

4.3 AIR QUALITY

This section evaluates the potential effects of implementing the 2040 General Plan on air quality, including whether it would conflict with, obstruct, or violate any applicable air quality plan or standard; result in a cumulatively considerable net increase of any criteria pollutant exceeding State or federal standards; expose the public to substantial pollutant concentrations; or generate objectionable odors affecting a substantial number of people. As described in the “Approach to the Environmental Analysis” section, above, the following assessment of impacts is based on the characterization of existing environmental conditions and regulatory setting provided in the January 2020 Background Report (Appendix B). Where necessary, each section identifies changes (e.g., new information, regulatory changes) to the environmental and regulatory setting included in the Background Report that are relevant to understanding the 2040 General Plan’s potential impacts.

Comments on the notice of preparation (NOP) expressed concerns regarding oil and gas extraction in the county and the generation of fugitive dust emissions from agricultural practices. Comments also included recommended updates to construction mitigation proposed by the Ventura County Air Pollution Control District (VCAPCD). These comments are addressed in this section, as appropriate. The NOP and comments on the NOP are included in Appendix A.

4.3.1 Background Report Setting Updates

REGULATORY SETTING

In addition to the information provided in Section 8.1, “Air Quality,” of the January 2020 Background Report (Appendix B), the following information is relevant to understanding the potential air quality impacts of the 2040 General Plan.

Federal

Safer Affordable Fuel-Efficient Vehicles Rule

On August 2, 2018, the National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (EPA) proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule). This rule addresses emissions and fuel economy standards for motor vehicles and is separated in two parts as described below.

Part One “One National Program” (84 FR 51310) revokes a waiver granted by EPA to the State of California under Section 209 of the Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by EPA for the explicit purpose of greenhouse gas emission (GHG) reduction, and indirectly, criteria air pollutant and ozone precursor emission reduction. This revocation became effective on November 26, 2019, restricting the ability of California Air Resources Board (CARB) to enforce more stringent GHG emission standards for new vehicles and set zero emission vehicle mandates in California. CARB has estimated the vehicle tailpipe and evaporative emissions impacts to criteria air pollutants from SAFE Rule Part One and has provided off-model adjustment factors to adjust emissions output from CARB’s Emission Factor (EMFAC) model.

Part Two would address Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026, but comment is sought on a range of alternatives discussed throughout the proposed rule. This proposal addressing CAFE standards is being jointly developed with EPA, which is simultaneously proposing tailpipe carbon dioxide standards for the same vehicles covered by the same model years. As of January 10, 2020, Part Two is not final. The timing of a final SAFE Rule Part Two and the outcome of any pending or potential lawsuits (and how such lawsuits could delay or affect its implementation) are unknown at this time.

State

Sierra Club v. County of Fresno

In December 2018, the California Supreme Court issued its decision in *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, also known as the Friant Ranch decision. The case reviewed the long-term, regional air quality analysis contained in the EIR for the proposed Friant Ranch development. The Friant Ranch development site is located in unincorporated Fresno County within the San Joaquin Valley Air Basin, an air basin currently in nonattainment for multiple national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS), including ozone, respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM₁₀), and fine particulate matter with aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}). The Court ruled that the air quality analysis failed to adequately disclose the nature and magnitude of long-term air quality impacts from emissions of criteria air pollutants and precursors “in sufficient detail to enable those who did not participate in its preparation to understand and consider meaningfully the issues the proposed project raises.” The Court noted that the air quality analysis did not provide a discussion of the foreseeable adverse effects of project-generated emissions on Fresno County’s likelihood of exceeding the NAAQS and CAAQS for criteria air pollutants, nor did it explain why it was not “scientifically possible” to determine such a connection. The Court concluded that “because the EIR as written makes it impossible for the public to translate the bare numbers provided into adverse health impacts or to understand why such translation is not possible at this time,” the EIR’s discussion of air quality impacts was inadequate.

Local

Ventura County Coastal Zoning Ordinance

The following guidelines are included in the Ventura County Coastal Zoning Ordinance and pertain to air quality (Ventura County 2018).

- ▶ **Section 8175-5.7.7 – Oil Development Design Standards:** Pipelines shall be used to transport petroleum products offsite to promote traffic safety and air quality. Transshipment of crude oil through an onshore pipeline for refining shall be a condition of approval for expansion of existing processing facilities or construction of new facilities.

Gas from wells shall be piped to centralized collection and processing facilities, rather than being flared, to preserve energy resources and air quality, and to reduce fire hazards and light sources.

Ventura County Non-Coastal Zoning Ordinance

The following guidelines are included in the Ventura County Non-Coastal Zoning Ordinance and pertain to air quality (Ventura County 2019).

- ▶ **Section 8107-5.5.5:** The following guidelines shall apply to the installation and use of oil and gas pipelines:
 - Pipelines should be used to transport petroleum products off-site to promote traffic safety and air quality.
- ▶ **Section 8107-5.5.7:** Gas from wells shall be piped to centralized collection and processing facilities, rather than being flared, to preserve energy resources and air quality, and to reduce fire hazards and light sources.

ENVIRONMENTAL SETTING

The Background Report (Appendix B) accurately describes the environmental setting for the purpose of this evaluation in Section 8.1, “Air Quality.” There is no additional information necessary to understand the potential air quality impacts of the 2040 General Plan.

4.3.2 Environmental Impacts and Mitigation Measures

METHODOLOGY

This program-level analysis evaluates air quality impacts of 2040 General Plan implementation based on construction and operational activities associated with assumed land use development for the buildout year of 2040 relative to existing (2015) land use development in the county.

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of development. Air quality impacts can nevertheless be acute during construction periods, potentially resulting in adverse localized impacts to air quality. Construction-related emissions are difficult to quantify with a high degree of accuracy at the general plan level because such emissions are dependent on the characteristics and circumstances of future individual development projects that are not known at this time. However, because construction associated with buildout under the 2040 General Plan would generate temporary criteria pollutant emissions, primarily due to the operation of construction equipment (e.g., oxides of nitrogen [NO_x] from vehicle exhaust, reactive organic gas/compounds [ROG] from architectural coatings) and truck trips, emissions have been estimated in this analysis, and are based on the anticipated amount of development under buildout the 2040 General Plan.

The quantitative analysis of construction-related emissions of criteria air pollutants and precursors were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 computer program (CAPCOA 2016). Modeling was based on information specific to the 2040 General Plan including proposed land use designations and types. For modeling purposes construction activities under the 2040 General Plan are assumed to occur between 2020 and 2040 (20 years). Although the exact timing of construction activity over this period is unknown, for the purposes of modeling, it was assumed that development would occur gradually in equal annual increments over this time period. Maximum daily emissions

were generated using CalEEMod default outputs for the first year anticipated year of construction, which would be 2020. See Table 4.3-1 below for a full list of land use assumptions used for the modeling. Where information specific to the 2040 General Plan was not available, default values in CalEEMod were used. While the SAFE Vehicle Rule Part One has been adopted by EPA and NHTSA, the changes in emission factors for light-duty vehicles published by CARB address vehicle model year 2021 and later. For the purposes of this analysis, worker commute emissions were not adjusted based on this rule because the construction modeling is based on 2020, prior to the rule's effect.

