

MEMORANDUM

DATE: September 25, 2019

To: Larry Deese, Housing Authority of the County of Santa Barbara

FROM: Amy Fischer, Principal
Cara Carlucci, Planner

SUBJECT: Air Quality and Greenhouse Gas Analysis for the proposed Escalante Meadows Project, Guadalupe, CA

INTRODUCTION

This Air Quality and Greenhouse Gas Analysis for the proposed Escalante Meadows Project (project) in the City of Guadalupe (City) has been prepared using methods and assumptions recommended in the Santa Barbara County Air Pollution Control District's (SBCAPCD) *Environmental Review Guidelines*.¹ This analysis includes a description of existing regulatory framework, an assessment of project construction and operation-period air quality emissions, and an assessment of greenhouse gas (GHG) emissions. Measures to reduce or eliminate significant impacts are identified, where appropriate.

PROJECT DESCRIPTION

The 8.96-acre project site is located along 11th Street in the City of Guadalupe. The project site is bound to the north by 11th Street, to the east by rural residential uses, to the south by wetland, and to the west by Mary Buren Elementary School.

The proposed project would include the phased redevelopment of 52 units of affordable apartments into 80 units of affordable apartments. During Phase 1, eight existing buildings would remain and five new apartment buildings, a community center building, and a maintenance building would be constructed. During Phase 2, the remaining five apartment buildings would be constructed. Each apartment building would include eight units for a total of 40 units. Additional amenities would include a community building for resident services along with a children's center and wellness service center available to the public. The proposed apartments would be energy efficient and handicap accessible and would include solar-ready covered parking during each phase of the

¹ Santa Barbara County Air Pollution Control District, 2015. *Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District*. April 30. Website: <https://www.ourair.org/wp-content/uploads/APCDCEQAGuidelinesApr2015.pdf> (accessed September 2019).

project. Construction of Phase 1 is expected to begin December 1, 2020 and end June 1, 2022 and construction of Phase 2 is expected to begin June 2, 2022 and end August 11, 2023.

ENVIRONMENTAL SETTING

Air Quality Background

Both State and Federal governments have established health-based Ambient Air Quality Standards for six criteria air pollutants:² carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and suspended particulate matter (PM). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_x) and reactive organic compounds (ROC).

Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

Air quality monitoring stations are located throughout the nation and maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the USEPA to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment, such as marginal, moderate, serious, severe, and

² United States Environmental Protection Agency (USEPA), 2014. Criteria pollutants are defined as those pollutants for which the Federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

extreme, are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS.

The California Air Resources Board (CARB) has divided California into 15 regional air basins according to topographic drainage features, geographic features, and meteorological features for the purpose of managing the air resources of the State on a regional basis. Each air district establishes significance thresholds, which are used to manage total regional and local emissions within an air basin. Significance thresholds are based on whether or not the air basin has met State and federal ambient air quality standards (AAQS) for criteria pollutants. These emission thresholds were established for individual development projects that would contribute to regional and local emissions and could adversely affect or delay the Air Basin's projected attainment target goals for nonattainment criteria pollutants.

The City of Guadalupe is within the South Central Coast Air Basin (SCCAB), which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The SCCAB is comprised of three air pollution control districts (APCDs) which are county governing authorities that have primary responsibility for controlling air pollution from stationary sources within their jurisdiction. The three APCDs within the SCCAB include: the San Luis Obispo County APCD, which consists of San Luis Obispo County; the Santa Barbara County APCD (SBCAPCD), which consists of Santa Barbara County; and the Ventura County APCD, which consists of Ventura County. The City of Guadalupe is located within Santa Barbara County and, therefore, is within the jurisdiction of the SBCAPCD.

The primary pollutants of concern in the SBCAPCD are O₃ and PM₁₀ as the SBCAPCD is designated as nonattainment under State AAQS standards for these pollutants. However, in 2017 the SBCAPCD changed from nonattainment to nonattainment-transitional for O₃ due to the declining number of State 1-hour and 8-hour O₃ exceedances that have occurred in the County between 1990 and 2005.³ The SBCAPCD is either in attainment or unclassified for all other State and federal standards.⁴ The attainment statuses for each of the criteria pollutants for the SBCAPCD are listed in Table 1.

