

4.8 HAZARDOUS MATERIALS

This section describes the project site's existing sources of environmental contamination and potential hazards and the impacts of the proposed project on public health and safety due to the exposure of people to existing hazardous materials or creation of new hazardous materials. This analysis was based primarily on a Phase I Environmental Site Assessment prepared by Groundwater Solutions, Inc. (January 2009), discussions with staff at the Agricultural Commissioner's Office and the ranch manager in regards to pesticide use, as well as research and site investigations by County staff.

4.8.1 ENVIRONMENTAL SETTING

4.8.1.1 Existing Site Conditions

The project site is a 1,784-acre ranch (not including the 18-acre ranch parcel that is not a part of the project applications) located in the rural unincorporated Gaviota Coast area of Santa Barbara County, approximately four miles from the City of Goleta and the urban/rural boundary. The site has been used for various forms of agriculture since the 1800s, with more cultivated agriculture gradually intensifying over time. Aerial photographs indicate that crop production and orchards have occurred on the site since at least 1928. As an active agricultural operation within a rural area, pesticides and other farming chemicals, agricultural machinery lubricants and fuels are stored within the project site. These are currently stored in and around the agricultural storage buildings within proposed Parcel 5. These include small quantities of pesticides and farm chemicals (< 5 gallons), four 55-gallon drums of spent lubrication fluids, a 700-gallon aboveground diesel storage tank, and two 500-gallon aboveground gasoline storage tanks (Groundwater Solutions, 2009).

All pesticides, herbicides, and insecticides are regulated by the County Agricultural Commissioner's Office and are applied consistent with the County's regulations. Beginning in 1970, farmers were required to submit pesticide use reports to the County Agricultural Commissioner's Office. Based on a review of the pesticide use records for the Ranch over the last five years (2004-2009), the agricultural operation applies herbicides during the spring and summer months to control weeds. It appears that they do spot treatments on the orchard floor, roadsides, and in rangeland on an as-needed basis. Las Varas Ranch hires a company to do aerial pesticide applications (using helicopter) of a Federally Restricted product (pers. comm., Paul Van Leer, Ranch Manager). Las Varas Ranch's pesticide application pattern is typical of other avocado orchards in the area. Treatments are usually in the late spring or early summer and a second round in the fall if pest pressure remains high.

4.8.1.2 On-site Oil and Gas Activities

In addition to past and present agricultural activities, the site has experienced past oil and gas development. The locations of the known abandoned oil and gas wells within the ranch are shown in **Figure 4.8-1**. There are no active oil or gas wells or processing facilities within the project site, nor is there above-ground evidence of abandoned oil or gas wells remaining within the project site. The most recent wells were abandoned in 1998.

The Division of Oil, Gas, and Geothermal Resources (DOGGR) has 15 plugged and abandoned wells on the project site. In addition, two “unmapped” wells (Lemon #1 and Pasture #1) exist on the ranch and are identified as being abandoned in 1998. The abandoned Las Varas Canyon oil field is located north of U.S. Highway 101 within proposed Parcel 6. The earliest known well was drilled in 1928. The other wells were subsequently drilled and later abandoned through 1968. It is unknown when the two wells that were abandoned in 1998 were originally drilled. Records indicate that these two wells leaked oil into surrounding soils before being abandoned, potentially resulting in a hazardous soil condition. Their locations are shown on **Figure 4.8-1**.

The DOGGR has specific requirements for abandonment of oil wells. Formerly abandoned wells may or may not have been abandoned in accordance with the standards of the time, which were not as strict as they are today.

There is no documentation from DOGGR regarding the location of oil sumps, storage tanks, pipelines or other infrastructure commonly associated with oil production. No evidence of these facilities was identified during the field assessments, though that does not rule out their existence.

A single natural tar seep was identified on the project site, north of the railroad to the east of Gato Creek. The tar seep is currently bermed and fenced and shrouded by trees. As identified in the Phase I ESA, the seep consisted of a layer of congealed oil floating on water.