Table 4.3-1 Land Use Assumptions for Air Quality Modeling in 2040 Buildout Scenario

Land Use Type	Amount	Unit
Single Family Housing	1,125	Dwelling units
Condo/Townhome	131	Dwelling units
Mid-Rise Apartments	25	Dwelling units
Light Industrial	423,661	Square feet
Heavy Industrial	394,643	Square feet
Mixed Retail	284,821	Square feet
Schools	570,982	Square feet
General Office Building	535,714	Square feet
Medical Office Building	388,839	Square feet

Source: Developed by Ascent Environmental in 2019

Operational emissions of criteria air pollutants and precursors were also estimated using CalEEMod. Modeling used information specific to the 2040 General Plan where available, including assumptions associated with land use designations and types that would be developed as part of the 2040 General Plan. Where information specific to the 2040 General Plan was not available, default values in CalEEMod that are based on Ventura County's climate and land use types were used. See Table 4.3-1, below, for a full list of land use assumptions used for the modeling. Operational emissions were estimated using CalEEMod for the following sources: area sources (e.g., landscaping equipment), energy use (i.e., electricity and natural gas consumption) and mobile sources (vehicle trips and vehicle miles travelled). CalEEMod default energy consumption rates were adjusted to account for energy efficiency improvements from the 2019 California Energy Code (California Code of Regulations [CCR] Title 24, Part 6), which will result in 7 percent and 30 percent reductions in energy consumption for residential and nonresidential (including residential buildings over three stories), respectively, when compared with the 2016 California Energy Code that is included in CalEEMod (CEC 2018).

Mobile-source emissions were estimated using a combination of CalEEMod and EMFAC2017 using annual vehicle miles traveled (VMT) estimates included in the traffic study for the 2040 General Plan and vehicle emissions factors specific to Ventura County. The annual VMT estimates were generated from the Ventura County Transportation Commission (VCTC) Travel Demand Model and were included in the traffic study (Appendix F). VMT estimates were generated for the baseline year (2015) and target year (2040), based on the land uses included in the 2040 General Plan. Mobile-source emissions associated with the target year (2040) were adjusted using EMFAC2017 to account for adoption of the SAFE Vehicle Rule Part One by EPA and NHTSA using emissions factors for criteria air pollutants provided by CARB (CARB 2019).

Some localized areas, such as traffic-congested intersections, can have elevated levels of carbon monoxide (CO) concentrations (CO hotspots). CO hotspots are defined as locations where ambient CO concentrations exceed the CAAQS (20 parts per million (ppm) for 1-hour standard, 9 ppm for 8-hour standard). In Ventura County, ambient air monitoring for CO stopped in 2004, with the approval of the U.S. Environmental Protection Agency Region 9, because CO background concentrations in El Rio, Simi Valley, and Ojai were much lower than the CAAQS. The highest recorded CO background concentration in Ventura County was in Simi Valley at 6.2 ppm for 1-hour and 1.6 ppm for 8-hour between the years 2000 and 2002 (VCAPCD 2003:6-5). Therefore, no CO hotspots are expected to occur in the unincorporated county from development associated with the 2040 General Plan, and additional CO modeling analysis is not warranted. In addition, with over 80 percent of the CO in urban areas emitted by motor vehicles, and with stricter emission standards due to State regulations, CO ambient concentrations should remain at or lower than the most recent CO monitoring data available for Ventura County.

The level of health risk from exposure to construction- and operation-related toxic air contaminant (TAC) emissions was assessed qualitatively because of the programmatic nature of the project and the fact that the specific types and locations of future discretionary projects are unknown. This assessment was based on the proximity of TAC-generating construction activity to off-site sensitive receptors, the number and types of diesel-powered construction equipment being used, and the duration of potential TAC exposure. As defined in the January 2020 Background Report, sensitive receptors are considered to be populations or uses that are more susceptible to the effects of air pollution than the general population, such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds (Appendix B: 8-21).

Similarly, the assessment of odor-related impacts is based on the types of odor sources associated with the land uses that would be developed under the 2040 General Plan and their location relative to nearby sensitive receptors.

THRESHOLDS OF SIGNIFICANCE

As discussed in the “Approach to the Environmental Analysis” section, the thresholds used to determine the significance of the 2040 General Plan’s impacts are based on Ventura County’s adopted Initial Study Assessment Guidelines (ISAG), which include threshold criteria to assist in the evaluation of significant impacts for individual projects. Appendix G of the State CEQA Guidelines also provides considerations for determining the significance of a project’s impacts, in the form of initial study checklist questions.

To develop thresholds of significance for this section of the draft EIR, the County has deviated from the ISAG threshold criteria, where appropriate, to appropriately consider the programmatic nature of a general plan for the entire unincorporated area and to incorporate the 2019 revisions to the Appendix G checklist.

Specifically, ISAG Section 1 states that the air quality assessment guidelines published by VCAPCD should be used for determining thresholds of significance for air quality impacts. VCAPCD’s guidance recommends the sample air quality checklist questions contained in Appendix G Section III(a-d), with additional guidelines specific to Ventura County.

CEQA-related air quality thresholds of significance are tied to achieving or maintaining attainment designations with the NAAQS and CAAQS, which are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health.

In consideration of new and more stringent NAAQS and CAAQS adopted since 2000, VCAPCD identified numerical thresholds for project-generated emissions of ozone precursors that would determine whether a project's non-VCAPCD permitted emissions would result in a cumulative, regional contribution (i.e., significant) to the baseline nonattainment status of Ventura County. VCAPCD's quantitative thresholds of significance for project-level CEQA evaluation may be used to determine the extent to which a project's emissions of ozone precursors would contribute to regional degradation of ambient air quality within Ventura County.

Using federal and State guidance pertaining to TACs, VCAPCD developed cancer risk thresholds for TAC exposure. Unlike criteria air pollutants, there is no known safe concentrations of TACs. Moreover, TAC emissions contribute to the deterioration of localized air quality because of the dispersion characteristics of TAC emissions that do not cause regional-scale air quality impacts. VCAPCD thresholds are designed to ensure that a source of TACs does not contribute to a localized, significant impact to existing or new receptors.

As such, the following thresholds of significance are used to determine whether implementation of the 2040 General Plan would produce a significant localized and/or regional air quality impact such that human health would be adversely affected. For the purpose of this draft EIR, implementation of the 2040 General Plan would have a significant air quality impact if it would:

- ▶ Conflict with or obstruct implementation of the 2016 Ventura County Air Quality Management Plan.
- ▶ Result in emissions of ROG that exceed 25 pounds per day (lb/day) countywide, and 5 lb/day in the Ojai Valley.
- ▶ Result in emissions of NO_x that exceed 25 lb/day countywide, and 5 lb/day in the Ojai Valley.
- ▶ Result in a cumulatively considerable net increase of any criteria pollutant within the South Central Coast Air Basin (SCCAB) that is in nonattainment status under an applicable State or federal ambient air quality standard.
- ▶ Expose the public to substantial pollutant concentrations, including TAC emissions that exceed 10 in 1 million for carcinogenic risk and/or a noncarcinogenic hazard index of 1.0 or greater.
- ▶ Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

While VCAPCD has not formally adopted construction-related thresholds of significance, VCAPCD recommends that construction-related emissions should be mitigated if ROG and NO_x estimates from heavy-duty construction equipment is anticipated to exceed the 5 lb/day threshold in the Ojai Valley or the 25 lb/day in the remainder of the county (VCAPCD 2003:5-3–5-4). For the purposes of this analysis, construction emissions associated with the 2040 General Plan are evaluated against these thresholds.

ISSUES NOT DISCUSSED FURTHER

The Area Plans for communities of El Rio/Del Norte, Lake Sherwood/Hidden Valley, North Ventura Avenue, Oak Park, Ojai Valley, Piru, and Thousand Oaks were reviewed for policies and implementation programs specific to these Area Plans that would potentially have impacts on the environment with respect to air quality. The 2040 General Plan would not result in substantive changes to Area Plan policies and implementation programs related to air quality. The Area Plan policies and implementation programs related to these issues are consistent with the 2040 General Plan policies and implementation programs, which are addressed in the following impact discussions. Therefore, the environmental effects of the Area Plan policies and implementation programs are not addressed separately in this section.