Pollutant monitoring results for the years 2016 to 2018 at the Santa Maria ambient air quality monitoring station (the closest monitoring station to the project site) indicate that air quality in the project area has generally been good, with the exception of PM. The monitoring results indicated PM_{2.5} levels exceeded the federal standard once in 2018; however the federal PM_{2.5} standards were not exceeded in 2016 or 2017. PM₁₀ levels exceeded the State standard 16 times in 2016, 22 times in 2017, and 13 times in 2018; however the federal PM₁₀ standards were not exceeded between 2016 and 2018. Both State and federal 1-hour ozone standards were not exceeded between 2016 and 2018, and the federal 8-hour ozone standards were not exceeded between 2016 and 2018 at this monitoring station. The CO, SO₂, and NO₂ standards were also not exceeded in this area between 2016 and 2018.

³ SBCAPCD, 2016. *2016 Ozone Plan*. October.

⁴ A region is determined to be unclassified when the data collected from the air quality monitoring stations do not support a designation of attainment or nonattainment, due to lack of information, or a conclusion cannot be made with the available data.

Table 1: Santa Barbara County Attainment/Nonattainment Classification Summary

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 hour	0.070 ppm	Nonattainment-Transitional	0.070 ppm	Unclassifiable/Attainment
	1 hour	0.09 ppm (180 µg/m ³)	Nonattainment-Transitional	-	-
Carbon Monoxide	8 hour	9.0 ppm (10 mg/m ³)	Attainment	9.0 ppm (10 m/m ³)	Attainment
	1 hour	20.0 ppm (23 mg/m ³)	Attainment	35.0 ppm (40 µg/m ³)	Attainment
Nitrogen Dioxide	annual average	0.030 ppm (56 µg/m ³)	Attainment	53 ppb	Unclassifiable/Attainment
	1 hour	0.18 ppm (338 µg/m ³)	Attainment	100 ppb	Unclassifiable/Attainment
Sulfur Dioxide	annual average	-	-	Revoked	-
	24 hour	0.04 ppm (105 µg/m ³)	Attainment	Revoked	-
	1 hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb	Attainment
Particulate Matter (PM ₁₀)	annual arithmetic mean	20 µg/m ³	Nonattainment	Revoked	Attainment
	24 hour	50 µg/m ³	Nonattainment	150 µg/m ³	Attainment
Particulate Matter (PM _{2.5})	annual arithmetic mean	12µg/m ³	Unclassifiable	12.0 µg/m ³	Unclassifiable/Attainment
	24 hour	-	-	35 µg/m ³	Unclassifiable/Attainment
Sulfates	24 hour	25 µg/m ³	Attainment	-	-
Lead	calendar quarter	-	-	1.5 µg/m ³	Attainment
	30 day average	1.5 µg/m ³	Attainment	-	-
	rolling 3-month average	-	-	0.15 µg/m ³	Unclassifiable
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m ³)	Attainment	-	-
Vinyl Chloride (chloroethene)	24 hour	0.010 ppm (26 µg/m ³)	Attainment	-	-
Visibility Reducing Particles	8 hour (1000 to 1800 PST)	-	-	-	-

Source: SBCAPCD (2019). Website: <https://www.ourair.org/air-quality-standards/>

Greenhouse Gas and Global Climate Change Background

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂);
- Methane (CH₄);
- Nitrous oxide (N₂O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur Hexafluoride (SF₆).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally-occurring GHGs such as CO₂, CH₄, and N₂O, some gases, like HFCs, PFCs, and SF₆ are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO₂, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO₂ over a specified time period. GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂e).

Regulatory Framework

Air quality and GHG standards and the regulatory framework are discussed below.

Federal Regulations

At the federal level, the USEPA has been charged with implementing national air quality programs. USEPA air quality mandates are drawn primarily from the Federal Clean Air Act (FCAA), which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO₂ emissions under the federal Clean Air Act. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change. This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the Clean Air Act, finding that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

California Air Resources Board

The CARB is the State's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations. CARB is also the lead agency for implementing climate change regulations in the State. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act. Under Assembly Bill (AB) 2588, stationary sources of air pollutants are required to report the types and quantities of certain substances their facilities routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, determine health risks, and notify nearby residents of significant risks.

The California Air Resources Board Handbook. The CARB has developed an Air Quality and Land Use Handbook⁵ which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. According to the CARB Handbook, recent air pollution studies have shown an association between respiratory and other non-cancer health effects and proximity to high traffic roadways. Other studies have shown that diesel exhaust and other cancer-causing chemicals emitted from cars and trucks are responsible for much of the overall cancer risk from airborne toxics in California. The CARB Handbook recommends that county and city planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools, and playgrounds.

