVELOPMENTS**

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Prepared by:



1501 SPORTS DRIVE, SUITE A • SACRAMENTO • CA • 95834  
OFFICE 916.372.6100 • FAX 916.419.6108  
INFO@RANEYMANAGEMENT.COM

## Introduction

This Air Quality and Greenhouse Gas Analysis identifies and analyzes the potential environmental impacts from the West Oaks Project (proposed project) related to air quality and greenhouse gas (GHG) emissions. The information and analysis in this document is organized in accordance with the checklist in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed.

## Project Summary

The proposed project is located in the City of Rocklin, immediately east of Kathy Lund Park and south of West Oaks Boulevard (see Figure 1). Pleasant Grove Creek runs along the eastern site boundary. The project site is currently vacant and undisturbed and is adjacent to additional vacant land to the east. A business park is located to the north of the site, across West Oaks Boulevard, and residential uses are located to the south of the site, opposite the creek area. State Route (SR) 65 is located approximately 0.7-mile west of the site.

The proposed project would include a total of 20 single-family townhouse style units (see Figure 2). The units would be three stories in height with a roof deck and a two-car garage. In addition, the development would also include eight guest parking spaces. The nearest existing sensitive receptors would be the existing residences to the south of the site.

## Sources

1. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
2. California Air Resources Board. *Climate Change Scoping Plan*. December 2008.
3. California Air Resources Board. *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document*. August 19, 2011.
4. California Air Resources Board. *First Update to the AB 32 Scoping Plan*. May 27, 2014.
5. California Building Standards Commission. *2016 California Green Building Standards Code (CALGreen), California Code of Regulations Title 24, Part 11*. June 2015.
6. Placer County Air Pollution Control District. *CEQA Thresholds and Review Principles*. November 21, 2017.
7. Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. August 2017.
8. Placer County Air Pollution Control District. *Placer County Air Pollution Control District Policy, Review of Land Use Projects Under CEQA*. October 13, 2016.
9. Sacramento Metropolitan Air Quality Management District. *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*. September 26, 2013.
10. University of California, Davis. *Transportation Project-Level Carbon Monoxide Protocol*. December 1997.

**Figure 1**  
**Project Location Map**



**Figure 2**  
**Preliminary Site Plan**





**III. AIR QUALITY.**

*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>

**Discussion**

a,b. The City of Rocklin is located within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO<sub>x</sub>), and lead. At the federal level, the SVAB area is designated as nonattainment for the 8-hour ozone and the 24-hour particulate matter 2.5 microns in diameter (PM<sub>2.5</sub>) AAQS, and attainment or unclassified for all other federal criteria pollutant AAQS. At the State level, the SVAB area is designated as nonattainment for the 1-hour ozone, 8-hour ozone, and particulate matter 10 microns in diameter (PM<sub>10</sub>) AAQS, and attainment or unclassified for all other State AAQS.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, PCAPCD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies.

The current applicable air quality plan for the proposed project area is the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2013 Ozone Attainment Plan), adopted September 26, 2013. The U.S. Environmental Protection Agency (USEPA) approved the 2013 Ozone Attainment Plan effective March 2, 2015. The

2013 Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the CAA requirements, including the federal AAQS. It should be noted that the USEPA strengthened the primary 8-hour ozone AAQS, as well as the secondary 8-hour ozone AAQS, making the secondary standard identical to the primary standard. The SVAB remains classified as a severe nonattainment area with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised AAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). With the publication of the new AAQS ozone rules, areas in nonattainment must update their ozone attainment plans and submit new plans by 2020/2021.

General conformity requirements of the regional air quality plan include whether a project would cause or contribute to new violations of any AAQS, increase the frequency or severity of an existing violation of any AAQS, or delay timely attainment of any AAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the PCAPCD has adopted recommended thresholds of significance for emissions of PM<sub>10</sub> and the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>). On October 13, 2016, the PCAPCD adopted updated thresholds of significance for the aforementioned pollutants.