2040 GENERAL PLAN POLICIES AND IMPLEMENTATION PROGRAMS

2040 General Plan policies and implementation programs related to air quality and, specifically, the thresholds of significance identified above, include the following:

Circulation, Transportation, and Mobility Element

- ▶ **Policy CTM-2.11: Efficient Land Use Patterns.** The County shall establish land use patterns that promote shorter travel distances between residences, employment centers, and retail and service-oriented uses to support the use of public transportation, walking, bicycling, and other forms of transportation that reduce reliance on single-passenger automobile trips. (RDR, MPSP) *[Source: New Policy]*
- ▶ **Policy CTM-4.1: Reduce VMT.** The County shall work with Caltrans and VCTC to reduce VMT by:
 - facilitating the efficient use of existing transportation facilities,
 - striving to provide viable modal choices that make driving alone an option rather than a necessity,
 - supporting variable work schedules to reduce peak period VMT, and
 - providing more direct routes for pedestrians and bicyclists. (MPSP, SO) *[Source: Existing GPP Goal 4.2.1.6, modified]*
- ▶ **Policy CTM-4.2: Alternative Transportation.** The County shall encourage bicycling, walking, public transportation, and other forms of alternative transportation to reduce VMT, traffic congestion, and greenhouse gas emissions. (PI) *[Source: New Policy]*
- ▶ **CTM-6.1: Routine Use of Alternative Transportation Options.** The County shall support the integration of emerging technologies that increase the routine use of alternative transportation options to decrease single-passenger automobile travel. (MPSP) *[Source: New Policy]*

Public Facilities, Services, and Infrastructure Element

- ▶ **Policy PFS-2.5: County Employee Trip Reduction.** The County shall encourage its employees to reduce the number and distance of single-occupancy vehicle work trips. (SO) *[Source: New Policy]*

- ▶ **Policy PFS-2.6: County Alternative Fuel Vehicle Purchases.** The County shall review market-available technologies for alternative fuel vehicles and prioritize purchase of vehicles to reduce greenhouse gas emissions where economically feasible. (SO) *[Source: New Policy]*

Conservation and Open Space Element

- ▶ **Policy COS-7.1: Minimum Site Area.** The County shall only approve discretionary development for oil and gas development if the area of ground disturbance constitutes the minimum necessary to accomplish the project objectives. (RDR) *[Source: Existing El Rio/Del Norte Area Plan Policy 1.3.2.4 and Ojai Valley Area Plan Policy 1.3.2.8, modified]*
- ▶ **Policy COS-7.3: Compliance with Current Policies, Standards, and Conditions.** The County shall require new or modified discretionary development permits for oil and gas exploration, production, drilling, and related operations be subject to current State and County policies, standards, and conditions. (RDR) *[Source: Existing Ojai Valley Area Plan Policy 1.3.2.3 and Piru Area Plan Policy 1.2.2.3, modified]*
- ▶ **Policy COS-7.4: Electrically-Powered Equipment for Oil and Gas Exploration and Production.** The County shall require discretionary development for oil and gas exploration and production to use electrically-powered equipment from 100 percent renewable sources and cogeneration, where feasible, to reduce air pollution and greenhouse gas emissions from internal combustion engines and equipment. (RDR) *[Source: Existing Ojai Valley Area Plan Policy 1.3.2.3 and Piru Area Plan Policy 1.2.2.3, modified]*
- ▶ **Policy COS-7.7: Conveyance for Oil and Produced Water.** The County shall require new discretionary oil wells to use pipelines to convey oil and produced water; oil and produced water shall not be trucked. (RDR) *[Source: New Policy]*
- ▶ **Policy COS-7.8: Gas Collection, Use, and Disposal.** The County shall require that gases emitted from all new discretionary oil and gas wells shall be collected and used or removed for sale or proper disposal. Flaring or venting shall only be allowed in cases of emergency or for testing purposes. (RDR) *[Source: Existing Ojai Valley Policy 1.3.2.2]*
- ▶ **Policy COS-8.1: Reduce Reliance on Fossil Fuels.** The County shall promote the development and use of renewable energy sources (e.g., solar, thermal, wind, tidal, bioenergy) to reduce dependency on petroleum-based energy sources. (IGC, RDR) *[Source: New Policy]*
- ▶ **Policy COS-8.2: Incentives for Energy Efficiency.** The County shall encourage the State and energy utility companies to provide programs, rebates, and incentives for energy efficiency installation and retrofit projects. (IGC) *[Source: Existing GPP Goal 1.9.1.3, modified]*
- ▶ **Policy COS-8.6: Zero Net Energy and Zero Net Carbon Buildings.** The County shall support the transition to zero net energy and zero net carbon buildings, including the electrification of new buildings. (RDR) *[Source: New Policy]*
- ▶ **Policy COS-8.12: Energy Conservation in Area Plan Land Use Policies.** Land use policies in Area Plans should be developed to promote energy conservation and should include the following:

- The pattern of residential, commercial and industrial land use should be compact, relate to transit routes and centers and minimize vehicular travel.
- The Infill of vacant lots should be encouraged over step-out developments.

(RDR) [Source: Existing GPP Policy 1.9.2.2]

Implementation Programs

- ▶ **Implementation Program M: Sustainable Building, Siting, and Landscaping Practice Guidelines.** The County shall prepare sustainable building, siting, and landscaping practice guidelines that promote a whole systems approach to building designs and construction techniques that reduce consumption of non-renewable resources such as oil, gas and water and promote renewable energy use. [Source: New Program]

Hazards and Safety Element

- ▶ **Policy HAZ-10.1: Air Pollutant Reduction.** The County shall strive to reduce air pollutant from stationary and mobile sources to protect human health and welfare, focusing efforts on shifting patterns and practices that contribute to the areas with the highest pollution exposures and health impacts. (MPSP, RDR, SO, IGC, PI, JP) [Source: New Policy]
- ▶ **Policy HAZ-10.2: Air Quality Management Plan Consistency.** The County shall prohibit discretionary development that is inconsistent with the most recent adopted Air Quality Management Plan (AQMP), unless the Board of Supervisors adopts a statement of overriding considerations. (RDR) [Source: Existing GPP Policy 1.2.2.1, modified]
- ▶ **Policy HAZ-10.3: Air Pollution Control District Rule and Permit Compliance.** The County shall ensure that discretionary development subject to VCAPCD permit authority complies with all applicable APCD rules and permit requirements, including the use of Best Available Control Technology (BACT) as determined by the VCAPCD. (RDR) [Source: Existing GPP Policy 1.2.2.5, modified]
- ▶ **Policy HAZ-10.4: Engagement with Air Quality Management Plan.** When the VCAPCD updates the AQMP, the County shall actively engage continuously and throughout the process. (IGC) [Source: Existing Lake Sherwood/Hidden Valley Program 2.3.3.1, modified]
- ▶ **Policy HAZ-10.5: Air Pollution Impact Mitigation Measures for Discretionary Development.** The County shall work with applicants for discretionary development projects to incorporate bike facilities, solar water heating, solar space heating, incorporation of electric appliances and equipment, and the use of zero and/or near zero emission vehicles and other measures to reduce air pollution impacts and reduce greenhouse gas emissions. (RDR) [Source: Existing Piru Area Plan Policy 1.7.2.4, modified]
- ▶ **Policy HAZ-10.6: Transportation Control Measures Programs.** The County shall continue to work with the VCAPCD and VCTC to develop and implement Transportation Control Measures (TCM) programs consistent with the AQMP to facilitate public transit and alternative transportation modes within the county. (IGC, FB) [Source: Existing GPP Policy 1.2.2.4 and Existing El Rio/Del Norte Area Plan Program 1.1.3.1, modified]