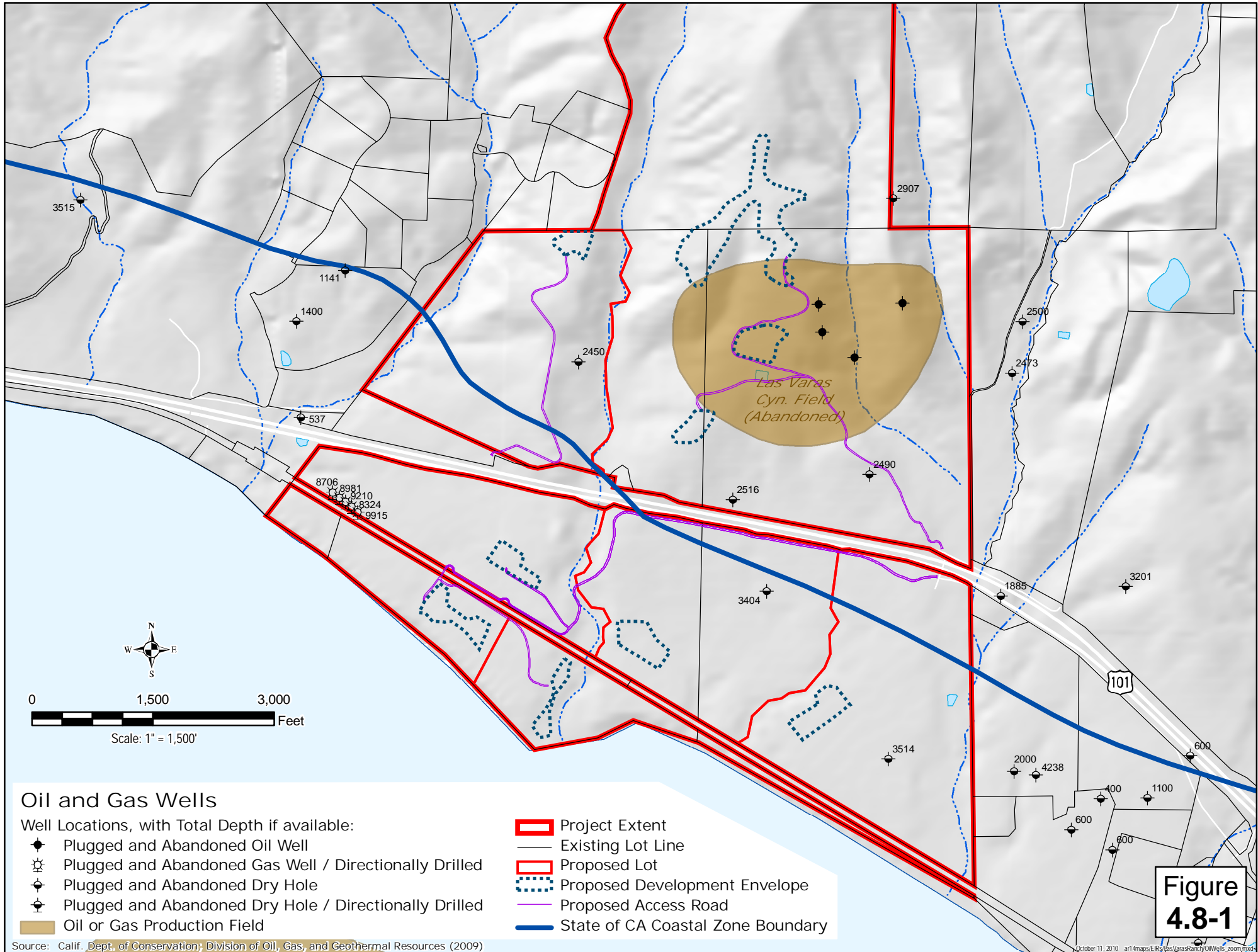
4.8.1.3 Oil and Gas Facilities in Vicinity

Several oil and gas producing, processing, and treatment facilities are located along the coast in the general vicinity of the project site. These facilities have the potential to release hazardous materials that could affect human health and safety. Facilities located closest to the project site include Venoco, Inc.’s Ellwood onshore oil and gas processing facility (3 miles to the southeast of the project site); Venoco’s offshore Platform Holly (6 miles southeast of the project site); Pacific Offshore Pipeline Company’s gas plant in Las Flores Canyon (3 miles northwest of the project site); ExxonMobile’s stripping gas treatment facility and transport terminal in Las Flores Canyon; and the All American Pipeline Company facilities, also in Las Flores Canyon.

