

Greenhouse Gas Emissions

Chapter 3.8

SUMMARY OF FINDINGS

Based on the impact analysis below, potential impacts to greenhouse gas emissions as a result of the proposed Project are determined to be *Less Than Significant*. The impact determinations in this chapter are based upon information obtained from the References listed at the end of this chapter, as well as information contained in the Air Quality, Greenhouse Gases and Energy Consumption Technical Memorandum (AGE Memo) by RMA Staff and in the detailed Health Risk Assessment and Ambient Air Quality Analysis determination prepared by consultant Alta Environmental, provided in Appendix “A” of this DEIR. A detailed review of potential impacts is provided in the analysis as follows.

INTRODUCTION

CEQA Requirements for Evaluation of Impacts to Greenhouse Gas Emissions

This section of the DEIR addresses potential impacts related to GHG emissions. As required in CEQA Guidelines Section 15126, all phases of the proposed Project would be considered as part of the potential environmental impact.

CEQA Guideline Section 15064.4 Determining the Significance of Impacts from Greenhouse Gas Emissions provides the following guidance for lead agencies in determining the significance of impacts from GHG emissions:

- “(a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
 - (1) Quantify greenhouse gas emissions resulting from a project; and/or
 - (2) Rely on a qualitative analysis or performance based standards.
- (b) In determining the significance of a project’s greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency’s analysis should consider a timeframe that is appropriate for the project. The agency’s analysis also must reasonably reflect evolving scientific knowledge and state

regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment:

- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
 - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the projects incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.
- (c) A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.”¹

The “Environmental Setting” provides a description greenhouse gases and the County's existing (2007) and projected (2030) greenhouse gas emissions inventory. The “Regulatory Setting” provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County General Plan 2030 Update (General Plan), Tulare County General Plan 2030 Update Background Report (Background Report), and/or Tulare County General Plan 2030 Update Recirculated Draft Environmental Impact Report (RDEIR) incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

¹ CEQA Guidelines, Section 15064.4

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA Checklist Item questions. A significant impact would occur if the project would:

- “(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- (b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.”²

The San Joaquin Valley Unified Air Pollution Control District provides the following guidance to lead agencies for determining the cumulative significance of project specific GHG emissions on global climate change:

- “Projects determined to be exempt from the requirements of CEQA would be determined to have a less than significant individual and cumulative impact for GHG emissions and would not require further environmental review, including analysis of project specific GHG emissions. Projects exempt under CEQA would be evaluated consistent with established rules and regulations governing project approval and would not be required to implement BPS.
- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.
- Projects implementing Best Performance Standards would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing Best Performance Standards would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to BAU, including GHG emission reductions achieved since the 2002-2004 baseline period. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.
- Notwithstanding any of the above provisions, projects requiring preparation of an Environmental Impact Report for any other reason would require quantification of project specific GHG emissions. Projects implementing BPS or achieving at least a 29% GHG

² Ibid. Appendix G: Environmental Checklist Form.

emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.”³

ENVIRONMENTAL SETTING

“Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern is that increases in GHGs are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. The gases believed to be most responsible for global warming are water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).”⁴ Nitrogen trifluoride was not listed initially in AB 32 but was subsequently added to the list via legislation. ⁵

“For over the past 200 years, the burning of fossil fuels such as coal and oil, deforestation, and other sources have caused the concentrations of heat-trapping "greenhouse gases" to increase significantly in our atmosphere. These gases absorb some of the energy being radiated from the surface of the earth and trap it in the atmosphere, essentially acting like a blanket that makes the earth's surface warmer than it would be otherwise.

Greenhouse gases are necessary to life as we know it, because without them the planet's surface would be about 60°F cooler than present. But, as the concentrations of these gases continue to increase in the atmosphere, the Earth's temperature is climbing above past levels. According to NOAA and NASA data, the Earth's average surface temperature has increased by about 1.2 to 1.4°F since 1900. The ten warmest years on record (since 1850) have all occurred in the past 13 years (EPA 2009). Most of the warming in recent decades is very likely the result of human activities. Other aspects of the climate are also changing such as rainfall patterns, snow and ice cover, and sea level. ”⁶

“In 2007, Tulare County generated approximately 5.2 million tonnes of CO₂e [carbon dioxide equivalents]. The largest portion of these emissions (63 percent) is attributed to dairies/feedlots, while the second largest portion (16 percent) is from mobile sources.”⁷ **Table 3.8-1** below, identifies Tulare County’s emissions by sector in 2007.

³ San Joaquin Valley Unified Air Pollution Control District. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA. Pages 4 to 5.

⁴ General Plan Background Report. Pages 6-19 to 6-20.

⁵ California Air Resources Board. Assembly Bill 32 Overview. Accessed November 2019 at: <http://www.arb.ca.gov/cc/ab32/ab32.htm>.

⁶ United States Environmental Protection Agency, National Greenhouse Gas Emissions Data. Technical Support Document for the Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. U.S. Environmental Protection Agency. Page 1-2. Accessed November 2019 at: <https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean>.

⁷ General Plan 2030 Update Background Report. Page 6-36.

**Table 3.8-1
Emissions by Sector in 2007⁸**

Sector	CO₂e (tonnes/year)	% of Total
Electricity	542,690	11%
Natural Gas	321,020	6%
Mobile Sources	822,230	16%
Dairy/Feedlots	3,294,870	63%
Solid Waste	227,250	4%
Total	5,208,060	100%
Per Capita	36.1	

“In 2030, Tulare County is forecast to generate approximately 6.1 million tonnes of CO₂e. The largest portion of these emissions (59 percent) is attributed to dairies/feedlots, while the second largest portion (20 percent) is from mobile sources. ... Per capita emissions in 2030 are projected to be approximately 27 tonnes of CO₂e per resident.”⁹

**Table 3.8-2
Emissions by Sector in 2030¹⁰**

Sector	CO₂e (tonnes/year)	% of Total
Electricity	660,560	11%
Natural Gas	384,410	6%
Mobile Sources	1,212,370	20%
Dairy/Feedlots	3,601,390	59%
Solid Waste	246,750	4%
Total	6,105,480	100%
Per Capita	27.4	

The Tulare County General Plan 2030 Update Background Report contains the following: “Enhancement of the greenhouse effect can occur when concentrations of GHGs exceed the natural concentrations in the atmosphere. Of these gases, CO₂ and methane are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF₆ is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming.

⁸ Ibid. 6-38.

⁹ Op. Cit.

¹⁰ Op. Cit.

Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2006). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.”¹¹

REGULATORY SETTING

Applicable Federal, State, Regional, and local regulations specific to greenhouse gas resources are described below. The following environmental regulatory settings were summarized, in part, from information contained in the Tulare County 2030 General Plan Update Background Report, Tulare County 2030 General Plan Update Recirculated Draft Environmental Impact Report (RDEIR), the California Air Resources Board (ARB) website, and the United States Environmental Protection Agency (US EPA) website.