- ▶ **Policy HAZ-10.7: Fuel Efficient County Vehicles.** When purchasing new County vehicles, the County shall give strong preference to fuel efficient vehicles, include the use of zero emission vehicles when feasible. (SO, FB) *[Source: New Policy]*
- ▶ **Policy HAZ-10.8: Alternative Transportation Modes.** The County shall promote alternative modes of transportation that reduce single-occupancy vehicle (SOV) travel and enhance “last-mile” transportation options to improve air quality. (IGC, JP, PI) *[Source: El Rio/Del Norte Area Plan Goal 1.1.1.2, modified]*
- ▶ **Policy HAZ-10.9: Mitigation of Objectionable Odors.** The County shall require that discretionary development which will create objectionable odors that could affect a substantial number of people are appropriately mitigated. The project, pursuant to state law, shall be required to operate in accordance with the Rules and Regulations of the VCAPCD, with emphasis on Rule 51, Nuisance throughout the life of the permit. (RDR) *[Source: Existing El Rio/Del Norte Area Plan Policy 1.1.2.3, modified]*
- ▶ **Policy HAZ-10.10: Smoke-Free Environments.** The County shall continue to designate, promote, and enforce smoke-free environments to reduce toxins in the air and exposure to second-hand smoke. (PI, SO) *[Source: New Policy]*
- ▶ **Policy HAZ-10.11: Air Quality Assessment Guidelines.** In evaluating air quality impacts, the County shall consider total emissions from both stationary and mobile sources, as required by the California Environmental Quality Act. The County shall evaluate discretionary development for air quality impacts using the Air Quality Assessment Guidelines as adopted by the Ventura County Air Pollution Control District (APCD), except that emissions from APCD-permitted sources shall also be included in the analysis. The County shall revise the Initial Study Assessment Guidelines to implement this policy. (RDR) *[Source: Existing GPP Policy 1.2.2.2, modified]*
- ▶ **Policy HAZ-10.12: Conditions for Air Quality Impacts.** The County shall require that discretionary development that would have a significant adverse air quality impact shall only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate (offset) for the air quality impact. The use of innovative methods and technologies to minimize air pollution impact shall be encouraged in project design. (RDR) *[Source: Existing GPP Policy 1.2.2.3, modified]*

Agriculture Element

- ▶ **Policy AG-2.3: Right-to-Farm Ordinance.** The County’s Right-to-Farm Ordinance shall be maintained and updated as needed to protect agricultural land uses from conflicts with non-agricultural uses, as well as to help land purchasers and residents understand the potential for nuisance (e.g., dust, noise, odors) that may occur as the natural result of living in or near agricultural areas. (RDR) *[Source: New Policy]*
- ▶ **Policy AG-5.2: Electric- or Renewable-Powered Agricultural Equipment.** The County shall encourage and support the transition to electric- or renewable-powered or lower emission agricultural equipment in place of fossil fuel-powered equipment when feasible. (PI, JP) *[Source: New Policy]*
- ▶ **Policy AG-5.3: Electric- or Renewable-Powered Irrigation Pumps.** The County shall encourage farmers to convert fossil fuel-powered irrigation pumps to systems powered by electric or renewable energy sources, such as solar power, and encourage electric utilities to eliminate or reduce stand-by charges. (SO) *[Source: New Policy]*

Implementation Programs

- ▶ **Implementation Program I: Fossil Fuel-Powered Equipment Replacement.** The County shall coordinate with the Air Pollution Control District and electric utilities to develop a program to establish a countywide fossil fuel-powered equipment conversion target, track progress on conversions to renewable energy-sourced electric-powered systems and provide technical assistance to users considering replacement of pumps. *[Source: New Program]*
- ▶ **Implementation Program J: Alternative Fuel Funding for Agricultural Operations.** The County shall coordinate with the VCAPCD to develop a program to identify funding sources or develop financial or regulatory incentives to encourage the switch to electric or alternatively fueled agricultural equipment, when feasible. *[Source: New Program]*

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 4.3-1: Conflict with or Obstruct Implementation of the 2016 Ventura County Air Quality Management Plan

Ventura County is in nonattainment for ozone with respect to the CAAQS. As a result, VCAPCD is required to develop a plan to achieve and maintain the State ozone standards by the earliest practicable date. The 2016 Ventura County AQMP addresses the attainment and maintenance of the NAAQS and CAAQS. The AQMP ozone control strategy is based on anticipated city and county population growth. Thus, a general plan amendment or revision that would increase population growth greater than that estimated in the 2016 Ventura County AQMP would have a significant cumulative adverse air quality impact.

The AQMP ozone control strategy consists of stationary source and transportation control measures, conformity with federal regulations, the State Mobile Source Strategy, reasonably available control measures, incentives, and smart growth policies and programs (VCAPCD 2017). Stationary source control measures include vapor collection systems on gasoline and oil storage tanks, landfill gas recovery systems, low NO_x burners on boilers, and replacing internal combustion engines with electric motors. These measures are included in rules adopted by VCAPCD. Transportation control measures include trip reduction strategies, vehicle substitution, VMT reduction, vehicle occupancy, and technological improvements. There are several 2040 General Plan policies that ensure consistency with the 2016 Ventura County AQMP. Policy HAZ-10.2 prohibits discretionary development that is inconsistent with the AQMP, and Policy HAZ-10.3 requires all discretionary development to comply with all applicable VCAPCD rules and permit requirements, including the use of BACT as deemed necessary by VCAPCD. Policies CTM-4.2, CMT-2.1 through CTM-2.25, and CTM-3.1 through CTM-3.8 seek to reduce vehicle trips through increasing the availability of alternative modes and accommodating the infrastructure needed to encourage bicycling and walking. Policy CTM-4.1 strives to reduce VMT and Policy CTM-4.3 aims to increase vehicle occupancy. Implementation of these policies would be consistent with the ozone control strategy of the 2016 Ventura County AQMP.

The population forecast used in the 2016 Ventura County AQMP was derived from the Southern California Association of Governments' 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. The 2040 population projection for unincorporated Ventura County is 113,600 (SCAG 2016:29). As discussed in Chapter 2, "Project Description," the 2040 General Plan estimates the population of the unincorporated county to be 101,832 by 2040.

Because the population estimates under implementation of the 2040 General Plan would be less than the population estimates assumed in the 2016 Ventura County AQMP, and policies under 2040 General Plan would be consistent with the ozone control strategy, the 2040 General Plan would not result in a significant cumulative adverse air quality impact because it would not conflict with or obstruct implementation of the 2016 Ventura County AQMP. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 4.3-2: Cause Construction-Generated Criteria Air Pollutant or Precursor Emissions to Exceed VCAPCD-Recommended Thresholds

The land use diagram of the 2040 General Plan would accommodate future development of relatively higher intensity residential, commercial, mixed use, and industrial land uses within the Existing Community area designation (boundary) and the Urban area designation (boundary). These are areas with existing residential, commercial, and/or industrial uses developed with urban building intensities generally located adjacent to the boundaries of incorporated cities or along highway corridors such as SR 33, SR 118, SR 126, and Highway 101. The residential, commercial, mixed use, and industrial land use designations of the 2040 General Plan would apply to approximately 1.2 percent of land in the unincorporated county. Potential uses within these designations include small- and large-lot detached single-family homes, one- to three-story attached single-family dwellings and lower density multifamily developments, mixes of commercial, office, residential, civic, and/or recreational uses, one- to two-story structures for retail and commercial services, and industrial employment-generating uses, such as production, assembly, warehousing, and distribution.

The Rural land use designation would allow for low-density and low-intensity land uses such as residential estates and other rural uses which are maintained in conjunction with agricultural and horticultural uses or in conjunction with the keeping of farm animals for recreational purposes, such as greenhouses, principal and accessory structures related to agriculture, and also oil and gas wells, and would apply to approximately 0.9 percent of land in the unincorporated county.