Land use designations with air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners, and large gasoline service stations. Key recommendations in the CARB Handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day;

⁵ CARB. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April.

- Within 1,000 feet of a major service and maintenance rail yard;
- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet); and
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

The CARB Handbook specifically states that its recommendations are advisory and acknowledges land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

The recommendations are generalized and do not consider site-specific meteorology, freeway truck percentages, or other factors that influence risk for a particular project site. The purpose of this guidance is to further examine project sites for actual health risk associated with the location of new sensitive land uses.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is Assembly Bill (AB) 32, passed by the State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) CO₂e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT of CO₂e, or approximately 30 percent, from the State's projected 2020 emission level of 596 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 42 MMT CO₂e, or almost 10 percent from 2002-2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO₂e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO₂e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO₂e).

The Scoping Plan identifies 18 emission reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional

transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT CO₂e by 2020.

On August 24, 2011, the CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. The CARB also approved a more robust CEQA equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020, and also sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,⁶ to reflect the 2030 target set by Executive Order B-30-15 and codified by Senate Bill (SB) 32.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, the CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). The CARB may update the targets every 4 years and must update them every 8 years. MPOs in turn must demonstrate how their plans, policies and transportation investments meet the targets set by the CARB through Sustainable Community Strategies (SCS). The SCS are included with the Regional Transportation Plan (RTP), a report required by State law. However, if an MPO finds that their SCS will not meet the GHG reduction target, they may prepare an Alternative Planning Strategy (APS). The APS identifies the impediments to achieving the targets.

Executive Order B-30-15 (2015). Governor Jerry Brown signed Executive Order B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy

⁶ California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. November.

measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. Senate Bill 350 (SB 350), signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission for the private utilities and by the California Energy Commission for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for, and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016 the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 Executive Order B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO₂e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100. On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon

neutrality goal. The goal of carbon neutrality by 2045 is in addition to other Statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO₂e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Santa Barbara County Air Pollution Control District

Under the California Clean Air Act (CCAA), the SBCAPCD is required to prepare a plan for air quality improvement for pollutants for which the District is nonattainment. The SBCAPCD updates the plan every three years. Each SBCAPCD Air Quality Attainment Plan (AQAP) is an update of the previous plan and has a 20-year horizon. The latest AQAP is the 2016 Ozone Plan, which was adopted in October 2016.⁷ Based on the region's nonattainment status for ozone, each of the SBCAPCD plan updates have included an "every feasible measure" strategy to ensure continued progress toward attainment of the state ozone standards. The 2016 Ozone Plan documents the SPCAPCD's progress toward the State 1-hour and 8-hour ozone standards.

The 2016 Ozone Plan incorporates and builds upon the prior Clean Air Plans and focuses on achieving attainment of the State ozone standards, in addition to the federal ozone standard. The 2016 Ozone Plan focuses on reducing ozone precursor emissions through implementation of transportation control measures, which would serve to reduce mobile source emissions, which are the primary source of ROC and NO_x emissions in Santa Barbara County. It emphasizes the need for updating emission reduction measures identified in the 2013 Clean Air Plan in order to achieve implementation. In addition, the 2016 Ozone Plan utilizes the Santa Barbara County Association of Governments (SBCAG) Regional Growth Forecast and CARB on-road emissions forecasts to project population growth and associated air pollutant emissions within Santa Barbara County.

When the 2016 Ozone Plan was adopted, the SBCAPCD was still designated as a nonattainment area for the State ozone standard. However, after adoption of the 2016 Ozone Plan, the SBCAPCD's designation for ozone under the CCAA changed from nonattainment to nonattainment-transitional. As a result, the SBCAPCD prepared the August 2017 Report to the District Board of Directors⁸ to examine the stationary source control measures in the 2016 Ozone Plan and determine whether changes in the control measure implementation schedule are necessary. The following actions are recommended as an interim strategy, in order to comply with this requirement:

1. Delay implementation of the NO_x control measures until 2018;
2. Shift the ROC control measures to contingency measures; and,

⁷ Santa Barbara County Air Pollution Control District, 2016. *2016 Ozone Plan*. October 20. Website: <https://www.ourair.org/wp-content/uploads/Final-2016-Ozone-Plan-Approved-October-20-2016.pdf> (accessed September 2019).