Federal Agencies & Regulations

United States Environmental Protection Agency (US EPA)

“The primary sources of greenhouse gas emissions in the United States are:

- **Electricity production** (31% of 2013 greenhouse gas emissions) - Electricity production generates the largest share of greenhouse gas emissions. Approximately 67% of our electricity comes from burning fossil fuels, mostly coal and natural gas. ^[2]
- **Transportation** (27% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from transportation primarily come from burning fossil fuel for our cars, trucks, ships, trains, and planes. Over 90% of the fuel used for transportation is petroleum based, which includes gasoline and diesel. ^[3]

¹¹ General Plan 2030 Update Background Report. Page 6-31.

- **Industry** (21% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from industry primarily come from burning fossil fuels for energy as well as greenhouse gas emissions from certain chemical reactions necessary to produce goods from raw materials.
- **Commercial and Residential** (12% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from businesses and homes arise primarily from fossil fuels burned for heat, the use of certain products that contain greenhouse gases, and the handling of waste.
- **Agriculture** (9% of 2013 greenhouse gas emissions) - Greenhouse gas emissions from agriculture come from livestock such as cows, agricultural soils, and rice production.
- **Land Use and Forestry** (offset of 13% of 2013 greenhouse gas emissions) - Land areas can act as a sink (absorbing CO₂ from the atmosphere) or a source of greenhouse gas emissions. In the United States, since 1990, managed forests and other lands have absorbed more CO₂ from the atmosphere than they emit.”¹²

Greenhouse Gas Endangerment Finding

“On December 7, 2009, Administrator Lisa Jackson signed a final action, under Section 202(a) of the Clean Air Act, finding that six key well-mixed greenhouse gases constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to the climate change problem.”¹³

“On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases — carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) — in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.”¹⁴

State Agencies & Regulations

California Clean Air Act

¹² United States Environmental Protection Agency. Sources of Greenhouse Gas Emissions. Accessed November 2019 at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

¹³ United States Environmental Protection Agency. Regulatory Initiatives. Accessed November 2019 at: <http://www3.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html>.

¹⁴ United States Environmental Protection Agency. Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. Accessed November 2019 at: <http://www3.epa.gov/climatechange/endangerment/>.

“The California CAA of 1988 establishes an air quality management process that generally parallels the federal process. The California CAA, however, focuses on attainment of the State ambient air quality standards,...which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards. Responsibility for meeting California’s standards is addressed by the CARB and local air pollution control districts (such as the eight county SJVAPCD, which administers air quality regulations for Tulare County). Compliance strategies are presented in district-level air quality attainment plans.”¹⁵

Executive Order S-3-05

“In 2005, in recognition of California’s vulnerability to the effects of climate change, Governor Schwarzenegger issued Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order additionally ordered that the Secretary of the California Environmental Protection Agency (Cal EPA) would coordinate oversight of the efforts among state agencies made to meet the targets and report to the Governor and the State Legislature biannually on progress made toward meeting the GHG emission targets. Cal EPA was also directed to report biannually on the impacts to California of global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry, and prepare and report on mitigation and adaptation plans to combat these impacts.

In response to the Executive Order, the Secretary of Cal EPA created the Climate Action Team (CAT), composed of representatives from the Air Resources Board; Business, Transportation, & Housing; Department of Food and Agriculture; Energy Commission; California Integrated Waste Management Board (CIWMB); Resources Agency; and the Public Utilities Commission (PUC). The CAT prepared a recommended list of strategies for the state to pursue to reduce climate change emission in the state (Climate Action Team, 2006).”¹⁶

Assembly Bill 32: California Global Warming Solutions Act of 2006

“In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.), which requires the CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

¹⁵ Tulare County General Plan 2030 Update RDEIR. Pages 3.3-2 to 3.3-3.

¹⁶ Tulare County General Plan 2030 Update Background Report (at Climate Action Team Report to Governor Schwarzenegger and the Legislature). 6-21 to 6-22.

The bill also requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The bill authorizes CARB to adopt market-based compliance mechanisms. The bill additionally requires the state board to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by the state board, pursuant to specified provisions of existing law. The bill also authorizes CARB to adopt a schedule of fees to be paid by regulated sources of GHG emissions. Because the bill requires CARB to establish emissions limits and other requirements, the violation of which would be a crime, this bill would create a state-mandated local program.

Under AB 32, by June 30, 2007, CARB was to identify a list of discrete early action GHG reductions that will be legally enforceable by 2010. By January 1, 2008, CARB was also to adopt regulations that will identify and require selected sectors to report their statewide GHG emissions. By January 1, 2011, CARB must adopt rules and regulations to achieve the maximum technologically feasible and cost-effective reductions in GHG reductions. CARB is authorized to enforce compliance with the program that it develops.”¹⁷

Senate Bill 97

“Governor Schwarzenegger signed Senate Bill (SB) 97 (Sutton), a CEQA and GHG emission bill, into law on August 24, 2007. SB 97 requires the Governor’s Office of Planning and Research (OPR) to prepare CEQA guidelines for the mitigation of GHG emissions, including, but not limited to, effects associated with transportation or energy consumption. OPR must prepare these guidelines and transmit them to the Resources Agency by July 1, 2009. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for greenhouse gas emissions. The Resources Agency must then certify and adopt the guidelines by January 1, 2010. OPR and the Resources Agency are required to periodically review the guidelines to incorporate new information or criteria adopted by CARB pursuant to the Global Warming Solutions Act, scheduled for 2012.

The OPR published a Technical Advisory in June of 2008 that is an “informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents” to serve in the interim until guidelines are established pursuant to SB 97 (OPR, 2008). This Advisory recommends that CEQA documents include quantification of estimated GHG emissions associated with a proposed project and that a determination of significance be made. With regard to significance the Advisory states that “lead agencies must determine what constitutes a significant impact. In the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a “significant impact”, individual lead agencies may undertake a project-by-project analysis, consistent with the available guidance and current CEQA practice”.¹⁸

¹⁷ Ibid. 6-22 to 6-23.

¹⁸ Op. Cit. (at Technical Advisory – CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review). 6-26 to 6-27.

Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS), which will prescribe land use allocation in that MPO's Regional Transportation Plan (RTP). ARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every 8 years, but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG emission reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.¹⁹

California Air Resources Board (ARB or CARB)

“The Air Resources Board (ARB or Board) has established State ambient air quality standards (State standards) to identify outdoor pollutant levels considered safe for the public. After State standards are established, State law requires ARB to designate each area as attainment, nonattainment, or unclassified for each State standard. The area designations, which are based on the most recent available data, indicate the healthfulness of air quality throughout the State.”²⁰ On July 22, 2004, the California Air Resources Board adopted the 2004 Revisions to the California State Implementation Plan for Carbon Monoxide²¹.

Climate Change Scoping Plan

“The CARB published a *Climate Change Scoping Plan* in December 2008 (CARB, 2008c) that outlines reduction measures to lower the state's GHG emissions to meet the 2020 limit. The *Scoping Plan* “proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health”. Key elements for reducing California's GHG emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;

¹⁹ Senate Bill 375 (Steinberg). Accessed November 2019 at: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB375.

²⁰ California Air Resources Board. Air Quality Standards and Area Designations. Accessed November 2019 at: <http://www.arb.ca.gov/desig/desig.htm>.