Approximately 97.1 percent of the unincorporated county would remain designated as either Open Space (approximately 88 percent) or Agriculture (approximately 9 percent) under the 2040 General Plan. The Open Space land use designation would allow low intensity development with a minimum parcel size of 10 acres and 1 dwelling unit per parcel. Other uses could include composting operations, greenhouses, correctional institutions, fire stations, and oil and gas wells. The Agriculture land use designation would allow for development of one dwelling unit per parcel and a minimum parcel size of 40 acres. Other uses could include greenhouses, principal and accessory structures related to agriculture, and composting operations. Proposed policies of the 2040 General Plan addressing flaring and trucking associated with new discretionary oil and gas wells could result in the construction and operation of new pipelines for the conveyance of oil, gas, or produced water.

The future development and other physical changes that could occur as a result of 2040 General Plan implementation as described above would generate construction-related emissions of criteria air pollutants and precursors, including ROG, NO_x, PM₁₀, and PM_{2.5}, from site preparation (e.g., excavation, clearing), off-road equipment, material delivery, worker

commute trips, and other activities (e.g., building construction, asphalt paving, application of architectural coatings). Typical construction activities that could occur with land use development include all-terrain forks, fork lifts, cranes, pick-up and fuel trucks, compressors, loaders, backhoes, excavators, dozers, scrapers, pavement compactors, welders, concrete pumps, concrete trucks, and off-road haul trucks, as well as other diesel-powered equipment as necessary. Fugitive dust emissions of PM₁₀ and PM_{2.5} would be associated primarily with site preparation/grading per CalEEMod, and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance, and mobile sources. Emissions of ozone precursors would be emitted from the exhaust of construction equipment and on-road vehicles. Paving and the application of architectural coatings also would result in off-gas emissions of volatile organic compounds or ROG. PM₁₀ and PM_{2.5} would also be emitted from off-road equipment and vehicle exhaust.

As discussed previously, specific construction phasing and intensity are unknown. The levels of emissions generated through these activities would depend on the characteristics of individual future development projects under the 2040 General Plan, including the size and type of land uses being developed, which would determine the length and intensity of construction activity.

Construction activities were estimated to occur at a constant rate over the 2040 General Plan horizon period of 20 years. Table 4.3-1 above details the assumed development under the 2040 General Plan. Based on Table 4.3-1, construction emission estimates were modeled and are shown below in Table 4.3-2.

Table 4.3-2 Modeled Maximum Daily Emissions of Criteria Air Pollutants and Precursors Emissions (lb/day)

Construction Phase	ROG	NO _x	PM ₁₀	PM _{2.5}
Site Preparation	4.1	42.5	20.4	12.0
Grading	4.5	50.2	13.0	5.9
Building Construction	2.5	22.7	2.1	1.3
Paving	1.4	14.1	0.9	0.7
Architectural Coating	18.4	1.7	0.3	0.2
Maximum Daily Emissions	18.4	50.2	20.4	12.0
VCAPCD Countywide Threshold	25	25	N/A	N/A
VCAPCD Ojai Valley Threshold	5	5	N/A	N/A

Notes: ROG = reactive organic gas; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; VCAPCD = Ventura County Air Pollution Control District; NA = not applicable.

Source: Calculations by Ascent Environmental in 2019

As shown above, construction activity associated with the 2040 General Plan would generate NO_x emissions in exceedance of the countywide threshold and ROG and NO_x emissions in exceedance of the Ojai Valley thresholds. However, these thresholds are for operational sources of emissions. VCAPCD has not adopted construction-related thresholds for criteria air pollutants or ozone precursors, as these sources of emissions are temporary. VCAPCD recommends mitigating construction emissions from heavy-duty off-road equipment if these emissions exceed the operational thresholds.

Construction activities resulting from implementation of the 2040 General Plan could contribute substantially to Ventura County's nonattainment status for ozone and PM₁₀ and could result in an increase in the potential for adverse health impacts to occur from ozone and PM₁₀. Policy HAZ-10.3 of the 2040 General Plan would require all discretionary projects to comply with applicable VCAPCD rules, including Rule 51 (Nuisance), Rule 50 (Opacity), and Rule 55 (Fugitive Dust). Implementation of this policy would reduce construction-generated emissions of criteria air pollutants and precursors, but it cannot be guaranteed that emissions from individual discretionary projects would be reduced to below the VCAPCD thresholds. Additionally, Policy COS-8.7 promotes sustainable building practices to reduce energy associated with construction.

The addition of NO_x, which is a precursor to ozone, could result in an increase in ambient concentrations in Ventura County and, moreover, increase the likelihood that ambient concentrations exceed the CAAQS and NAAQS. As summarized in the January 2020 Background Report, human exposure to ozone may cause acute and chronic health impacts including coughing, pulmonary distress, lung inflammation, shortness of breath, and permanent lung impairment. Also, the increase in construction-generated emissions of PM₁₀ could impede air quality planning efforts to bring Ventura County into attainment of the CAAQS for PM₁₀. However, it would be misleading to correlate the levels of criteria air pollutant and precursor emissions associated with implementation of the 2040 General Plan to specific health outcomes to sensitive receptors. While the description of the effects noted above could manifest in the recipient receptors, actual effects on individuals depend on individual factors, such as life stage (e.g., older adults are more sensitive), preexisting cardiovascular or respiratory diseases, and genetic polymorphisms. Even armed with this type of specific medical information (which is confidential to the individual), there are wide ranges of potential health outcomes from exposure to ozone precursors and particulates, from no effect to the effects described above. Therefore, other than determining the types of health effects that could occur, it would be speculative to more specifically correlate exposure to ozone precursors and particulates from the 2040 General Plan to specific health outcomes to receptors. By evaluating emissions of air pollutants against VCAPCD's thresholds, it is foreseeable that health complications associated with ozone and PM₁₀ exposure could be exacerbated to nearby sensitive receptors by construction-generated emissions.

Due to the nonattainment status of Ventura County for ozone and PM₁₀, construction activities associated with implementation of the 2040 General Plan may result in adverse air quality impacts to existing surrounding land uses and may contribute to the existing adverse air quality condition in the county. Further, as actual construction phasing is not known, it is possible that emissions may exceed or be below modeled emissions shown in Table 4.3-2. Nonetheless, based on conservative modeling, it is likely that emissions would exceed countywide and Ojai Valley thresholds at some point during buildout of the 2040 General Plan. The Hazards and Safety Element of the 2040 General Plan includes Policy HAZ-10.3 that would require discretionary projects to comply with VCAPCD rules that specifically focus on reducing criteria air pollutant and precursor emissions from construction activity. However, implementation of this policy cannot guarantee construction-generated emissions would be reduced to below the VCAPCD thresholds. Therefore, construction emissions could contribute to the existing nonattainment condition in the county with respect to the CAAQS and NAAQS for ozone and with respect to the CAAQS for PM₁₀ and could result in an increase in the potential for adverse health impacts to occur from exposure to ozone and PM₁₀. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure AQ-1a: New Policy HAZ-X: Construction Air Pollutant Best Management Practices

The County shall include the following new Policy HAZ-X in the 2040 General Plan.

Policy HAZ-X: Construction Air Pollutant Best Management Practices

The County shall ensure that discretionary development will, to the extent feasible, incorporate best management practices (BMPs) to reduce emissions to be less than applicable thresholds. These BMPs include but are not limited to the most recent VCAPCD recommendations for construction BMPs (per the Air Quality Assessment Guidelines or as otherwise identified by VCAPCD).

Mitigation Measure AQ-1b: New Implementation Program HAZ-X: Construction Air Pollutant Best Management Practices

The County shall include the following new implementation program in the 2040 General Plan.

Implementation Program HAZ-X: Construction Air Pollutant Best Management Practices

Applicants for future discretionary development projects that would generate construction-related emissions that exceed applicable thresholds, will include, but are not limited to, the mitigation measures recommended by VCAPCD (in its Air Quality Assessment Guidelines or otherwise), to the extent feasible and applicable to the project. The types of measures shall include but are not limited to: maintaining equipment per manufacturer specifications; lengthening construction duration to minimize number of vehicle and equipment operating at the same time; and using electric-powered or other alternative fueled equipment in place of diesel powered equipment (whenever feasible).