⁸ Santa Barbara County Air Pollution Control District, 2017. *Nonattainment-Transitional Designation: Changes to the 2016 Ozone Plan Control Measure Implementation Schedule. August 2017 Report to the District Board of Directors*. Website: <https://www.ourair.org/wp-content/uploads/NA-Trans-Att-B-Justif-Doc.pdf> (accessed September 2019).

3. Receive and file a preliminary cost-benefit analysis of the NO_x control measures; a complete cost-benefit analysis of the NO_x control measures will be included with the Board action to implement the measures.

In addition, SBCAPCD provides guidance for assessing and reducing the impacts of project-specific air quality emissions in the Environmental Review Guidelines.⁹ The Environmental Review Guidelines also developed a GHG threshold of 10,000 metric tons of CO₂e per year for stationary source projects, which include equipment, processes, and operations that require an SBCAPCD permit to operate. However, this threshold does not apply to land development projects. The SBCAPCD has not developed or adopted GHG significance thresholds for residential, commercial, or industrial projects.

Santa Barbara County Association of Governments

The SBCAG adopted the 2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)¹⁰ in 2017 which responded to the State requirements in Senate Bill 375. The RTP/SCS aims to make land use assumptions and allocate forecast future growth consistent with those assumptions and the allocation of regional housing needs. Starting with land uses allowed by existing, adopted local General Plans, the land use assumptions, developed in close coordination with the planning staff of SBCAG's member jurisdictions, selectively provide for intensification of residential and commercial land uses in urban areas proximate to existing transit. The intent of these changes is ultimately to shorten trip distances and reduce vehicle miles traveled by (1) directly addressing regional jobs/housing imbalance by providing more housing on the jobs-rich South Coast and more jobs in bedroom communities in the North County, and (2) promoting more trips, both local and inter-city, by alternative transportation modes, especially public transit.

THRESHOLDS OF SIGNIFICANCE

The State CEQA Guidelines indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

⁹ Santa Barbara County Air Pollution Control District, 2015. op. cit.

¹⁰ Santa Barbara County Association of Governments, 2017. *Fast Forward 2040 SBCAG Regional Transportation Plan and Sustainable Communities Strategy*. August 17.

According to the SBCAPCD Environmental Review Guidelines¹¹ and SBCAPCD Scope and Content of Air Quality Sections in Environmental Documents¹², a proposed project would not have a significant air quality effect on the environment, if operation of the project would:

- Emit (from all project sources, mobile and stationary) less than the daily trigger for offsets in the APCD New Source Review Rule for any pollutant (from all project sources, both stationary and mobile) less than the daily trigger for offsets or Air Quality Impact Analysis set in the APCD New Source Review Rule, for any pollutant (i.e., 240 pounds/day for ROC or NO_x; and 80 pounds per day for PM₁₀. There is no daily operational threshold for CO; it is an attainment pollutant); and
- Emit less than 25 pounds per day of NO_x or ROC from motor vehicle trips only;
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone); and
- Be consistent with the adopted federal and State air quality plans.

The State *CEQA Guidelines* indicate that a project would normally have a significant adverse greenhouse gas emission impact if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reduction the emissions of greenhouse gases.

The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The SBCAPCD has developed a GHG threshold of 10,000 metric tons of CO₂e per year for stationary projects, which include equipment, processes, and operations that require an SBCAPCD permit to operate. However, this threshold does not apply to land development projects. Neither the City of Guadalupe nor SBCAPCD has developed or adopted GHG significance thresholds for residential, commercial, or industrial projects. Therefore, this analysis evaluates the project's GHG emissions based on the San Luis Obispo Air Pollution Control District (SLOAPCD) Greenhouse Gas Thresholds, as adopted in April 2012.

As described in SLOAPCD's Greenhouse Gas Thresholds and Supporting Evidence document, the SLOAPCD's approach to developing a threshold of significance for GHG emissions was to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions.¹³ The SLOAPCD set the GHG thresholds based on AB 32 GHG emission reduction goals by attributing a fair share of the GHG

¹¹ Santa Barbara County Air Pollution Control District, 2015. op. cit.

¹² Santa Barbara County Air Pollution Control District, 2017. op. cit.

¹³ San Luis Obispo County Air Pollution Control District, 2012. *Greenhouse Gas Thresholds and Supporting Evidence*. March 28.

reductions needed from new land use development projects subject to CEQA. Therefore, as these GHG thresholds were developed based on State goals, these thresholds would be applicable to the City of Guadalupe. In addition, the SLOAPCD's GHG thresholds provide a quantitative approach and have been developed in a nearby air district in the same general region.