²¹ California Air Resources Board. 2004 Revisions to the California State Implementation Plan for Carbon Monoxide. Accessed November 2019 at: <http://www.arb.ca.gov/planning/sip/co/co.htm>.

- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State’s long-term commitment to AB 32 implementation.”²²

Regional Agency Policy and Regulations

California Air Pollution Control Officers Association (CAPCOA)

“In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a “white paper” on evaluating GHG emissions under CEQA (CAPCOA, 2008). The CAPCOA white paper strategies are not guidelines and have not been adopted by any regulatory agency; rather, the paper is offered as a resource to assist lead agencies in considering climate change in environmental documents.”²³

The California Association of Air Pollution Control Officers (CAPCOA) represents all thirty-five local air quality agencies throughout California. CAPCOA, which has been in existence since 1975, is dedicated to protecting the public health and providing clean air for all our residents and visitors to breathe, and initiated the Greenhouse Gas Reduction Exchange.²⁴

“The Greenhouse Gas Reduction Exchange (GHG Rx) is a registry and information exchange for greenhouse gas emissions reduction credits designed specifically to benefit the state of California. The GHG Rx is a trusted source of locally generated credits from projects within California, and facilitates communication between those who create the credits, potential buyers, and funding organizations.”²⁵ Four public workshops were held throughout the state including in the SJVAPCD. The mission is to provide a trusted source of high quality California-based greenhouse gas credits to keep investments, jobs, and benefits in-state, through an Exchange with integrity, transparency, low transaction costs and exceptional customer service.²⁶

San Joaquin Valley Unified Air Pollution Control District (Air District)

“The San Joaquin Valley Air Pollution Control District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and

²² Tulare County General Plan 2030 Update Background Report (at Climate Change Proposed Scoping Plan). Pages 6-27 to 6-28.

²³ Op. Cit. (at CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act). 6-28.

²⁴ California Air Pollution Control Officers Association. Accessed November 2019 at: <http://www.capcoa.org/>.

²⁵ Ibid.

²⁶ California Air Pollution Control Officers Association. CAPCOA Greenhouse Gas Reduction Exchange. Accessed November 2019 at: <http://www.ghgrx.org/>.

entrepreneurial air quality-management strategies.”²⁷ “The San Joaquin Valley Air Pollution Control District is made up of eight counties in California’s Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley Air Basin portion of Kern.”²⁸

“On December 17, 2009, the District’s Governing Board adopted the District Policy: *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. The District’s Governing Board also approved the guidance document: *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA*. In support of the policy and guidance document, District staff prepared a staff report: *Addressing Greenhouse Gas Emissions Under the California Environmental Quality Act*. These documents adopted in December of 2009 continue to be the relevant policies to address GHG emissions under CEQA. As these documents may be modified under a separate process, the latest versions should be referenced to determine the District’s current guidance at the time of analyzing a particular project.”²⁹

“It is widely recognized that no single project could generate enough GHG emissions to noticeably change the global climate temperature. However, the combination of GHG emissions from past, present and future projects could contribute substantially to global climate change. Thus, project specific GHG emissions should be evaluated in terms of whether or not they would result in a cumulatively significant impact on global climate change. GHG emissions, and their associated contribution to climate change, are inherently a cumulative impact issue. Therefore, project-level impacts of GHG emissions are treated as one-in-the-same as cumulative impacts.

In summary, the staff report evaluates different approaches for assessing significance of GHG emission impacts. As presented in the report, District staff reviewed the relevant scientific information and concluded that the existing science is inadequate to support quantification of the extent to which project specific GHG emissions would impact global climate features such as average air temperature, average rainfall, or average annual snow pack. In other words, the District was not able to determine a specific quantitative level of GHG emissions increase, above which a project would have a significant impact on the environment, and below which would have an insignificant impact. This is readily understood, when one considers that global climate change is the result of the sum total of GHG emissions, both manmade and natural that occurred in the past; that is occurring now; and will occur in the future.

In the absence of scientific evidence supporting establishment of a numerical threshold, the District policy applies performance based standards to assess project-specific GHG emission impacts on global climate change. The determination is founded on the principal that projects whose emissions have been reduced or mitigated consistent with the California Global Warming Solutions Act of 2006, commonly referred to as “AB 32”, should be considered to have a less than significant impact on global climate change. For a detailed discussion of the District’s

²⁷ San Joaquin Valley Air Pollution Control District. About the District. Accessed November 2019 at: http://www.valleyair.org/General_info/aboutdist.htm#Mission.

²⁸ Ibid.

²⁹ Air District. GAMAQI. Section 8.9. Page 110.

establishment of thresholds of significance for GHG emissions, and the District's application of said thresholds, the reader is referred to the above referenced staff report, District Policy, and District Guidance documents.”³⁰

“As presented in Figure 6 (Process of Determining Significance of Greenhouse Gas Emissions) [of the GAMAQI], the policy provides for a tiered approach in assessing significance of project specific GHG emission increases.

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS).
- Projects implementing BPS would not require quantification of project specific GHG emissions. Consistent with CEQA Guideline, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.
- Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG.

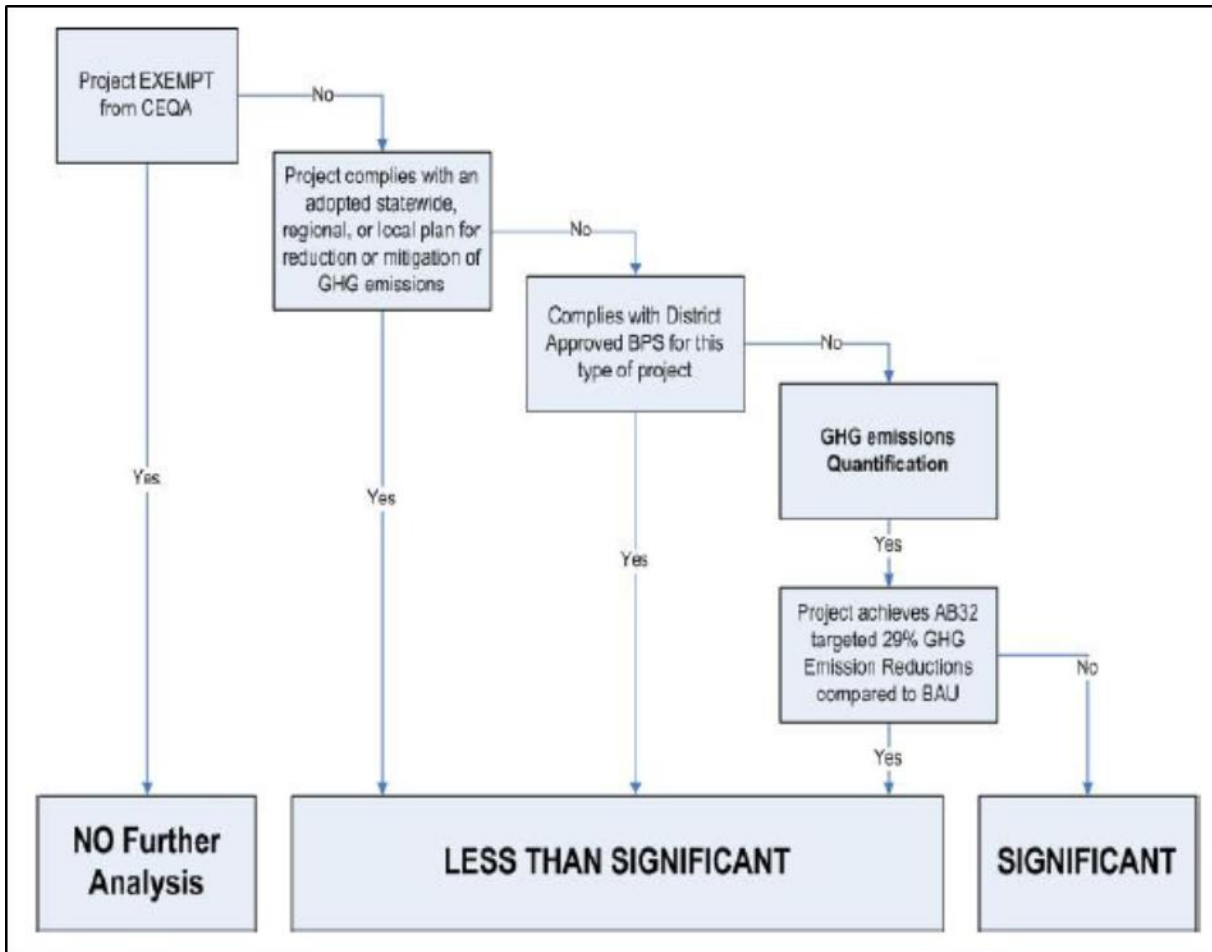
The District guidance for development projects also relies on the use of BPS. For development projects, BPS includes project design elements, land use decisions, and technologies that reduce GHG emissions. Projects implementing any combination of BPS, and/or demonstrating a total 29 percent reduction in GHG emissions from business-as-usual (BAU), would be determined to have a less than cumulatively significant impact on global climate change.”³¹