Mitigation Measure AQ-2a: New Policy HAZ-X: Fugitive Dust Best Management Practices

The County shall include the following new policy in the 2040 General Plan.

Policy HAZ-X: Fugitive Dust Best Management Practices

The County shall ensure that discretionary development which will generate fugitive dust emissions during construction activities will, to the extent feasible, incorporate BMPs that reduce emissions to be less than applicable thresholds.

Mitigation Measure AQ-2b: New Implementation Program HAZ-X: Fugitive Dust Best Management Practices

The County shall include the following new implementation program in the 2040 General Plan.

Implementation Program HAZ-X: Fugitive Dust Best Management Practices.

Applicants for future discretionary development projects which will generate construction-related fugitive dust emissions that exceed applicable thresholds will include, but are not limited to, the types of mitigation measures recommended by VCAPCD's Air Quality Assessment Guidelines, to the extent feasible and applicable:

- ▶ The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excess amounts of dust.
- ▶ The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excess amounts of dust.

- ▶ Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of watering (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
- ▶ Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114.
 - All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
- ▶ Graded and/or excavated inactive areas of the construction site shall be monitored by (indicate by whom) at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
- ▶ Signs shall be posted on-site limiting traffic to 15 miles per hour or less.
- ▶ During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with VCAPCD when winds are excessive.
- ▶ Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
- ▶ Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

Significance after Mitigation

Implementation of Mitigation Measures AQ-1a, AQ-1b, AQ-2a, and AQ-2b would reduce impacts to air quality to the extent feasible because construction-related emissions of criteria air pollutants and precursors would be minimized through the use of the highest rate diesel engines available for heavy-duty, off-road equipment; dust suppression techniques; the idling limits for heavy-duty diesel-powered equipment; and the use of alternatively fueled construction equipment. As shown in Table 4.3-3, these mitigation measures would reduce ROG and NO_x emission below the countywide thresholds but not the Ojai Valley thresholds.

Table 4.3-3 Mitigated Maximum Daily Emissions of Criteria Air Pollutants and Precursors Emissions (lb/day)

Construction Phase	ROG	NO _x	PM ₁₀	PM _{2.5}
Site Preparation	0.5	2.1	18.3	10.3
Grading	0.8	3.3	10.9	4.0
Building Construction	0.8	5.8	1.0	0.3
Paving	0.3	1.3	0.2	0.1
Architectural Coating	14.9	0.2	0.2	<0.1
Maximum Daily Emissions	14.9	5.8	18.3	10.0
VCAPCD Countywide Threshold	25	25	N/A	N/A
VCAPCD Ojai Valley Threshold	5	5	N/A	N/A

Notes: ROG = reactive organic gas; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; VCAPCD = Ventura County Air Pollution Control District; NA = not applicable.

Although fugitive dust emissions would be reduced through mitigation, PM₁₀ emissions could still occur from construction of individual development projects. Because Ventura County is in nonattainment for PM₁₀ with respect to the CAAQS, construction emissions under the 2040 General Plan could exacerbate this existing air quality condition. Additionally, because it is unknown how many development projects could be under construction at the same time, ROG and NO_x emissions could continue to exceed VCAPCD's thresholds within the Ojai Valley. Therefore, because ozone precursor emissions could remain above recommended thresholds and the fact that Ventura County is in nonattainment for ozone with respect to the NAAQS and CAAQS, this impact would be **significant and unavoidable**.

Impact 4.3-3: Result in a Net Increase in Long-Term Operational Criteria Air Pollutant and Precursor Emissions That Exceed VCAPCD-Recommended Thresholds

Future development and other physical changes that could occur as a result of 2040 General Plan implementation, as described in Impact 4.3-2, would result in long-term operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5}. Operational emissions would be generated from area sources (e.g., landscaping-related fuel combustion sources, the periodic application of architectural coatings, and the use of consumer products), energy use (e.g., electricity and natural gas), and from additional vehicle trips associated with all new land use development. Table 4.3-4 summarizes the maximum daily operation-related emissions of criteria air pollutants and precursors and the daily significance thresholds established by VCAPCD.

As shown in Table 4.3-4, operational activities would result in emissions of ROG and NO_x that exceed the VCAPCD thresholds of significance for both countywide and the Ojai Valley. As discussed in the "Thresholds of Significance" section, VCAPCD developed these thresholds in consideration of achieving and maintaining the NAAQS and CAAQS, which represent concentration limits of criteria air pollutants and precursors needed to adequately protect human health. Therefore, the 2040 General Plan's contribution to operational criteria air pollutants and precursors could result in greater acute or chronic health impacts compared to existing conditions.

Table 4.3-4 Summary of Maximum Daily Operational Emissions of Criteria Air Pollutants and Precursors in 2040 (lb/day)

Source Type	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Area	118.1	1.2	105	0.6	0.6
Energy	1.6	14.3	9	1.1	1.1
Mobile	16.8	70.8	387	319.2	85.8
Maximum Daily Emissions	136.6	86.3	502	320.9	87.5
VCAPCD Countywide Threshold	25	25	N/A	N/A	N/A
VCAPCD Ojai Valley Threshold	5	5	N/A	N/A	N/A

Notes: ROG = reactive organic gas; NO_x = oxides of nitrogen; CO = carbon monoxide; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; lb/day = pounds per day; VCAPCD = Ventura County Air Pollution Control District; NA = not applicable.

Totals may not sum exactly due to rounding.

Source: Calculations by Ascent Environmental in 2019

Stationary Source Facilities

Stationary sources, such as boilers, heaters, flares, cement plants, and other types of combustion equipment associated with industrial uses undergo a permitting process by VCAPCD. The permits approved by VCAPCD require emission caps for sources that are tied to attaining or maintaining the NAAQS and CAAQS. Stationary sources are required to implement and comply with applicable VCAPCD rule(s) for their specific operation. For example, VCAPCD Rule 26.2 requires the implementation of BACT, which may include the installation of emissions control equipment or implementation of administrative practices to reduce emissions, as deemed necessary by VCAPCD. A stationary source may also be required to offset its emissions of criteria air pollutants and precursors in order to be permitted. All new stationary sources that could be developed under the 2040 General Plan would be required to go through the permitting process and receive approval by VCAPCD prior to construction and operation. The APCD permitting program is a regulated process in which applicable industrial and commercial businesses are required to comply with APCD rules related to their respective operations. Examples of permitted sources include gas stations, auto body shops that perform motor vehicle coating on-site, landfills, graphic arts operations, asphalt production, mining operations, and oil and gas facilities. The APCD permitting program also requires source testing of emission control equipment, Operating & Maintenance (O&M) plan requirements of permitted equipment to ensure maintenance is being kept, monitoring of operating parameters to ensure compliance with VCAPCD rules and regulations, recordkeeping requirements, annual emissions inventory reporting, and annual compliance inspections by APCD staff to ensure all permit conditions are being met.

Summary

The 2040 General Plan includes policies that would reduce emissions of air pollutants associated with individual development projects. Policies HAZ-10.05 and HAZ-10.12 would require that discretionary development with significant adverse air quality impacts only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate for the impact. Policy COS-7.7 requires new discretionary oil wells to use pipelines to convey oil and produced water; oil and produced water shall not be allowed to be trucked for new discretionary oil wells. This would avoid air pollutant emissions that would otherwise result from trucking of oil and produced water from new discretionary oil wells. Policy COS-7.8 requires that gases emitted from all new discretionary oil and gas wells shall be collected and used or removed for sale or proper disposal.