According to SLOAPCD GHG thresholds, a proposed project would not have a significant GHG effect on the environment, if operation of the project would:

- Be consistent with a Qualified Greenhouse Gas Reduction Plan;
- Result in operational-related greenhouse gas emissions of less than 1,500 metric tons of CO₂e per year; or
- Result in operational-related greenhouse gas emissions of less than 4.9 metric tons of CO₂e per service population (residents plus employees).

IMPACTS AND MITIGATION MEASURES

The proposed project would release emissions over the short term as a result of construction activities, and over the long term from traffic generation and operation of the project. Emissions would include criteria air pollutants and GHG emissions. The sections below describe the proposed project's consistency with applicable air quality plans, estimated project emissions, and the significance of impacts with respect to SBCAPCD and SLOAPCD thresholds.

Air Quality Impacts

Consistency with Applicable Air Quality Plans

CEQA requires that proposed projects be analyzed for consistency with the applicable air quality plan. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State ambient air quality standards. As discussed above, to bring the SCCAB into attainment for O₃, the SBCAPCD has developed the 2016 Ozone Plan to satisfy Clean Air Act requirements and ensure attainment of the State ozone standard. The SBCAPCD does not have a plan to address PM₁₀ attainment.

For a project to be consistent with the SBCAPCD 2016 Ozone Plan, a project's direct and indirect emissions must be consistent with the policies in the 2016 Ozone Plan. Emissions are related to vehicle use, which are directly related to population because additional residents result in more vehicular use. Populations accounted for in the 2016 Ozone Plan and SBCAG forecasts are also accounted for in the SBCAPCD emissions inventories. The proposed project would include the phased redevelopment of 52 units of affordable apartments into 80 units of affordable apartments. The proposed project would not substantially increase population projections within the City or County and therefore, would be within growth forecast assumptions used in the 2016 Ozone Plan. Therefore, the project would be consistent with the 2016 Ozone Plan, would not conflict with or obstruct the implementation of the applicable air quality plan, and air quality impacts would be less than significant.

Criteria Pollutant Analysis

The primary pollutants of concern in the project area are O₃ and PM₁₀ as the SBCAPCD is designated as nonattainment under State AAQS standards for these pollutants. However, in 2017 the SBCAPCD changed from nonattainment to nonattainment-transitional for O₃ due to the declining number of State 1-hour and 8-hour O₃ exceedances that have occurred in the County between 1990 and 2005.¹⁴ The SBCAPCD is either in attainment or unclassified for all other State and federal standards. The SBCAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SBCAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by site preparation, grading, hauling, and building activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROC, directly-emitted particulate matter (PM_{2.5} and PM₁₀), and TACs such as diesel exhaust particulate matter.

Site preparation and project construction would involve demolition, grading, paving, and building activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity, local weather conditions, soil moisture, silt content of soil, and wind speed. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Although quantitative thresholds of significance are not currently in place for short-term emissions, CEQA requires that short-term impacts, such as exhaust emissions from construction equipment and fugitive dust generation during grading, be discussed in the environmental document. Therefore, the SBCAPCD recommends that construction-related NO_x, ROC, PM₁₀ and PM_{2.5} emissions, from diesel and gasoline powered equipment, paving, and other construction activities, be quantified.

¹⁴ SBCAPCD, 2016. *2016 Ozone Plan*. October.

The California Emissions Estimator Model (CalEEMod), Version 2016.3.2, was used to estimate construction emissions for the proposed project. Construction of Phase 1 is expected to begin December 1, 2020 and end June 1, 2022 and construction of Phase 2 is expected to begin June 2, 2022 and end August 11, 2023. Therefore, for purposes of this CalEEMod analysis, the construction schedule for all improvements was assumed to be approximately 32 months. Construction of the proposed project would include the demolition of the existing apartment buildings, which was included in the CalEEMod analysis. Other construction details are not yet known; therefore, default assumptions (e.g., construction fleet activities) from CalEEMod were used. CalEEMod output worksheets are attached. Results are summarized in Table 2 below.