Risk assessments have been previously prepared for each of these facilities to evaluate potential for risk of upset and the potential consequences for surrounding residents, roads, and public areas.

The Las Flores Canyon facilities were evaluated for public health and safety hazards in EIR# 94-EIR-002, POPCO Gas Plant Expansion Project (County of Santa Barbara, 1994). The EIR identifies hazard footprints for significant risks associated with plant expansion. The proposed project site is outside of the footprint area. In addition, the facility has been modified since 1994 to further reduce risks; the APCD has removed the POPCO and ExxonMobile facilities in Las Flores Canyon from its list of Significant Risk Facilities.

Venoco’s Ellwood onshore facility is listed by the APCD as a Significant Risk Facility. However, at approximately three miles away, the project site is outside the potential hazard footprint of the facility. Similarly, the hazard footprint from Venoco’s Platform Holly does not extend onshore.



Oil and Gas Wells

Well Locations, with Total Depth if available:

- ◆ Plugged and Abandoned Oil Well
- ⊙ Plugged and Abandoned Gas Well / Directionally Drilled
- ⊙ Plugged and Abandoned Dry Hole
- ⊙ Plugged and Abandoned Dry Hole / Directionally Drilled
- Oil or Gas Production Field

- ▭ Project Extent
- Existing Lot Line
- - - Proposed Lot
- ⋯ Proposed Development Envelope
- Proposed Access Road
- State of CA Coastal Zone Boundary

Figure 4.8-1

Source: Calif. Dept. of Conservation; Division of Oil, Gas, and Geothermal Resources (2009)

In addition to these facilities, the abandoned Naples Offshore Gas field is located approximately ½ mile offshore from Edward's Point and numerous oil and gas wells (both active and abandoned) are located offshore in the vicinity of the project site.

4.8.2 REGULATORY FRAMEWORK

4.8.2.1 Federal Authorities and Regulations

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (1980)

CERCLA was enacted by Congress in 1980. Administered by the EPA, this federal law provides broad federal authority to respond directly to releases, or threatened releases, of hazardous substances that may endanger public health or the environment. The Superfund Amendments and Reauthorization Act (SARA) of 1986 amended CERCLA as it relates to the "innocent landowner defense," and also required the EPA to revise the Hazard Ranking System. This is to ensure that the system accurately assesses the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List.

4.8.2.2 State Authorities and Regulations

Department of Toxic Substances Control (DTSC)

DTSC is authorized by the U.S. EPA to administer the hazardous waste laws and oversee remediation of hazardous waste sites. Regulations are codified in the California Code of Regulations Title 22. Waste that is toxic, corrosive, flammable, or reactive when tested in accordance with the CCR, Title 22, Article 11, Section 66693, must be handled, stored, transported, and disposed of in accordance with state regulations, which are more stringent with federal regulations. The Santa Barbara County Fire Protection District (FPD) is a Certified Unified Program Agency participant, overseen by DTSC.

Central Coast Regional Water Quality Control Board (RWQCB)

Federal and state site remediation regulations are enforced by the RWQCB and the FPD. The FPD is the lead agency for the area and has instituted a Site Mitigation Program responsible for the supervision of cleanup at sites located throughout the County. The County will grant closure of an impacted site when samples of soil and groundwater reveal that contaminant levels are below the standards set by FPD and the RWQCB.

California Division of Oil, Gas, and Geothermal Resources (DOGGR)

DOGGR is mandated by Section 3106 of the Public Resources Code to supervise the drilling, operation, maintenance, and abandonment of oil and gas wells. This is for the purposes of preventing: 1) damage to life, health, property, and natural resources; 2) damage to underground and surface waters suitable for irrigation or domestic use; 3) loss of oil, gas, or reservoir energy; and 4) damage to oil and gas deposits by infiltration of water and other causes.