Flaring or venting of such gases shall not be allowed except in cases of emergency or for testing purposes. This would lessen air pollutant emissions that would otherwise result from flaring at new discretionary oil and gas wells. Analysis of the potential impacts of this policy on petroleum resources are addressed in Section 4.12, "Mineral and Petroleum Resources," of this EIR. Policies HAZ-10.6, CTM-2.11, CTM-4.1, CTM-4.2, and CTM-6.1 focus on reducing VMT through land use planning and the availability of alternative transportation options, which would reduce air pollutants associated with mobile sources through reducing the number of trips taken by individuals and the distance of those trips. Additionally, the 2040 General Plan includes many policies (e.g., CTM-2.11, CTM-2.13, CTM-3.1, CTM-4.2) that encourage trips made by biking, walking, and public transportation, which would reduce vehicular trips and thus reduce mobile-source air pollutant emissions.

While there are policies in the 2040 General Plan that would reduce criteria air pollutant and precursor emissions, it is unknown if emission levels from future development would be reduced below the VCAPCD countywide and Ojai Valley thresholds. Because Ventura County is in nonattainment for ozone with respect to the CAAQS and NAAQS and is in nonattainment for PM₁₀ with respect to the CAAQS, future development under the 2040 General Plan could contribute to the existing nonattainment status. This impact would be **potentially significant**.

Mitigation Measures

The 2040 General Plan policies described above require implementation of all feasible mitigation measures for all discretionary development projects. While individual projects may be able to reduce emissions to levels below applicable thresholds, the total emissions attributable to future development under the 2040 General Plan would exceed VCAPCD's thresholds and would be a considerable contribution to cumulative air pollutants in the region. No additional feasible mitigation is available to reduce this impact.

Significance after Mitigation

For the reasons provided above this impact would remain **significant and unavoidable**.

Impact 4.3-4: Result in a Short- or Long-Term Increase in Localized CO Emissions That Exceed VCAPCD-Recommended Thresholds

Local mobile-source CO emissions near roadway intersections are a direct function of traffic volume, vehicle speed, and traffic delay. A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. Transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions. However, under stable meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels, adversely affecting nearby sensitive land uses, such as residential units, hospitals, schools, and childcare facilities. CO is a pollutant of localized concern and, therefore, is analyzed at the local level. Construction activities are rarely a cause of localized CO impacts because they do not typically result in substantial traffic increases at any one location. This impact focuses on operational increases in mobile sources of CO and is based on guidance available from VCAPCD and the South Coast Air Quality Management District (SCAQMD).

As discussed in the Methodology section above, Ventura County has been in attainment for both the 1-hour and 8-hour CO concentration standards for the CAAQS and NAAQS and ambient air monitoring for CO stopped in 2004. The maximum reported CO concentration data in Ventura County was 3.5 ppm for the 8-hour average in 2003, which is the year with the most recently available CO monitoring data. This is well below the 8-hour CAAQS standard of 20 ppm.

Given that Ventura County is in attainment for CO and is not projected to exceed CAAQS or NAAQS within the SCCAB, it is not anticipated that the adoption of the 2040 General Plan would result in localized CO impacts, considering that individual discretionary project implemented under the 2040 General Plan would be dispersed throughout the unincorporated county. Additionally, federal and State vehicle emissions standards are anticipated to result in a decrease in CO concentrations. Nonetheless, CO impacts are further analyzed using available operational thresholds recommended by SCAQMD. Based on the emissions modeling conducted for 2040 General Plan, and shown in Table 4.3-4 above, mobile-source CO emissions would not exceed 387 lb/day during operation, which is below the SCAQMD-recommended screening threshold of 550 lb/day (SCAQMD 2019). Refer to Appendix C for detailed modeling results.

For these reasons, local mobile-source CO emissions generated by future development that could be accommodated under the 2040 General Plan would not result in or substantially contribute to concentrations of CO that exceed the 1-hour or 8-hour CAAQS and NAAQS. This impact would be **less than significant**.

Mitigation Measures

No mitigation would be required for this impact.

Impact 4.3-5: Expose Sensitive Receptors to Substantial Increases in Toxic Air Contaminant Emissions

Diesel PM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of diesel PM outweighs the potential for all other health impacts (i.e., noncancer chronic risk, short-term acute risk) and health impacts from other TACs (CARB 2003). Thus, diesel PM is the focus of this analysis. With regards to exposure of diesel PM, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher level of health risk for any exposed receptor. According to the Office of Environmental Health Hazard Assessment's guidance, exposure of sensitive receptors to TAC emissions should be based on a 30-year exposure period for estimating cancer risk at the Maximum Exposed Individual (MEI), with 9- and 70-year exposure periods at the MEI as supplemental information. Furthermore, a 70-year exposure period is required for estimating cancer burden or providing an estimate of population-wide risk (OEHHA 2015:8-1).

Construction Emissions

Future development and other physical changes that could occur as a result of 2040 General Plan implementation, as described in Impact 4.3-2, would generate temporary, intermittent emissions of diesel PM from the exhaust of off-road heavy-duty diesel-powered equipment used for site preparation, grading, paving, application of architectural coatings, on-road truck travel, and other miscellaneous activities.

Existing sensitive receptors are located throughout the plan area. However, at the general plan scale, individual sensitive receptors were not identified. In addition, studies show that diesel PM is highly dispersive and that concentrations of diesel PM decline with distance from the source (Zhu et al. 2002a). These studies illustrate that diesel PM is highly dispersive and that receptors must be near emission sources for a long period to experience exposure at concentrations of concern.

Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the plan area (i.e., construction is not likely to occur in any one part of the plan area for an extended time), the dose of diesel PM of any one receptor is exposed would be limited. Therefore, considering the relatively short duration of diesel PM-emitting construction activity at any one location of the plan area, and the highly dispersive properties of diesel PM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions.

Operational Emissions

Proximity to highways increases cancer risk and exposure to diesel PM. Similarly, proximity to heavily traveled transportation corridors and intersections would expose residents to higher levels of diesel PM. CARB recommends avoiding siting new sensitive land uses, such as residences, schools, daycare centers, playgrounds, or medical facilities, within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day (CARB 2005). As discussed in Section 8.1 of the January 2020 Background Report, and based on 2014 traffic data, several interstate and route segments located within or adjacent to Ventura County include annual average daily traffic volumes (AADT) in excess of 100,000 vehicles per day on State Route 23, State Route 118, and U.S. Highway 101. There are no segments along State Routes 1, 33, 34, 150, or 232, that exceed an AADT of 50,000 vehicles per day. There are two segments along Route 126 that have an AADT of 50,000. There are no rural roadways in Ventura County with volumes that exceed 50,000 vehicles per day (Caltrans 2014).

Additionally, implementation of the 2040 General Plan would accommodate future development that could generate new sources of TACs from commercial and industrial land uses. Per VCAPCD Rule 36 (New Source Review – Hazardous Air Pollutants), land uses that would construct or reconstruct stationary emissions from a major source would be required to obtain a permit and would have to install maximum achievable control technology (MACT) for air toxics, if deemed applicable by VCAPCD. This is also included as Policy HAZ-10.3 of the 2040 General Plan.