Figure 3.8-1 provides a visual summary of the Air District's process for determining significance of project-related GHG emissions.

³⁰ Ibid. Section 8.9. 111-112.

³¹ Op. Cit. Section 8.9.1.

Figure 3.8-1
Process of Determining Significance of Greenhouse Gas Emissions



The Air District’s *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Project under CEQA* states, “Projects implementing Best Performance Standards in accordance with this guidance would be determined to have a less than significant individual and cumulative impact on global climate change and would not require project specific quantification of GHG emissions. Projects exempt from the requirements of CEQA, and projects complying with an approved GHG emission reduction plan or mitigation program would also be determined to have a less than significant individual or cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document. Projects not implementing BPS would require quantification of project specific GHG emissions. To be determined to have a less than significant individual and cumulative impact on global climate changes, such projects must be determined to have reduced or mitigated GHG emissions by 29%, consistent with GHG emission reduction targets established in ARB’s AB 32 Scoping Plan. Furthermore, quantification of GHG emissions would be expected for all projects for which the lead agency has determined that an

Environmental Impact Report is required, regardless of whether the project incorporates Best Performance Standards.”³²

“If total GHG emissions reductions measures add up to 29% or more, are enforceable, and are required as a part of the development’s approval process, the project achieves the Best Performance Standard (BPS) for the respective type of development project. Thus, the GHG emissions from the development project would be determined to have a less than individually and cumulatively significant impact on global climate change for CEQA purposes.”³³

“By definition, BPS for development projects is achieving a project-by-project 29% reduction in GHG emissions, compared to BAU. Thus, it is reasonable to conclude that Lead Agencies implementing the proposed *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* threshold will achieve an overall reduction in GHG emissions consistent with AB 32 emission reduction targets...”³⁴

Local Policy & Regulations

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County that support reduction efforts of GHG. General Plan policies that relate to the proposed Project are listed as follows:

AQ-1.3 Cumulative Air Quality Impacts - The County shall require development to be located, designed, and constructed in a manner that would minimize cumulative air quality impacts. Applicants shall be required to propose alternatives as part of the State CEQA process that reduce air emissions and enhance, rather than harm, the environment.

AQ-1.4 Air Quality Land Use Compatibility - The County shall evaluate the compatibility of industrial or other developments which are likely to cause undesirable air pollution with regard to proximity to sensitive land uses, and wind direction and circulation in an effort to alleviate effects upon sensitive receptors.

AQ-1.5 California Environmental Quality Act (CEQA) Compliance - The County shall ensure that air quality impacts identified during the CEQA review process are consistently and reasonable mitigated when feasible.

AQ-1.7 Support Statewide Climate Change Solutions - The County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code Section 38501 et seq.), to develop a recommended list of emission reduction strategies. As

³² Air District. *Guidance for Valley Land-use Agencies*. Page 4.

³³ Ibid. 7-8.

³⁴ Op. Cit. 8.

appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies.

AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan - The County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The Plan will incorporate the requirements adopted by the California Air Resources Board specific to this issue. In addition, the County will work with the Tulare County Association of Governments and other applicable agencies to include the following key items in the regional planning efforts.

1. Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
2. Inventory the greenhouse gas emissions in the most current year available, and those projected for year 2020, and
3. Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.

AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions - The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

Tulare County Climate Action Plan

“The Tulare County Climate Action Plan (CAP) serves as a guiding document for County of Tulare (“County”) actions to reduce greenhouse gas emissions and adapt to the potential effects of climate change. The CAP is an implementation measure of the 2030 General Plan Update. The General Plan provides the supporting framework for development in the County to produce fewer greenhouse gas emissions during Plan buildout. The CAP builds on the General Plan’s framework with more specific actions that will be applied to achieve emission reduction targets consistent with California legislation.”³⁵

IMPACT EVALUATION

Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Project Impact Analysis: *Less Than Significant Impact*

In addition to their GAMAQI and Guidance for Agencies documents, the Air District adopted the policy: *District Policy – Addressing GHG Emission Impacts for Stationary*

³⁵ Tulare County Climate Action Plan. Page 1

Source Projects Under CEQA When Serving as the Lead Agency to assist permit applicants and project proponents in assessing the impacts of project specific GHG emissions from stationary source projects.³⁶ This policy applies to projects for which the Air District has discretionary approval authority over the project and serves as the lead agency for CEQA purposes; however, land use agencies can refer to it as guidance for projects that include stationary sources of emissions.³⁷ The policy summarizes the Air District’s evaluation process for determining the significance of GHG-related impacts for stationary source projects as presented in **Figure 3.8-1**.³⁸

The Air District has determined that, “[p]rojects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement BPS.”³⁹

Section 15064.4(b) of the CEQA Guidelines states that a lead agency should consider the following three considerations when determining the significance of impacts from GHG emissions.

- “(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project’s incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies, provided that substantial evidence supports the agency’s analysis of how those goals or strategies

³⁶ Air District. Air District Policy. Agency. Accessed November 2019 at: <http://www.valleyair.org/Programs/CCAP/12-17-09/2%20CCAP%20-%20FINAL%20District%20Policy%20CEQA%20GHG%20-%20Dec%2017%202009.pdf>.