Safe Drinking Water and Toxic Enforcement Act (Proposition 65) (1986)

In California, pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986: (1) no person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive toxicity into water or into land where such chemical passes or probably will pass into any source of drinking water, and (2) no person in the course of doing business shall knowingly and intentionally expose any individual to a chemical known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning to such individual.

Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code)

The Porter-Cologne Act established a regulatory program to protect water quality and to protect beneficial uses of state waters. The Porter-Cologne Act also established the state board and regional boards as the principal state agencies responsible for control of water quality. Each of the nine California Regional Water Quality Control Boards is required to develop guidance to assist in ensuring that the intent of the Porter-Cologne Act is met.

4.8.2.3 Local Authorities and Regulations

Santa Barbara County Agricultural Commissioner's Office

The County Agricultural Commissioner's Office regulates the purchase and application of pesticides on agricultural lands within the County, in compliance with the California Code of Regulations sections 6600 and 6614. The Office issues pesticide use permits, conditions permits, conducts inspections, responds to and investigates pesticide complaints, and issues notice of violations or fines for improper pesticide use in order to ensure agricultural chemicals are applied in accordance with product label requirements.

4.8.3 THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines indicate that a project could have a potentially significant impact with respect to hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The County's *Environmental Thresholds and Guidelines Manual* identifies a potential for a significant impact to public safety from a project if the following conditions exist:

- Oil wells and gas wells are present and associated production activities are occurring;
- Gas and hazardous liquid pipelines are present;

- Oil and/or gas processing and storage facilities are present.

Lastly, the County's Initial Study checklist provides the following questions to help in the evaluation of significance of a hazardous materials/risk of upset impact:

Would the project result in:

- In the known history of this property, have there been any past uses, storage, or discharge of hazardous materials? (e.g. fuel or oil stored in underground tanks, pesticides, solvents, or other chemicals)?
- The use, storage, or distribution of hazardous or toxic materials?
- A risk of an explosion or the release of hazardous substances (including, but not limited to oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?
- Exposure to hazards from oil or gas pipelines or oil well facilities?
- The contamination of public water supply?

There are no active oil or gas wells, pipelines, or processing or storage facilities present within the project site that would pose a hazard to future residents or the recreating public. However, there is a history of oil and gas activities on the project site as well as the past and present use and storage of pesticides and other agricultural chemicals. Thus, with respect to the proposed project, the two key factors to consider are 1) whether the past oil and gas wells and drilling activities within the project site pose a potential impact to public health and safety through the exposure of residual contaminants or leaking wells to future residents and the general public; and 2) whether the use or storage (past or present) of agricultural chemicals poses a public health hazard from direct exposure or exposure via contaminated soils or groundwater.

4.8.4 PROJECT IMPACTS AND MITIGATION

Impact HAZ-1: Impacts from Past Oil and Gas Activities

As discussed in Section 4.8.1.2, there are 17 recorded oil and gas wells that have been abandoned within the project site. All but two of the wells were reportedly abandoned by 1968, with the two "unmapped" wells not abandoned until 1998. There is evidence of these latter wells leaking prior to their abandonment by the DOGGR. The approximate locations of the 17 wells are indicated on **Figure 4.8-1**. Abandonment records were available for all but two of the wells (these are available for viewing at P&D's office upon request).

Given the timing of many of the abandonments, it is possible that many of the wells were not abandoned in conformance with current safety standards. In the case of the two more recent abandonments, the DOGGR issued a letter to the landowner in 2005 indicating that because the wells were drilled prior to the creation of the DOGGR in 1915, there is no guarantee that they were abandoned in accordance with current standards since they did not have information as to the underground well construction and geologic conditions.

There is the possibility for oil, methane, or toxic gases to migrate through the abandoned wells and be released into the environment if not plugged and abandoned properly. Such

contaminants pose a potential health hazard to the public, including construction workers. Soils in the vicinity of abandoned oil and gas wells may be contaminated with petroleum hydrocarbons (volatile organic compounds and semi-volatile organic compounds) and metals. The County Fire Department has no records of releases of hazardous materials. However, there is the potential for soils contaminated by past oil activities to be uncovered during development of the project site. There is also a safety factor associated with constructing buildings above or in close proximity to previously abandoned wells. For that reason, the DOGGR prohibits such construction.