Due to the programmatic level of this analysis, the amount of specific types of projects and land uses and the specific locations of future development are not available. However, it is possible that future development as a result of the 2040 General Plan could result in new stationary sources associated with commercial and industrial land use development that could result in TAC exposure to existing or future planned sensitive land uses. However, the 2040 General Plan includes policies focused specifically on addressing exposure of sensitive receptors to TACs. Policies HAZ-10.5, HAZ-10.11, and HAZ-10.12 focus on addressing air quality impacts from discretionary development through requirements for air quality impact evaluations and implementation of mitigation measures to reduce air quality impacts. Policies LU-17.2, LU-17.4, and LU-17.5 provide land use compatibility guidance for the siting of residential land uses in designated disadvantaged communities near industrial land uses with the goal of minimizing health risks to people from industrial toxic or TAC emissions. These policies would serve to reduce the risk of exposing new and existing sensitive receptors to TAC emissions. Policy COS-7.2 would require that new oil wells subject to discretionary approval be located a minimum of 1,500 feet from residential dwellings and 2,500 feet from any school. Currently, the County's zoning standards state that wells should be located a minimum of 800 feet from sensitive uses (NCZO 8107-5.5.8 and CZO 8175-5.7.8), and must be located a minimum of 500 feet from dwelling units (NCZO 8107-5.6 and CZO 8175-5.7.8), 500 feet from schools in the non-coastal area (NCZO 8107-5.6), and 800 feet from schools in

the Coastal Zone (CZO 8175-5.7.8), unless these setback requirements are waived by occupants of the sensitive uses. The proposed setback increases of Policy COS-7.2 would reduce the potential for sensitive receptors at residential dwellings and schools to be exposed to air pollutants including toxic air contaminants associated with new oil wells subject to discretionary approval.

Further, new stationary TAC sources would be subject to Rule 36 and would be required to install MACT for toxics to receive permitting for the source. New stationary TAC sources that do not meet the requirements of Rule 36 would not receive permits and would not ultimately be approved for development, ensuring receptors would not be exposed to substantial concentrations of TACs.

Summary

As discussed above, implementation of the 2040 General Plan could result in exposure of sensitive receptors to construction-related TACs. However, given that future development under the 2040 General Plan would occur by 2040 and would occur in various areas throughout the county, it is unlikely that any one sensitive receptor would be exposed to construction-related TACs for extended periods of time. Therefore, construction activity as a result of the 2040 General Plan would not result in the exposure of existing or new sensitive receptors to a substantial increase in TAC emissions. The 2040 General Plan would also result in an increase in total VMT along local roadways within the county as a result of future growth and development. Because there are urban roads in the unincorporated county that exceed 100,000 vehicles per day and rural roads that exceed 50,000 vehicles per day, new sensitive receptors could be exposed to roadway traffic levels that could result in adverse health effects from TACs. Regarding stationary sources of TACs, as discussed above, the 2040 General Plan includes policies that would limit exposure of new sensitive receptors to TACs from stationary sources such as industrial land uses. Additionally, all new development undergoing discretionary review would be required to evaluate existing TAC exposure and incorporate available reduction measures in accordance with VCAPCD requirements, if necessary. In consideration of these factors, implementation of the 2040 General Plan could result in the exposure of new sensitive receptors to a substantial increase in TAC emissions. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure AQ-3: New Policy HAZ-10.X: Setback Requirements for Sensitive Land Uses Near Heavily Traveled Transportation Corridors

The County shall include the following new policy in the 2040 General Plan.

Policy HAZ-10.X: Setback Requirements for Sensitive Land Uses Near Heavily Traveled Transportation Corridors

The County shall require discretionary development for land uses which include sensitive receptors which are considered to be populations or uses that are more susceptible to the effects of air pollution than the general population, such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds are located at least 500 feet from any freeway or urban road with traffic volumes that exceed 100,000 vehicles per day, or rural roads that exceed 50,000 vehicles per day. New sensitive use structures can be located with 500 feet from a new or existing freeway or urban road with traffic volumes that exceed 100,000 vehicles per day, or

rural road with traffic volumes that exceed 50,000 vehicles per day only if a project applicant first prepares a qualified, site-specific health risk assessment (HRA). The HRA shall be conducted in accordance with guidance from VCAPCD and approved by VCAPCD. If the HRA determines that a nearby sensitive receptor would be exposed to an incremental increase in cancer risk greater than 10 in 1 million, then design measures shall be incorporated to reduce the level of risk exposure to less than 10 in 1 million. No further action shall be required if the HRA demonstrates that the level of cancer risk would be less than 10 in 1 million.

Significance after Mitigation

Implementation of Mitigation Measure AQ-3 would require that new sensitive receptors not be located within 500 feet of any freeway, urban or rural roadways experiencing traffic volumes that exceed 100,000 and 50,000 vehicles per day, respectively, which is the CARB-recommended setback distance (CARB 2005:10), unless a site-specific VCAPCD-approved HRA shows that associated levels of cancer risk at the sensitive receptors would not exceed 10 in 1 million. This would substantially lessen the exposure of new receptors to a substantial increase in TAC emissions. This impact would be reduced to **less than significant**.

Impact 4.3-6: Result in Other Emissions (Such as those Leading to Odors) Adversely Affecting a Substantial Number of People

Future development and other physical changes that could occur as a result of 2040 General Plan implementation, as described above in Impact 4.3-2, could expose existing sensitive receptors to future development that could include odor sources and may cause a nuisance. Additionally, new sensitive receptors could be exposed to existing land uses that include odors and may result in a nuisance. The occurrence and severity of odors impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected receptors. While offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress among the public, and they often generate citizen complaints to local governments and regulatory agencies. VCAPCD Rule 51 states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property." Enforcement of VCAPCD Rule 51 would serve to mitigate new odor-generating land uses other than agricultural operations developed as a result of the 2040 General Plan that may cause a nuisance to nearby sensitive receptors.

In regard to odors generated from agricultural operations, Ventura County's Code of Ordinances includes a "Right to Farm" ordinance (Ventura County Code of Ordinances Division 9, Chapter 1). The ordinance serves to protect and support agricultural land and operations within the county. Section 8114-2.1.1 states:

No agricultural activity, operation or facility that is consistent with this Chapter and the General Plan, and is conducted or maintained for commercial purposes in a manner consistent with proper and accepted customs and standards as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after it has been in operation for more than one year if it was not a nuisance at the time it began.

To deter from potential conflicts with existing agricultural land uses, as part of the ordinance, the County is required to give notice of this ordinance to buyers of real property located in the county. The County also has a mediation process for any disputes involving agricultural land uses and issue opinions on whether certain agricultural land uses constitute a nuisance. The County's "Right to Farm" ordinance serves to mitigate issues regarding exposure of sensitive receptors to odors from agricultural land and operations while protecting agricultural land uses in the county. This ordinance would serve to protect agricultural lands in the county during implementation of the 2040 General Plan and mitigate issues regarding exposure of sensitive receptors to odors from agricultural land operation that may be considered a nuisance.

The Agriculture Element includes Policy AG-2.1 that addresses the siting of development adjacent to agriculturally designated land. This policy would serve to reduce potential odor impacts from the siting of new sensitive receptors in the county. The Agricultural Land Use Policy Direction of the Land Use and Community Character Element includes policies that restrict the introduction of conflicting land uses into agricultural areas, which would serve to reduce potential odors impacts to new sensitive receptors.

Minor odors from the use of heavy-duty diesel-powered equipment and the laying of asphalt during construction activities would be intermittent and temporary. Due to the characteristics of diesel exhaust emissions, odors generated from the use of heavy-duty diesel-powered equipment would dissipate rapidly within 150 meters (492 feet) (Zhu et al. 2002a, Zhu et al. 2002b). While construction would occur intermittently by 2040, these types of odor-generating activities would not occur at any single location, or within close proximity to the same off-site receptors, for an extended period of time and would not result in permanent odor sources. Therefore, construction is not anticipated to result in substantial odors.

Future nonresidential land uses or specific facilities in the county could generate odor emissions that could be a nuisance. However, the Land Use and Community Character Element includes land use compatibility policies that would serve to reduce potential impacts from receptors near existing odors sources. Additionally, VCAPCD Rule 51 regulates nonagricultural uses that potentially emit odors, further reducing the potential for odor impacts on existing and new sensitive receptors in the county. As a result, implementation of the 2040 General Plan would not result in odor impacts on existing sensitive receptors or future sensitive receptors. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.