³⁷ Air District. Fact Sheet: Addressing Greenhouse Gas Emissions Impact under the California Environmental Quality Act (CEQA) – Stationary Source Projects. Accessed November 2019 at: http://www.valleyair.org/Programs/CCAP/bps/Fact_Sheet_Stationary_Sources.pdf.

³⁸ Air District. GAMAQI. Figure 6. Page 113, and Air District Policy. Page 10.

³⁹ Air District. Air District Policy. Page 8.

address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.”⁴⁰

The Tulare County Climate Action Plan (CAP) was adopted in 2012 to address AB 32 2020 targets and ARB's 2008 Scoping Plan and was updated in 2018 to address SB 32 2030 targets and ARB's 2017 Scoping Plan. The CAP states, “The 2018 CAP Update includes an additional method of determining project consistency with the CAP and 2030 targets. Projects subject to CEQA review could use a checklist containing design features and measures that are needed to determine consistency. Large projects (500-unit subdivisions and 100,000 square feet of retail or equivalent intensity for other uses) and new specific plans should provide a greenhouse gas analysis report quantifying GHG emissions to demonstrate that the project emissions are at least 31 percent below 2015 levels by 2030 or 9 percent below BAU emissions in 2030. These are the amounts currently required from development related sources to demonstrate consistency with SB 32 2030 targets. Smaller projects may also prepare a GHG analysis report if the checklist is not appropriate for a particular project or is deemed necessary by the project proponent or County staff. The GHG analysis should incorporate as many measures as possible from the CalEEMod mitigation component as described in Table 15 [of the CAP Update] and can take credit for 2017 Scoping Plan measures that have not been incorporated into CalEEMod but that will be adopted prior to 2030 such as 50 percent RPS.”⁴¹

The CAP fulfills the requirements of consideration #3 as a local plan for the reduction or mitigation of greenhouse gas emissions. The CAP includes strategies to reduce GHG emissions through compliance with relevant General Plan policies and statewide GHG regulations. The 2018 CAP indicates that the County is on track to achieve the AB 32 2020 targets with the existing CAP measures and includes new targets for 2030. The CAP target for 2030 is a per capita rate of 4.18 tons per person in 2030. This would require an 8.6 percent reduction from business as usual in 2030 accounting for regulations currently in place.

The CAP focuses on residential and commercial development. CAP targets are not intended for Industrial process emissions since they are subject to Cap-and-Trade. Industrial projects with large numbers of employees and air-conditioned buildings would be subject to the CAP targets related to building energy efficiency and employee commuting. The project includes no new buildings and adds only three new employees. No mining industry-specific local measures are included in the CAP; however, the project will comply State regulations that apply to fuels used by project trucks and equipment, vehicle emission standards, and electricity consumed by the project that will reduce project emissions. “For industrial projects where the SJVAPCD is a Responsible Agency, the project will be expected to implement Best Performance Standards included in the SJVAPCD Guidelines for Addressing Greenhouse Gas Emissions on the processes and stationary equipment that emit greenhouse

⁴⁰ CEQA Guidelines § 15064.4(b).

⁴¹ Tulare County Climate Action Plan. December 2018 Update. Page 73. Accessed November 2019 at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/220Climate%20Action%20Plan/CLIMATE%20ACTION%20PLAN%202018%20UPDATE.pdf>.

gases to levels that meet or exceed state targets and may be subject to Cap-and-Trade Program requirements.”⁴² The project requires no new air quality permits so the SJVAPCD is not a Responsible Agency in this case. Therefore, the analysis provides a quantitative analysis of its GHG emissions and assesses compliance with plans and regulations adopted to reduce or mitigate GHG emissions.

The State’s regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted by the responsible agencies and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then are tracked to verify their effectiveness after implementation. As previously noted, the State is on track to achieve the 2020 target with adopted regulations and has adopted the 2017 Scoping Plan Update which provides the State’s strategy to achieve the SB 32 2030 target of a 40 percent reduction in emissions compared to 1990 levels. The 2017 Scoping Plan includes existing and new measures that when implemented are expected to achieve the SB 32 2030 target. The 2017 Scoping Plan achieves substantial reductions beyond 2020 through continued implementation of existing regulations. Other regulations will be adopted to implement recently enacted legislation including SB 350, which requires an increase in renewable energy from 33 percent to 50 percent and doubling the efficiency of existing buildings by 2030. The Legislature extended the Cap-and-Trade Program through 2030. Cap-and-Trade provides a mechanism to make up shortfalls in other strategies if they occur.⁴³ In addition, the strategy relies on reductions achieved in implementing the ARB Short-Lived Climate Pollutant (SLCP) Reduction Strategy to reduce pollutants not previously controlled for climate change such as black carbon, methane, and hydrofluorocarbons (HFCs).⁴⁴

The State’s regulatory program is able to target both new and existing development because the two most important strategies—motor vehicle fuel efficiency and emissions from electricity generation— obtain reductions equally from existing and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations, and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the Low Carbon Fuel Standard (LCFS) that applies to all fuel used in California, and the Renewable Portfolio Standard (RPS) and Renewable Energy Standard that apply to utilities providing electricity to all California homes and businesses. These regulations apply to the Project’s most important emission sources (on-road and off-road motor vehicles and energy use) and contribute toward meeting State GHG reduction targets. Measures targeted exclusively at new development include Title 24 Building Efficiency

⁴³ ARB. California’s 2017 Climate Change Scoping Plan. Accessed November 2019at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

⁴⁴ ARB. Short-Lived Climate Pollutant Reduction Strategy. Accessed November 2019 at <https://ww2.arb.ca.gov/resources/documents/final-short-lived-climate-pollutant-reduction-strategy-march-2017>.

Standards, the CalGreen Building Code, and water conservation measures applicable to new construction.

The State's regulatory strategy relies on Cap-and-Trade Program to achieve most reductions from the industrial sector and it applies to 80 percent of the State's emission inventory. Cap-and-Trade applies to large sources such as electrical utilities, fuel producers and refiners, and cement manufacturers. The Cap-and-Trade Program also addresses emissions from fuels and from combustion of other fossil fuels not directly covered at large sources in the Program. The additional costs for fuel and electricity to comply with Cap-and-Trade are spread throughout the economy to users of the fuel and electricity such as the project.

The analysis for this Project assesses consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities. The analysis shows the extent to which the Project complies with adopted regulations. At this point in time, no additional reductions are required from new development beyond regulations for the State to achieve its 2020 target. The 2030 target will require a reduction from 431 metric tons of CO₂ equivalents (MTCO_{2e}) to 260 MTCO_{2e} or 40 percent from 1990 levels. After accounting for projected growth of approximately 0.8 percent per year an average decrease of 5.2 percent per year from the State GHG inventory will be required to achieve the target. The 2017 Scoping Plan Update includes a strategy for achieving the needed reductions, but does not identify an amount required specifically from new development. However, all GHG emission sources within development projects are subject to GHG regulations at some level.

The quantitative analysis prepared for the Project (summarized in **Table 3.8-3**) assesses the extent to which the Project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting under Consideration # 1. As the Project is a new facility, there are no baseline activities in which to compare the Project to; as such, Project emissions are evaluated at the proposed Air District permit limits and represent the total increase in emissions. The analysis assumes a worst-case emissions scenario in which the Project would reach the permit limit in its first year of operation and reflects compliance with existing regulations that apply to the Project.