The site reconnaissance undertaken as part of the Phase I ESA did not find any surficial evidence of soil contamination in the locations of the 17 abandoned wells. Based on the mapped locations of the wells, the proposed development envelopes and public trails appear to be outside any of the well footprints. However, given the inexact nature of the mapping (the well locations can be off by up to approximately 200 feet), it cannot be stated with certainty that well locations and/or production infrastructure do not potentially encroach into any of the proposed envelopes, especially the proposed upper development areas on proposed Parcel 6 where two mapped wells are located within approximately 500 feet of the envelopes' boundaries, and proposed Parcel 7 where a mapped well is located within approximately 200 feet of the proposed access road. In cases where contaminated soils are encountered either during grading and construction or pre-construction assessments, the County Fire Department would need to be contacted and would require assessment and remediation of soil that exceeds County action levels. The impacts are thus considered *potentially significant but mitigable*.

Mitigation Measures

HAZ 1-1: Hazardous Materials Discovery - Field Observation. A registered environmental assessor shall conduct a pre-grading/construction training with appropriate construction crews regarding the identification of contaminated soil and shall be on-site during grading and site excavation activities in areas that are within 300 yards~~500 feet~~ of mapped abandoned oil wells. In the event that visual contamination or chemical odors are detected while implementing the approved work on the project site, all work shall cease immediately. The property owner or appointed agent shall contact the County Fire Department's Hazardous Materials Unit (HMU); the resumption of work requires the approval of the HMU. **Plan Requirements/Timing:** This requirement shall be noted on all grading and building plans.

MONITORING: Permit Compliance staff shall site inspect to ensure compliance.

HAZ 1-2: Encountering Oil Production Infrastructure. In the event that any unexpected wells or piping are encountered during normal grading operations, all grading operations shall cease until the Division of Oil and Gas has been notified and appropriate actions have been taken. Previously abandoned wells showing evidence of continued leaking shall require re-abandonment to current standards under the direction of DOGGR and the County Fire Department in compliance with California Code of Regulations Title 14, Chapter 4 and the Public Resources Code, Section 3106. **Plan Requirements and Timing:** This requirement shall be noted on all grading and building plans.

MONITORING: Permit Compliance staff shall site inspect to ensure compliance. The County Fire Department and DOGGR shall monitor abandonment activities and documentation, as necessary.

Residual Impacts

The residual effect of Impact HAZ-1 with implementation of the above mitigation measures is reduced to **less than significant (Class II)**.

Impact HAZ-2: Impacts from Agricultural Operations.

The proposed project would result in the establishment of residential development envelopes in seven newly reconfigured/created lots. In addition, the project would establish and dedicate two trail easements to the County for future use as public recreational trails providing beach access and a linked segment of the California Coastal Trail, in addition to a lateral easement along the shoreline. Of the seven proposed lots and associated development envelopes, proposed Parcels 1, 2, 3, and 6 would potentially result in future residential development adjacent to or in close proximity to (within 200 yards) productive orchards. Additionally, access to most all of the development envelopes would pass along or through an existing orchard within the ranch. The proposed vertical beach access trail would be established immediately adjacent to an active avocado orchard and a portion of the proposed lateral trail easement would be located adjacent to an active avocado orchard as well.

The lemon and avocado orchard operation within the ranch uses various registered pesticides, (includes herbicides and insecticides) as part of its normal operations, as discussed in Section 4.8.1.1. The application of these chemicals is strictly regulated by the County Agricultural Commissioner's Office. Application of these chemicals is done by hand and other ground-based techniques (e.g. small tractor with an attached sprayer), and occasional aerial spraying with helicopter under strict parameters (e.g. weather conditions). Ground-based application of these chemicals, in conjunction with the oversight provided by the Agricultural Commissioner's Office, would help to limit the likelihood of pesticide drift onto adjacent residential portions of the site or public trails. Given the limited frequency and duration of aerial pesticide applications at the ranch and the existing ongoing oversight and regulation by the County Agricultural Commissioner's Office, impacts to future residents and trail users from aerial applications are considered *adverse but less than significant*. In addition, it is common practice to fly over the site prior to applying the pesticides in order to ensure that no one is present in the immediate vicinity of the spraying. Nonetheless, Mitigation AG 2-1 would ensure that any potential exposure of the public is avoided by closing the trails on days in which pesticides are being applied aerially. This is expected to be no more than approximately three days per year.