Table 2: Project Construction Emissions (Tons Per Year)

	CO	NO_x	ROC	SO_x	PM₁₀	PM_{2.5}
Year 2020	0.3	0.4	<0.1	<0.1	<0.1	<0.1
Year 2021	2.6	3.2	0.3	<0.1	0.6	0.3
Year 2022	2.7	2.5	0.6	<0.1	0.2	0.1
Year 2023	2.6	1.9	0.6	<0.1	0.2	0.1
Maximum Project Construction Emissions	2.6	3.2	0.6	<0.1	0.6	0.3
Total Project Construction Emissions	8.2	8.0	1.5	<0.1	1.0	0.5
SBCAPCD Significance Threshold	N/A	25.0	25.0	N/A	N/A	N/A
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (September 2019).

Note:

N/A = not applicable

As shown in Table 2, construction emissions associated with the proposed project would be less than significant.

The SBCAPCD has established standard measures for reducing fugitive dust emissions (PM₁₀ and PM_{2.5}), which are required for all projects that would involve earth-moving activities. For example, the SBCAPCD requires water or other soil stabilizers be used at a project site to control dust. Using water or soil stabilizers can result in fugitive dust emissions reductions of 50 percent or more. Mitigation Measure AQ-1 would require the project contractor to implement the SBCAPCD's standard dust control measures to reduce construction fugitive dust. Therefore, with implementation of Mitigation Measure AQ-1, construction of the proposed project would have less than significant impacts associated with an air quality standard violation or a substantial contribution to an existing or projected air quality violation.

Mitigation Measure AQ-1: During construction, the project contractor shall implement the following Santa Barbara County Air Pollution Control District (SBCAPCD) standard dust control measures:

- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and

after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

- Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
- If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.
- After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to grading/building permit issuance and/or map clearance.

As shown in Table 2, construction emissions associated with the project would be less than significant with implementation of Mitigation Measures AQ-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Long-Term Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

Long-term operation emissions associated with the proposed project were calculated using CalEEMod. For purposes of evaluating the proposed project, the County in CalEEMod was specified as Santa Barbara County - north of Santa Ynez County and the climate zone of 4 was selected. Based on this climate zone, CalEEMod assumed a wind speed of 3.1 meters per second and precipitation frequency of 37 days per year. The operational year was assumed to be 2023. The utility company for the region was selected as Pacific Gas & Electric Company (PG&E) and the CO₂ intensity was determined to be 328.8 pounds per megawatt hour based on a 5-year average estimated by PG&E.

The CalEEMod analysis assumed 80 low-rise apartment units, a 274-space parking lot, and 20,795 square feet of library uses, which was chosen as the closest representative land use type for the community building for resident services, the children's center, wellness service center, and maintenance building. As discussed in the Project Description, the proposed apartments would be energy efficient and would include solar-ready covered parking during each phase of the project, which was included in the CalEEMod analysis. In addition, trip generation rates for the project were based on the project's trip generation estimates, as identified in the Traffic and Circulation Study¹⁵, which estimates that the proposed project would generate approximately 361 net new average daily trips, with 43 trips occurring during the AM peak hour and 46 trips occurring during the PM peak hour. Where project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions.

Model results are shown in Table 3 below. Model output worksheets are attached.

Table 3: Project Operation Emissions (Pounds Per Day)

	CO	NO_x	ROC	SO_x	PM₁₀	PM_{2.5}
Mobile Source Emissions	6.6	0.1	3.3	<0.1	<0.1	<0.1
Energy Source Emissions	0.2	0.3	<0.1	<0.1	<0.1	<0.1
Area Source Emissions	5.5	1.9	0.5	<0.1	1.4	0.4
Total Project Operation Emissions	12.3	2.2	3.8	<0.1	1.4	0.4
SBCAPCD Mobile Source Significance Threshold	N/A	25.0	25.0	N/A	N/A	N/A
Exceed Threshold?	No	No	No	No	No	No
SBCAPCD All Source Significance Threshold	N/A	240	350	N/A	80	N/A
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (September 2019).

Note:

N/A = not applicable

As shown in Table 3, project-related long-term air emissions would occur primarily from vehicle trips associated with the proposed project (i.e., mobile source emissions). Project-related long-term air emissions would also occur from the use of electricity and natural gas (i.e., energy source emissions) and the use landscape equipment and from the use of consumer products (i.e., area source emissions).

PM₁₀ emissions result from exhaust produced when a vehicle is running, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM₁₀ occurs when vehicle tires pulverize small rocks and pavement and the vehicle movement generate airborne dust. The contribution of tire and brake wear is small compared to the other sources of PM emissions. Gasoline-powered engines have small rates of particulate matter

¹⁵ Associated Transportation Engineers, 2018. *Traffic and Circulation Study for the Guadalupe Ranch Acres Project, City of Guadalupe*. July 11.

emissions compared with diesel-powered vehicles. As indicated in Table 3 above, the primary emissions generated the proposed project would be associated with mobile source emissions, however these emissions would not exceed the SBCAPCD's significance thresholds.