The Tulare County CAP includes a threshold approach that complies with Consideration #2 for commercial and residential development based on a percent reduction from BAU in 2030, but it is not applicable to asphalt and concrete production industries. The CAP found that additional reductions from industrial sources beyond regulations would not be required to reach the 2030 target since those emissions were subject to regulation by other entities such as Cap-and-Trade, which applies to 80 percent of the State's GHG emission inventory. .

Operational or long-term emissions occur over the life of the Project. Sources of emissions include the HMA, RAP, and concrete batch plants, motor vehicles and trucks, energy usage, waste generation, and area sources. Operational emissions were modeled for the permitted throughput limit, which reflects a worst-case emissions scenario. The emissions were modeled in 2020 using CalEEMod and spreadsheet calculations using the EMFAC mobile

source emission model and EPA emission factors. CalEEMod assumes compliance with some, but not all, applicable rules and regulations regarding energy efficiency, vehicle fuel efficiency, renewable energy usage, and other GHG reduction policies, as described in the CalEEMod User’s Guide.

Full assumptions and model outputs are provided in the Health Risk Assessment report, Authority to Construct Applications, and Greenhouse Gas Analysis memo prepared by Alta Environmental (Appendix A of the DEIR), and the CalEEMod report included as Attachment A of this memo. The results of the GHG analysis for the Project operational emissions are presented in **Table 3.8-3**.

Table 3.8-3. Project Greenhouse Gas Emissions	
Source	Emissions (MTCO₂e per year)
Construction	
On-site Emissions ¹	325
Off-site Emissions ¹	585
Total Construction	909
On-Site Operations	
HMA Dryer ²	36,391
HMA Oil Heater ²	539
On-site Haul Trucks ²	257
On-site Off-Road Equipment ²	698
Area Sources ¹	0.01
Energy ¹	45
Waste ¹	31
Water ¹	16
Total On-Site Operations	37,977
Off-Site Operations	
Off-site Haul Trucks ³	4,485
Employee Vehicles ³	118
Total Off-Site Operations	4,604
Total Operations	43,490
Notes: MTCO ₂ e = metric tons of carbon dioxide equivalents. ¹ Source:Health Risk Assessment (Attachment 2) prepared by Alta Environmental. Operational mobile sources not included as they were included in the calculations in Attachment A of this analysis. ² Source:Greenhouse Gas Analysis memo prepared by Alta Environmental. ³ Source:Attachment A of this memo.	

As shown in **Table 3.8-3**, the Project would result in GHG emissions of 43,490 MTCO₂e per year. The modeling includes the benefits of existing regulations that reduce Project emissions. The analysis presented above does not include new strategies proposed in the 2030 Scoping Plan Update. The Update provides alternatives in terms of their likelihood of implementation and ranges of reduction from the strategies. Measures already authorized by legislation are highly likely to be implemented, while measures requiring new legislation are less likely to go forward. A new round of motor vehicle fuel efficiency standards beyond 2025 when LEV III standards are at their maximum reduction level is highly likely.

Changing heavy-duty trucks and off-road equipment to alternative fuels face greater technological hurdles and are less likely to provide dramatic reductions by 2030.

The 2030 emission limit is 260 MMTCO_{2e}. The ARB estimates that the 2030 BAU (reference) Inventory will be 392 MMTCO_{2e}—a reduction of 132 MMTCO_{2e}, including existing policies and programs but not including known commitments that are already underway. The 2030 Scoping Plan Update includes the estimated GHG emissions by sector compared with 1990 levels that is presented in **Table 3.8-4**. The proposed plan would achieve the bulk of the reductions from Electric Power, Industrial fuel combustion, and Transportation. Cap-and-Trade would provide between 10 to 20 percent of the required reductions depending on the amounts achieved by the other reduction measures.

Scoping Plan Sector	Emissions (MMTCO _{2e} per year)		
	1990	2030 Proposed Plan Ranges	Percent Change from 1990
Agriculture	26	24-25	-4 to -8
Residential and Commercial	44	38-40	-9 to -14
Electric Power	108	42-62	-43 to -61
High GWP	3	8-11	167 to 267
Industrial	98	77-87	-11 to -21
Recycling and Waste	7	8-9	14 to 29
Transportation (including TCU)	152	103-111	-27 to -32
Net Sink	-7	TBD	TBD
Subtotal	431	300-345	-20 to -30
Cap-and-Trade Program	N/A	40-85	N/A
Total	431	260	-40

Notes:
GWP = Global Warming Potential; TCU = Transportation Communications and Utilities
Source: ARB 2030 Scoping Plan Update

Although the 2030 Scoping Plan Update focuses on state agency actions necessary to achieve the 2030 GHG limit, the ARB considers local governments essential partners in achieving the State’s goals to reduce GHG emissions. The 2030 target will require an increase in the rate of emission reductions compared to what was needed to achieve the 2020 limit, and this will require action and collaboration at all levels, including local government action to complement and support State-level actions. For individual projects, the 2030 Scoping Plan Update suggests that all new land use development implement all feasible measures to reduce GHG emissions. The Scoping Plan does not define all feasible measures or attribute an amount of reductions required from new development beyond compliance with regulations; however, the CAP provides measures and reduction amounts that are feasible for commercial and residential development. No reduction amount or threshold was developed for industrial projects. Requiring the project operator to fully mitigate emissions without accounting for compliance with regulations would result in double mitigation, first by the regulated entity and then by the project operator purchasing electricity, fuel, and vehicles compliant with

regulations in effect at the time of purchase and beyond that would violate constitutional nexus requirements.

Based on progress achieved to date and the strong likelihood that the measures included in the 2017 Scoping Plan Update will be implemented, it is reasonable to conclude that the Project is consistent with the 2017 Scoping Plan and will contribute a reasonable fair-share contribution to achieving the 2030 target. The fair share may very well be achieved through compliance with increasingly stringent State regulations that apply to energy production, fuels, and motor vehicles. As shown in **Table 3.8-4**, the state strategy relies on the Cap-and-Trade Program to make up any shortfalls that may occur from the other regulatory strategies. The costs of Cap-and-Trade emission reductions will ultimately be passed on to the consumers of fuels, electricity and products produced by regulated industries, which includes the project and other purchasers of products and services. Therefore, the impact in terms of Considerations #1 and #2 would be less than significant.

As discussed above, the Project will result in GHG emissions from the construction of the Project and from the operations of the proposed production facilities (HMA, RAP and concrete plants), office (heating and cooling, cleaning supplies, etc.) as well as from on-site off-road equipment and off-site on-road vehicles (haul trucks for transport of raw material and finished product, outside services and deliveries, and employees trips). The Project will continue to comply with existing and future regulations, including the Cap-and-Trade program, State truck regulations, and Air District permit requirements, and the General Plan, Community Plan, and CAP will continue to be implemented through 2030. Therefore, ***Less Than Significant Project-specific Impacts*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The Project-related emissions would be considered to have a significant cumulative impact if project-specific impacts are determined to be significant. The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. The Project-related emissions would be considered to have a significant cumulative impact if project-specific impacts are determined to be significant. As previously noted, the Project is required to comply with applicable State GHG reduction program (including Cap-and-Trade and truck regulations) and is therefore, consistent with the reduction targets for years 2020 and 2030. As the proposed Project would result in Less Than Significant Project-specific Impacts, ***Less Than Significant Cumulative Impacts*** would also occur.