The thresholds of significance, expressed in pounds per day (lbs/day), listed in Table 1 are the PCAPCD's current thresholds of significance for use in the evaluation of air quality impacts associated with proposed development projects. The City of Rocklin, as lead agency, uses the PCAPCD's recommended thresholds of significance for CEQA evaluation purposes. Thus, if the proposed project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

<b>Table 1</b>		
<b>PCAPCD Thresholds of Significance</b>		
<b>Pollutant</b>	<b>Construction Threshold (lbs/day)</b>	<b>Operational Threshold (lbs/day)</b>
ROG	82	55
NO <sub>x</sub>	82	55
PM <sub>10</sub>	82	82

*Source: PCAPCD, 2016.*

Based on modeling conducted using the California Emissions Estimator Model (CalEEMod) software, the PCAPCD has identified the approximate size of a project for selected land use categories that would result in NO<sub>x</sub> operational emissions equal to the threshold of 55 lbs/day. CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates

based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. Because emissions of ROG and PM<sub>10</sub> associated with land use development projects are typically lower than NO<sub>x</sub> emissions, NO<sub>x</sub> emissions are used as a proxy for a project's ROG and PM<sub>10</sub> emissions levels. Thus, if a project is equal to or less than the size identified by the PCAPCD, the project would not be expected to result in emissions of ROG, NO<sub>x</sub>, or PM<sub>10</sub> in excess of the thresholds of significance identified in Table 1 above.

The PCAPCD has identified a project size of 617 for single-family residential and 868 for condo/townhouse residential development as the representative size for which emissions would exceed the applicable thresholds of significance. The proposed project would involve the construction of 20 single-family townhouse style units, which would be well below the representative size identified by the PCAPCD for a single-family or condo/townhouse residential development. Because the proposed project would be of typical design, the assumptions used in the CalEEMod modeling performed by the PCAPCD to determine the screening level sizes would be sufficient to represent the proposed project land use and design. Therefore, the proposed project would not generate operational emissions in excess of the identified thresholds of significance for ROG, NO<sub>x</sub>, or PM<sub>10</sub>.

Demolition activities, extensive soil hauling, or other intensive or atypical construction activities would not be necessary for the proposed project. Construction would be consistent with typical residential development. As a result, and also because the proposed project would be well below the screening level sizes identified by the PCAPCD for operational emissions, construction emissions would similarly be expected to be below the applicable thresholds of significance for ROG, NO<sub>x</sub>, and PM<sub>10</sub>. Thus, the proposed project would not generate construction-related emissions in excess of the identified thresholds of significance for ROG, NO<sub>x</sub>, or PM<sub>10</sub>.

Projects within the jurisdictional area of the PCAPCD are required to comply with all applicable PCAPCD rules and regulations. Accordingly, the proposed project would be required to comply with all applicable PCAPCD rules and regulations for construction, which would be noted on City-approved construction plans, as well as for operations. The applicable rules and regulations would include, but would not be limited to, the following:

- Rule 202 related to visible emissions;
- Rule 217 related to asphalt paving materials;
- Rule 218 related to architectural coatings;
- Rule 228 related to fugitive dust;
- Rule 501 related to General Permit Requirements;
- Rule 225 related to wood-burning appliances; and
- Rule 246 related to water heaters.

Because the project would not exceed the thresholds of significance and would be required to comply with all applicable PCAPCD rules and regulations, the proposed project would not substantially contribute to the region's nonattainment status of ozone or PM<sub>10</sub>.

Therefore, implementation of the proposed project would not violate an air quality standard, contribute to an existing or projected air quality violation, or interfere with any applicable air quality plans, such as the 2013 Ozone Attainment Plan. As a result, a *less-than-significant* impact related to air quality would occur.

- c. A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. Due to the dispersive nature and regional sourcing of air pollutants, air pollution is already largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

To improve air quality and attain the health-based AAQS, reductions in emissions are necessary within nonattainment areas. The project is part of a pattern of urbanization occurring in the greater Sacramento ozone nonattainment area. The growth and combined vehicle usage, and business activity within the nonattainment area from the project, in combination with other past, present, and reasonably foreseeable projects within Rocklin and surrounding areas, could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could cumulatively contribute to regional air quality health effects through emissions of criteria air pollutants.

The PCAPCD recommends using the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and, thus, result in a cumulative impact. As discussed above, the PCAPCD's recommended thresholds of significance for ozone precursors and PM<sub>10</sub> are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM<sub>10</sub> emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the PCACPD established operational phase cumulative-level emissions thresholds identical to the operational thresholds identified above, in Table 1.

As discussed above, the proposed project would not result in emissions in exceedance of the applicable thresholds of significance for ozone precursors or PM<sub>10</sub>. Accordingly, impacts related to the cumulative emissions of criteria pollutants for which PCAPCD is in non-attainment would be considered *less than significant*.

- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers,



playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The proposed project would involve the creation of new housing and, thus, would be considered a sensitive receptor. The nearest existing sensitive receptors would be the existing residences to the south of the site.

The major pollutant concentrations of concern are localized CO emissions and toxic air contaminant (TAC) emissions, which are addressed in further detail below.

### Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Traffic congestion near a roadway's intersection with vehicles moving slowly or idling could result in localized CO emissions at that intersection due to a vehicle engine's inefficient combustion. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Accordingly, a land use project could result in impacts associated with localized CO concentrations at roadway intersections if the project generates substantial traffic. Typically, according to the statewide CO Protocol document, signalized intersections operating at Level of Service (LOS) E or F, or projects that would result in the worsening of signalized intersections to LOS E or F, have the potential to result in localized CO concentrations in excess of the State or federal AAQS and potentially expose sensitive receptors to substantial CO concentrations.

In accordance with the statewide CO Protocol, the PCAPCD has established screening methodology for localized CO emissions, which are intended to provide a conservative indication of whether project-generated vehicle trips would result in the generation of localized CO emissions that would contribute to an exceedance of AAQS and potentially expose sensitive receptors to substantial CO concentrations. Per the PCAPCD's screening methodology, if the project would result in vehicle operations producing more than 550 lbs/day of CO emissions and if either of the following scenarios are true, the project could result in localized CO emissions that would violate CO standards:

- Degrade the peak hour level of service (LOS) on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes an increase in delay at an intersection by 10 seconds or more when project-generated traffic is included.

As discussed above, the proposed project size would be well below the representative size identified by the PCAPCD for a single-family or condo/townhouse residential development for which emissions would exceed the applicable thresholds of significance. Accordingly, operational emissions would be expected to be below the applicable criteria air pollutant thresholds of significance. For the same reasons, the proposed project would not be

expected to result in emissions of CO in excess of 550 lbs/day. In addition, due to the number of proposed units, the traffic generated by the proposed project would not be substantial enough to result in the degradation of any nearby intersections from an acceptable LOS to an unacceptable LOS. Additionally, the proposed project would not substantially worsen traffic operations by resulting in an increase in delay of 10 or more seconds at any intersections predicted to operate at an unacceptable LOS without the project under existing or cumulative conditions. As such, according to the PCAPCD's screening criteria for localized CO emissions, the proposed project would not be anticipated to result in the exposure of sensitive receptors to substantial localized concentrations of CO.

### TAC Emissions

Another category of environmental concern is TACs. The *CARB's Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. As such, the proposed project would not generate any substantial pollutant concentrations during operations. Construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project, particularly so for the proposed project due to the size of the project. Construction equipment would operate intermittently throughout the course of a day and only portions of the site would be disturbed at a time. In addition, DPM is highly dispersive in the atmosphere. Prevailing winds in the City are generally from the south and southwest. Because the nearest sensitive receptors would be the residences located south of the project site, across the open space area associated with the adjacent creek, any emissions generated at the site associated with construction activities would be dispersed away from the nearby sensitive receptors. Furthermore, all construction equipment and operation thereof would be regulated per the State's In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, particularly associated with permitting of air pollutant sources.

Considering the intermittent nature of construction equipment, the duration of construction activities, the prevailing wind direction, and the long-term exposure periods typically associated with health risks, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time due to project

construction would be low. Therefore, construction of the proposed project would not be expected to expose any nearby sensitive receptors to substantial concentrations of DPM or other TAC.

### Conclusion

Based on the above discussion, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, impacts would be considered *less than significant*.

- e. Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Certain land uses such as wastewater treatment facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The proposed project would not introduce any such land uses. Residential land uses are not typically associated with the creation of objectionable odors.

Although less common, diesel fumes associated with substantial diesel-fueled equipment and heavy-duty trucks, such as from construction activities or operations of emergency generators, could be found to be objectionable. However, as addressed above, construction is temporary and construction equipment would operate intermittently throughout the course of a day and would likely only occur over portions of the improvement area at a time. All construction equipment and operation thereof would be regulated per the statewide In-Use Off-Road Diesel Vehicle Regulation. Construction equipment would also be required to comply with applicable PCAPCD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors. Considering the short-term nature of construction activities and the regulated and intermittent nature of the operation of construction equipment, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors affecting a substantial number of people, and impacts would be *less than significant*.

**VII. GREENHOUSE GAS EMISSIONS.**

*Would the project:*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	<input type="checkbox"/>	<input type="checkbox"/>	<b>✘</b>	<input type="checkbox"/>

**Discussion**

- a,b. Emissions of GHG contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project’s GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

In recognition of the global scale of climate change, California has enacted several pieces of legislations in an attempt to curb GHG emissions. Specifically, Assembly Bill (AB) 32 and, more recently, Senate Bill (SB) 32, have established statewide GHG emissions reduction targets. Accordingly, the CARB has prepared the Climate Change Scoping Plan for California (Scoping Plan), approved in 2008 and updated in 2014, which provides the outline for actions to reduce California’s GHG emissions and achieve the emissions reduction targets required by AB 32. In concert with statewide efforts to reduce GHG emissions, air districts, counties, and local jurisdictions throughout the State have implemented their own policies and plans to achieve emissions reductions in line with the Scoping Plan and emissions reduction targets, including AB 32 and SB 32.