Energy source emissions typically result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. Major sources of energy demand typically include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators or computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. As indicated in Table 3 above, the proposed project would generate minimal energy source emissions and would not exceed the SBCAPCD's significance thresholds.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products. As shown in Table 3 above, the proposed project would generate minimal area source emissions and would not exceed the SBCAPCD's significance thresholds.

ROC and NO_x emissions associated with the project would be regional in nature, meaning that the air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the project; emissions are released in other areas of the SCCAB (i.e., vehicles traveling to the project site would release emissions along roadways throughout the SCCAB and not specifically on the project site). The results shown in Table 3 indicate the project would not exceed the significance criteria for daily NO_x, ROC, or PM₁₀ emissions. The SBCAPCD does not have significance thresholds for CO, SO_x, or PM_{2.5}, however as indicated in Table 3, the proposed project is not expected to generate substantial CO, SO_x, or PM_{2.5} emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

Sensitive Receptors

Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors to the project site include the Mary Buren Elementary School located adjacent to the western border of the site, the rural residential uses located adjacent to the eastern boundary of the site, and the assisted living facility adjacent to the western border of the site.

Construction activities associated with the proposed project would generate airborne particulates and fugitive dust, as well as a small quantity of pollutants associated with the use of construction equipment (e.g., diesel-fueled vehicles and equipment) on a short-term basis. However, construction contractors would be required to implement measures to reduce or eliminate emissions by implementing Mitigation Measures AQ-1, as described above. Once the project is constructed, the project would not be a significant source of long term operational emissions.

Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during project operation, and with implementation of Mitigation Measures AQ-1, potential impacts associated with project construction would be considered less than significant.

Objectionable Odors

According to the SBCAPCD, common types of facilities that are known producers of odors include fast food restaurants, bakeries, and coffee roasting facilities. The proposed project would not include any of these types of land uses and would not include any activities or operations that would generate objectionable odors. During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed project would not include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Greenhouse Gas Impacts

Generate Greenhouse Gas Emissions

The following section describes the proposed project's construction and operational related GHG emissions and contribution to global climate change. The SBCAPCD has not addressed emission thresholds for construction in their CEQA Guidelines; however, the SBCAPCD encourages quantification and disclosure. Thus, construction emissions are discussed in this section.

Construction GHG Emissions. Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction of the proposed project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Construction GHG emissions associated with the proposed project were estimated using CalEEMod. CalEEMod output worksheets are attached. Based on the CalEEMod results, construction of the proposed project would generate approximately 1,373.6 metric tons of CO₂e. Neither SBCAPCD nor SLOAPCD have a threshold of significance for construction GHG emissions; however the SLOAPCD recommends amortizing GHG emissions over the life of the project based on the total GHG emissions for construction activities divided by the project life (i.e., 50 years for residential projects and 25 years for commercial projects) then adding that number to the annual operational phase GHG emissions. Therefore, when amortized over the 50-year life of the project, annual emissions would be 27.5 metric tons of CO₂e. Construction of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

Operational GHG Emissions. Long-term operation of the project would generate GHG emissions from mobile and area sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Operational emissions were estimated using CalEEMod and the results are presented in Table 4. Additional calculation details are attached.

Table 4: Greenhouse Gas Operational Emissions

Emission Source	Operational GHG Emissions (metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions				
Amortized Construction Emissions	27.3	<0.1	0.0	27.5
Operational Emissions				
Mobile Source Emissions	238.9	<0.1	0.0	239.1
Area Source Emissions	1.0	<0.1	0.0	1.0
Energy Source Emissions	129.7	<0.1	<0.1	130.6
Waste Source Emissions	11.6	0.6	0.0	26.0
Water Source Emissions	9.1	<0.1	<0.1	10.6
Total Operational CO ₂ e Emissions	407.4			
Total CO₂e Emission	434.9			
SLOAPCD Significance Threshold	1,150 MT CO₂e/year or 4.9 CO₂e/SP/year (residents + employees)			
Exceeds Threshold?	No			

Source: LSA (September 2019).