Mitigation: ***None Required.***

Conclusion: ***Less Than Significant Impact***

As previously noted, the Project is consistent with the State's reduction targets established for 2020 and 2030. As such, the Project would not generate GHG emissions that would have

a significant impact on the environment. *Less Than Significant Project-specific and Cumulative Impacts* related to this Checklist Item will occur.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Project Impact Analysis: *Less Than Significant Impact*

To be considered a less than significant impact, the Project must demonstrate consistency with the Tulare County CAP, the Air District’s Climate Change Action Plan, and the ARB’s 2008 Scoping Plan and 2017 Scoping Plan Update.

Tulare County CAP: The 2008 CAP identifies General Plan policies in place to assist the County in reducing GHG emissions. **Table 3.8-5** identifies these policies by policy titles. For a discussion of the benefits of the policies, refer to the CAP.⁴⁵ The Project will implement the applicable General Plan policies.

Table 3.8-5			
General Plan Policies Having Greenhouse Gas Emission Reductions			
Sustainability and Greenhouse Gas Emissions			
PF-1.1	Maintain Urban Edges	ERM-1.2	Development in Environmentally Sensitive Areas
PF-1.2	Location of Urban Development	ERM-1.3	Encourage Cluster Development
PF-1.3	Land Uses in UDBs/HDBs	ERM-1.4	Protect Riparian Management Plans and Mining Reclamation Plans
PF-1.4	Available Infrastructure	ERM-1.6	Management of Wetlands
AG-1.7	Conservation Easements	ERM-1.7	Planting of Native Vegetation
AG-1.8	Agriculture Within Urban Boundaries	ERM-1.8	Open Space Buffers
AG-1.11	Agricultural Buffers	ERM-1.14	Mitigation and Conservation Banking Program
AG-1.14	Right to Farm Noticing	ERM-4.1	Energy Conservation and Efficiency Measures
AG-2.11	Energy Production	ERM-4.2	Streetscape and Parking Area Improvements for Energy Conservation
AG-2.6	Biotechnology and Biofuels	ERM-4.3	Local and State Programs
AQ-1.6	Purchase of Low Emission/Alternative Fuel Vehicles	ERM-4.4	Promote Energy Conservation Awareness
AQ-1.7	Support Statewide Global Warming Solutions	ERM-4.6	Renewable Energy
AQ-1.8	Greenhouse Gas Emissions Reduction Plan	ERM-4.7	Reduce Energy Use in County Facilities**
AQ-1.9	Off-Site Measures to Reduce Greenhouse Gas Emissions*	ERM-4.8	Energy Efficiency Standards**
AQ-1.10	Alternative Fuel Vehicle Infrastructure**	ERM-5.1	Parks as Community Focal Points
AQ-2.1	Transportation Demand Management Programs	ERM-5.6	Location and Size Criteria for Parks
AQ-2.3	Transportation and Air Quality	ERM-5.15	Open Space Preservation
AQ-2.4	Transportation Management Associations		
AQ-2.5	Ridesharing		
AQ-3.1	Location of Support Services		
AQ-3.2	Infill Near Employment		
AQ-3.3	Street Design		
AQ-3.5	Alternative Energy Design		

⁴⁵ Tulare County. Climate Action Plan (2010). Accessed November 2019 at: <http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/ClimateActionPlan.pdf>; and Climate Action Plan Update (2018) at: <http://generalplan.co.tulare.ca.us/documents/GP/001Adopted%20Tulare%20County%20General%20Plan%20Materials/220Climate%20Action%20Plan/CLIMATE%20ACTION%20PLAN%202018%20UPDATE.pdf>.

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Table 3.8-5 General Plan Policies Having Greenhouse Gas Emission Reductions			
Sustainability and Greenhouse Gas Emissions			
AQ-3.6	Mixed Use Development	HS-1.4	Building and Codes
LU-1.1	Smart Growth and Healthy Communities	TC-2.1	Rail Service
LU-1.2	Innovative Development	TC-2.4	High Speed Rail (HSR)
LU-1.3	Prevent Incompatible Uses	TC-2.7	Rail Facilities and Existing Development*
LU-1.4	Compact Development	TC-4.4	Nodal Land Use Patterns that Support Public Transit
LU-1.8	Encourage Infill Development	TC-5.1	Bicycle/Pedestrian Trail System
LU-2.1	Agricultural Lands	TC-5.2	Consider Non-Motorized Modes in Planning and Development
LU-3.2	Cluster Development	TC-5.3	Provisions for Bicycle Use
LU-3.3	High-Density Residential Locations	TC-5.4	Design Standards for Bicycle Routes
LU-4.1	Neighborhood Commercial Uses	TC-5.5	Facilities
LU-7.1	Distinctive Neighborhoods	TC-5.6	Regional Bicycle Plan
LU-7.2	Integrate Natural Features	TC-5.7	Designated Bike Paths
LU-7.3	Friendly Streets	TC-5.8	Multi-Use Trails
LU-7.15	Energy Conservation	PFS-1.3	Impact Mitigation
ED-2.3	New Industries	PFS-1.15	Efficient Expansion
ED-2.8	Jobs/Housing Ratio	PFS-2.1	Water Supply
ED-5.9	Bikeways	PFS-2.2	Adequate Systems
ED-6.1	Revitalization of Community Centers	PFS-3.3	New Development Requirements
ED-6.2	Comprehensive Redevelopment Plan	PFS-5.3	Solid Waste Reduction
ED-6.3	Entertainment Venues	PFS-5.4	County Usage of Recycled Materials and Products
ED-6.4	Culturally Diverse Business	PFS-5.5	Private Use of Recycled Products
ED-6.5	Intermodal Hubs for Community and Hamlet Core Areas	PFS-8.3	Location of School Sites
ED-6.7	Existing Commercial Centers	PFS-8.5	Government Facilities and Services
SL-3.1	Community Centers and Neighborhoods	WR-1.5	Expand Use of Reclaimed Wastewater
ERM-1.1	Protection of Rare and Endangered Species	WR-1.6	Expand Use of Reclaimed Water
		WR-3.5	Use of Native and Drought Tolerant Landscaping

Source: Tulare County Climate Action Plan, Table 20.

* This GHG reduction policy is not included in the Tulare County CAP, but is included in the Tulare County General Plan 2030 Update.

** This GHG reduction policy is not included in Table 20 of the CAP, but it is included in the detailed list of policies provided within pages 64-77 of the CAP.