On October 13, 2016, the PCAPCD adopted GHG emissions thresholds. The thresholds were designed to analyze a project’s compliance with applicable state laws including AB 32 and SB 32. The GHG thresholds include a bright-line threshold for the construction and operational phase of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold. The bright-line threshold of 10,000 MTCO<sub>2e</sub>/yr represents the level at which a project’s GHG emissions would be substantially large enough to contribute to cumulative impacts and mitigation to lessen the emissions would be mandatory. The PCAPCD further recommends use of the 10,000 MTCO<sub>2e</sub>/yr for analysis of construction-related GHG emissions for land use project. Any project with GHG emissions below the screening level threshold of 1,100 MTCO<sub>2e</sub>/yr is judged by the PCAPCD as having a less-than-significant impact related to GHG emissions, and would

not conflict with any State or regional GHG emissions reduction goals. Projects that would result in GHG emissions above the 1,100 MTCO<sub>2e</sub>/yr screening level threshold, but below the bright-line threshold of 10,000 MTCO<sub>2e</sub>/yr, must result in GHG emissions below the efficiency thresholds in order to be considered to result in a less-than-significant impact related to GHG emissions and not conflict with any State or regional GHG emissions reduction goals. The GHG efficiency thresholds, which are in units of MTCO<sub>2e</sub>/yr per capita or per square-foot, are presented in Table 2.

<b>Table 2</b>			
<b>PCAPCD Operational GHG Efficiency Thresholds of Significance</b>			
<b>Residential (MTCO<sub>2e</sub>/capita)</b>		<b>Non-Residential (MTCO<sub>2e</sub>/1,000 sf)</b>	
<b>Urban</b>	<b>Rural</b>	<b>Urban</b>	<b>Rural</b>
4.5	5.5	26.5	27.3
<i>Source: PCAPCD, 2016.</i>			

In accordance with CARB and PCAPCD recommendations, the City, as lead agency, uses the currently adopted PCAPCD GHG thresholds of significance as presented above. Therefore, if the proposed project results in construction GHG emissions in excess of 10,000 MTCO<sub>2e</sub>/yr, and/or operational GHG emissions in excess of 1,100 MTCO<sub>2e</sub>/yr and is unable to show that emissions would achieve the efficiency thresholds presented in Table 2, the project would be considered to result in a cumulatively considerable contribution to global climate change.

Similar to criteria air pollutants, the PCAPCD has identified the approximate size of a project for selected land use categories that would result in operational GHG emissions equal to the bright-line threshold of 10,000 MTCO<sub>2e</sub>/yr and the screening level threshold of 1,100 MTCO<sub>2e</sub>/yr based on CalEEMod modeling. Thus, if a project is equal to or less than the size identified by the PCAPCD, the project would not be expected to result in emissions of GHG in excess of the applicable thresholds of significance.

The PCAPCD has identified a project size of 646 for single-family residential and 957 for condo/townhouse residential development as the representative size for which emissions would exceed the bright-line threshold, and of 71 for single-family residential and 105 for condo/townhouse residential development for which emissions would exceed the screening level threshold. The proposed project would involve the construction of 20 single-family townhouse style units, which would be well below the representative size identified by the PCAPCD for a single-family or condo/townhouse residential development in comparison to both the bright-line and the screening level threshold. Because the proposed project would be of typical design, the assumptions used in the CalEEMod modeling performed by the PCAPCD to determine the screening level sizes would be sufficient to represent the proposed project land use and design. Therefore, the proposed project would not generate operational emissions in excess of the identified thresholds of significance for GHG emissions, and would not conflict with any State or regional GHG emissions reduction goals.

Demolition activities, extensive soil hauling, or other intensive or atypical construction activities would not be necessary for the proposed project. Construction would be

consistent with typical residential development. As a result, and also because the proposed project would be well below the screening level sizes identified by the PCAPCD for operational GHG emissions, construction GHG emissions would similarly be expected to be below the applicable thresholds of significance. In addition, construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. Overall, the proposed project would not be expected to have a cumulatively considerable contribution to a significant cumulative GHG impact during construction.

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, impacts related to GHG emission and global climate change would not be cumulatively considerable and would be considered *less than significant*.