Notes:

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = gross climate change emissions

GHG = greenhouse gas

MT = metric tons

SP = service population

As discussed above, neither the City of Guadalupe nor SBCAPCD has developed or adopted GHG significance thresholds for residential, commercial, or industrial projects. Therefore, this analysis evaluates the project's GHG emissions based on the SLOAPCD Greenhouse Gas Thresholds. According to the SLOAPCD, a project would have GHG emissions that are considered to be less than significant if it meets one or more of the following criteria: be consistent with a qualified GHG reduction plan, result in operational-related GHG emissions of less than 1,150 metric tons of CO₂e a year, or result in operational-related GHG emissions of less than 4.9 metric tons of CO₂e per service population (residents plus employees). The City of Guadalupe does not have a qualified GHG reduction plan. Therefore, the determination of significance is based on the emission estimates. Based on the analysis results, the project would generate approximately 434.9 metric tons of CO₂e which is well below the SLOAPCD's numeric threshold of 1,150 metric tons CO₂e. Therefore, the

project would not have a significant effect on the environment related to GHG emissions. This impact would be less than significant.

Consistency with Greenhouse Gas Reduction Plans

The City of Guadalupe has not adopted a climate action plan. In May 2015, the County of Santa Barbara adopted the Energy and Climate Action Plan (ECAP); however the ECAP applies to unincorporated areas of Santa Barbara County and not incorporated cities such as Guadalupe. Because the City of Guadalupe has not adopted a climate action plan or any other plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, the proposed project is assessed based on its consistency with the SBCAG 2040 RTP/SCS, which is designed to help the region achieve its SB 375 GHG emissions reduction target. The SBCAG 2040 RTP/SCS demonstrates that the SBCAG region would achieve its regional emissions reduction targets for the 2020 and 2035 target years. The RTP/SCS sets forth goals and objectives related to mixed-use development and the jobs-housing balance. The RTP/SCS seeks to directly address the regional jobs/housing imbalance by providing more housing on the jobs-rich South Coast and more jobs in bedroom communities in the North County, including the City of Guadalupe, and (2) promoting more trips, both local and inter-city, by alternative transportation modes, especially public transit.

The proposed project would include the phased redevelopment of 52 units of affordable apartments into 80 units of affordable apartments. The proposed project would not substantially increase population projections within the City or County. In addition, the proposed project would include a community building for resident services along with a children's center and wellness service center available to the public which would create job opportunities within the City, which would increase the jobs-housing ratio. Although the proposed project would result in a net increase in vehicle trips, the proposed project would be located near residential, school, public, and religious uses, which would help to reduce the demand for travel by single occupancy vehicles. Therefore, the project would promote the SBCAG's initiatives to reduce vehicle trips and vehicle miles traveled and would increase the use of alternate means of transportation. Therefore, the proposed project would be consistent with the goals of the SBCAG 2040 RTP/SCS.

In addition, the proposed project was analyzed for consistency with the CARB Scoping Plan measures, including the following. The following discussion evaluates the proposed project according to the goals of AB 32, the AB 32 Scoping Plan, Executive Order B-30-15, SB 32, and AB 197.

AB 32 is aimed at reducing GHG emissions to 1990 levels by 2020. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The AB 32 Scoping Plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

Executive Order Executive Order B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017

Scoping Plan,¹⁶ to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Executive Order B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

As identified above, the AB 32 Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by AB 32, Executive Order B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As identified above, the proposed project would comply with the latest Title 24 standards of the California Code of Regulations, regarding energy conservation and green building standards, and would include solar-ready covered parking. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would be required to comply with the latest Title 24 standards of the California Code of Regulations, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. However, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

¹⁶ California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. November.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32, the AB 32 Scoping Plan, Executive Order B-30-15, SB 32, and AB 197 and would be consistent with applicable state plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

CONCLUSION

Based on the analysis presented above, construction of the proposed project would not result in the generation of criteria air pollutants that would exceed SBCAPCD thresholds of significance. Implementation of Mitigation Measure AQ-1 would further reduce construction dust impacts. As discussed above, the proposed project's construction emissions of criteria pollutants are estimated to be well below the emissions threshold established for the region. Operational emissions associated with the proposed project would also not exceed SBCAPCD established significance thresholds. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The proposed project would also not result in objectionable odors affecting a substantial number of people. GHG emissions released during construction and operation of the project are estimated to be lower than significance thresholds, and would not be cumulatively considerable. Additionally, the proposed project would be consistent with the SBCAG's RTP/SCS and the goals of AB 32. Therefore, the project would result in less-than-significant GHG emissions.

Attachment: CalEEMod Output Sheets