As previously discussed, the 2018 CAP Update address SB 32 2030 targets and ARB’s 2017 Scoping Plan and focuses on residential and commercial development and CAP reduction targets are not intended for Industrial process emissions since they are subject to Cap-and-Trade. No asphalt or concrete industry-specific local measures are included in the CAP; however, the Project will comply State regulations that apply to fuels used by Project trucks and equipment, vehicle emission standards, and electricity consumed by the Project that will reduce Project emissions. As the Air District is a Responsible Agency for this Project, the Project would be expected to implement applicable BPS as included in the Air District’s policies and guidelines on the processes and stationary equipment that emit greenhouse gases to levels that meet or exceed state targets and may be subject to Cap-and-Trade Program requirements. Therefore, ***Less Than Significant Project-specific Impacts*** related to this Checklist Item will occur.

Air District Climate Change Action Plan: The Air District adopted the Climate Change Action Plan (CCAP) in 2008, which included a carbon-exchange bank for voluntary GHG reductions.⁴⁶ The Carbon Exchange Program is not applicable to this Project, and the Project would not require Voluntary Greenhouse Gas Mitigation Agreements. The Project would comply with all applicable GHG regulations contained in the CCAP. ***Less Than Significant Project-specific Impacts*** related to this Checklist Item will occur.

State Scoping Plans: The 2018 CAP Update includes an additional method of determining project consistency with the CAP and 2030 targets. Projects subject to CEQA review could use a checklist containing design features and measures that are needed to determine consistency with the CAP. As shown in **Table 3.8-6**, the Project is consistent with most of the strategies, while others are not applicable to the Project. As discussed earlier, the 2017 Scoping Plan Update strategies primarily rely on increasing the stringency of existing regulations for which the project would continue to comply with and support through the project’s design and implementation of the General Plan goals and policies.

Table 3.8-6. Consistency with the 2017 Scoping Plan Update	
Scoping Plan Measure	Project Consistency
SB 350 50% Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030.	Consistent. The Project will purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels	Not Applicable. This measure applies to existing buildings. The Project will utilize the existing residential unit as an office and does not include new structures.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	Consistent. Vehicles accessing the Project site will use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	Consistent. The Project will purchase new work trucks when replacement is required and employees can be expected to purchase increasing numbers of more fuel-efficient and zero emission cars and trucks each year.
Sustainable Freight Action Plan. The plan’s target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	Not Applicable. The measure applies to owners and operators of trucks and freight operations. The Project does operate a haul truck fleet to transport both raw materials and final product. The haul trucks that access the site must be capable of handling heavy loads that are currently not feasible with zero emission technology. However, during the life of the Project, ZEV haul trucks may be possible.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs	Not Applicable. The Project does not include sources that produce significant quantities of

⁴⁶ SJVAPCD Climate Change Action Plan. Accessed November 2019 at: http://www.valleyair.org/Programs/CCAP/CCAP_menu.htm.

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Table 3.8-6. Consistency with the 2017 Scoping Plan Update	
Scoping Plan Measure	Project Consistency
by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	methane or black carbon. Diesel haul trucks accessing the site will achieve significant reductions in PM _{2.5} with adopted regulations that will reduce this source of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	Not Applicable. The Project is not within an SCS priority area and so is not subject to requirements applicable to those areas. Only 15-20 employees will be required for this Project.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	Consistent. The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased costs of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA Projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, state, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	Not Applicable. The Project is an asphalt and concrete production facility that is not suitable site for sequestration.
Source: ARB, 2017 Scoping Plan Update	

As discussed above, since the Project will comply with existing and future regulations, and the General Plan and CAP will continue to be implemented through 2030, the Project would not result in significant greenhouse gas impacts. Therefore, ***Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Cumulative Impact Analysis: ***Less Than Significant Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley Air Basin. As previously discussed, the Project is consistent with the applicable Scoping Plan reductions measures and the Air District's CCAP. The Project will implement applicable Tulare County

General Plan and Tulare County CAP policies. As such, the Project will not conflict with applicable state, regional, and local plans, policies or regulation adopted for the purpose of reducing the emissions of greenhouse gases. ***Less Than Significant Cumulative Impacts*** related to this Checklist Item will occur.

Mitigation Measures:

None Required

Conclusion:

Less Than Significant Impact

As the proposed Project is consistent with aforementioned plans, policies, and regulations, ***Less Than Significant Project-specific and Cumulative Impacts*** related to this Checklist Item would occur.

DEFINITIONS

Achieved-in-Practice: “Any equipment, technology, practice or operation available in the United States that has been installed and operated or used at stationary source site for a reasonable period of time sufficient to demonstrate that the equipment, technology, practice or operation is reliable when operated in a manner that is typical for the process. In determining whether equipment, technology, practice or operation is Achieved-in-Practice, the District will consider the extent to which grants, incentives or other financial subsidies influence the economic feasibility of its use.”⁴⁷

Approved Alternate Technology: “Any District approved, Non-Achieved-in-Practice GHG emissions reduction measure equal to or exceeding the GHG emission reduction percentage for a specific BPS.”⁴⁸

Baseline: “The three year average (2002-2004) of GHG emissions for a type of equipment or operation within an identified class and category, expressed as annual GHG emissions per unit.”⁴⁹

Best Performance Standard: “For a specific Class and Category, the most effective, District approved, Achieved-In-Practice means of reducing or limiting GHG emissions from a GHG emissions source, that is also economically feasible per the definition of Achieved-in-Practice. BPS includes equipment type, equipment design, and operational and maintenance practices for the identified service, operation, or emissions unit class and category.”⁵⁰

Business-as-Usual: “The emissions for a type of equipment or operation within an identified class and category projected for the year 2020, assuming no change in GHG emissions per unit of activity as established for the baseline period.”⁵¹ “Total baseline emissions for all emissions sources within the development type, projected for the year 2020, assuming no change in GHG emissions per unit of activity as established for the baseline period, 2002-2004. To relate BAU to an emissions generating activity, the District proposes to establish emission factors per unit of activity, for each class and category, using the 2002-2004 baseline period as the reference.”⁵²

Category: “A District approved subdivision within a “class” as identified by unique operational or technical aspects.”⁵³

Class: “The broadest District approved division of stationary GHG sources based on fundamental type of equipment or industrial classification of the source operation.”⁵⁴

⁴⁷ San Joaquin Valley Air Pollution Control District, Policy APR 2005: Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency. Page 6.

⁴⁸ Ibid. 6 to 7

⁴⁹ Op. Cit. 7

⁵⁰ Op. Cit.

⁵¹ Op. Cit.

⁵² San Joaquin Valley Air Pollution Control District, FACT SHEET: Addressing Greenhouse Gas Emission Impacts under the California Environmental Quality Act (CEQA). Page 1.

⁵³ District Policy, Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as Lead Agency. Page 7.

Global Warming: “Global warming is an increase in the temperature of the Earth’s troposphere. Global warming has occurred in the past as a result of natural influences, but the term is most often used to refer to the warming predicted by computer models to occur as a result of increased emissions of greenhouse gases.”⁵⁵

Greenhouse Gas: “Greenhouse gas (GHG) emissions are the release of any gas that absorbs infrared radiation in the atmosphere. Generally when referenced in terms of global climate they are considered to be harmful. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrochlorofluorocarbons (HCFCs), ozone (O₃), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).”⁵⁶

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⁵⁴ Op. Cit.

⁵⁵ General Plan 2030 Update Background Report. Page 6-3.

⁵⁶ Ibid. 6-3.

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