As discussed in Section 4.8.1.1, pesticides and other farming chemicals, agricultural machinery lubricants and fuels are stored within the project site. These are currently stored in and around the agricultural storage buildings within proposed Parcel 5. These include small quantities of pesticides and farm chemicals (< 5 gallons), four 55-gallon drums of spent lubrication fluids, a 700-gallon aboveground diesel storage tank, and two 500-gallon aboveground gasoline storage tanks (Groundwater Solutions, 2009). There are no records of spills or other incidents of release of hazardous materials having occurred at the project site. However, the storage of these fuels and spent lubrication fluids requires that the landowner obtain a permit from the County Fire

Department for hazardous waste generation pursuant to Article IV of Chapter 18 (Hazardous Waste Generation) of the County Municipal Code, as well as a onetime notification of chemical storage at the site. In addition, given the amount of petroleum fluids stored on site, a Spill Prevention Control and Countermeasure (SPCC) plan must also be prepared and implemented when necessary (pers. comm., Ann Marie Nelson, County Fire Department, 2010). These requirements are in place to protect public health and safety through the proper handling and storage of hazardous materials and response to accidental spills. In reviewing records at the County Fire Department, the landowner is currently out of compliance with these requirements, as no permits have been obtained and no plans or notifications submitted. Because the agricultural operation is not currently in compliance with these laws and regulations, and given the increase in the on-site resident and visitor population that would result from the project, impacts to public health and safety related to hazardous materials are considered *potentially significant but mitigable*.

Mitigation Measures

HAZ 2: Hazardous Materials Permits. The landowner/applicant shall obtain all necessary permits and authorizations from the County Fire Department for the storage and handling of hazardous materials, including agricultural chemicals, fuels, and spent lubricants. The landowner/applicant shall prepare and submit to the County Fire Department a Spill Prevention Control and Countermeasure (SPCC) plan for their review and approval. **Plan Requirements and Timing:** The landowner/applicant shall submit all necessary material to the County Fire Department prior to the issuance of Coastal Development Permits for site infrastructure. The landowner/applicant shall obtain written confirmation from the County Fire Department that all applicable requirements have been met and shall submit this documentation to Planning and Development for review and approval prior to Coastal Development Permit issuance for site infrastructure.

MONITORING: P&D shall confirm compliance with this condition prior to Coastal Development Permit issuance.

See **Mitigation AG 2-1** for restricting trail access during periods of aerial pesticide application.

Residual Impacts

The residual effect of Impact HAZ-2 with implementation of the above mitigation measures is reduced to a **less than significant (Class II)** level.

4.8.5 CUMULATIVE IMPACTS

The proposed project, in conjunction with other planned and pending projects would potentially increase the residential population in a predominantly agricultural area. This could have the effect of increasing the number of people potentially exposed to agricultural chemicals. However, as discussed elsewhere in this section, the application and storage of pesticides and other agricultural chemicals is strictly regulated by the County Agricultural Commissioner's Office and County Fire Department in order to protect public health and prevent unintended release of hazardous materials. In addition, exposure to hazardous materials such as improperly abandoned oil or gas wells is rather localized and would not have far-reaching

effects. The proposed project would involve the future development of up to seven residences, which would not result in a significant increase in the population potentially exposed to public health hazards. In addition, it is not expected that the new public trails created as part of the project would expose the public to health or safety hazards from continued pesticide application in compliance with local and state regulations. Thus, the cumulative effect of unsafe public exposure to these hazards is considered less than significant and the project's contribution would *not be cumulatively considerable*.