# 3.7 HAZARDS AND HAZARDOUS MATERIALS

This section describes the following within the existing City boundary:

- environmental setting (existing conditions and regulatory setting) for hazards and hazardous materials relating to the proposed project;
- the impacts associated with hazards and hazardous materials that would result from the proposed project; and
- mitigation measures that would reduce these impacts.

The setting, impacts, and mitigation measures for the future service areas are described in Chapter 4.0, "Future Service Areas." Chapter 5.0, "Alternatives to the Proposed Project," discusses the impacts of the alternatives to the proposed project.

# 3.7.1 Existing Conditions

This section discusses existing hazards or potential hazards associated with naturally occurring phenomenon (e.g., fire hazards) within the City of Goleta. This section also discusses hazards associated with the use, storage, transportation, and manufacturing of hazardous materials as well as the generation and management of hazardous wastes. This section also discusses manmade hazards associated the Santa Barbara Municipal Airport and electricity generation and transmission (i.e., electromagnetic fields).

# 3.7.1.1 Urban and Wildland Fire Hazards

Urban fires pose a potential risk to structures in any city. In addition, certain areas within Goleta have been designated as high wildland fire hazard areas (Figure 3.7-1, Hazards and Hazardous Materials), including areas north of Cathedral Oaks Road, portions of the Winchester Commons subdivision, and the Bacara Resort property. The areas susceptible to high fire hazards generally include lands with steep slopes and ample vegetation, or fuel load. The Santa Barbara County Fire Department provides fire suppression and fire prevention services to the City of Goleta, and has established standards for building and development review to minimize fire hazards and to provide for adequate fire suppression. In reviewing proposed developments, the Santa Barbara County Fire Department adheres to standards for fire hydrant spacing, fireflow, and need for sprinkler systems. Standards for peak-load water supply require that adequate water flow is available for effective fire suppression. The minimum required fire flow depends on the type of building construction, the proximity of adjacent structures, and the presence or absence of fire walls and other fire protection devices. Minimum required fireflow standards are specified in the California Uniform Fire Code, and the Fire Department reviews new developments and redevelopments to ensure compliance with these minimum requirements.

# 3.7.1.2 Oil and Gas Production, Processing, and Transport Hazards

# **Processing Facilities**

One major oil and gas production and processing facility, the Venoco Ellwood Onshore Oil and Gas Processing Facility (EOF), is located within the City's boundaries (Figure 3.7-1, Hazards and Hazardous Materials). Owned by Venoco, Incorporated, the EOF is located on a 4.46-acre parcel near the western end of Goleta. The plant treats crude oil and gas produced from

Platform Holly, which is located approximately 2.5 miles offshore. Processes at the EOF include the separation of oil and water; treatment of oil to reduce hydrogen sulfide ( $H_2S$ ) content; separation, storage, and loading of tanker trucks for transport of lighter-end hydrocarbons such as liquefied petroleum gas (LPG) and natural gas liquids (NGL); treatment and discharge of produced water; and conversion of raw sour ( $H_2S$ -rich) gas to sweet ( $H_2S$ -low) sales-grade natural gas. Elemental sulfur, a byproduct of the  $H_2S$  removal processes, is also produced at EOF and sold primarily for use in fertilizers.

Potential hazards to public safety near the plant (i.e., within 1 mile) may occur from a catastrophic H<sub>2</sub>S release from EOF due to an upset condition; fires and/or explosions resulting in different hydrocarbon streams that could release vapor clouds; and boiling liquid expanding vapor explosions (BLEVEs). H<sub>2</sub>S is a toxic gas with the potential to cause human fatalities given sufficient exposure duration and concentration. The types of fires include pool, jet, and vapor cloud fires in addition to BLEVEs and fireballs. Pool fires result from flammable liquid hydrocarbon releases (i.e., crude oil) that form a pool that is subsequently ignited. Jet fires result from ignition of a continuous release of pressurized flammable hydrocarbon gas (i.e., a NGL leak from piping). Both pool and jet fires are continuous sources of thermal radiation until the fuel is exhausted. Short-term vapor cloud fires result from delayed ignition of the flammable portion of vapor clouds that are dispersed following a hydrocarbon release. BLEVEs result from external fires causing a vessel containing volatile materials (i.e., LPG storage tank) to rupture, which subsequently creates an ignited fireball and/or explosive overpressures, producing shortterm thermal radiation. Fireballs can also result from ignition of any instantaneous release of pressurized hydrocarbons. Finally, delayed ignition of flammable vapor clouds may also produce an explosion, resulting in blast overpressures. Less severe hazards include the risk of a trucking accident and subsequent release of hazardous materials from one of the trucks transporting NGL, LPG, or sulfur cake.

The Santa Barbara County Fire Department required the Venoco Corporation to complete a quantitative risk assessment (QRA) for Platform Holly and the Ellwood Facility. The QRA was performed on these facilities as they are currently configured and with current production throughput volumes. The scope of the QRA was to evaluate the acute risk (i.e., fatalities or serious injuries) to the public associated with accidental gaseous releases from Platform Holly and the Ellwood Facility and to develop, if needed, measures that could reduce the level of public risk. As a result of the 2000 QRA, Venoco was required to implement a number of risk-reduction measures; these measures have recently been completed. Notable among these safety improvements were improved fire suppression measures in the LPG and NGL tank areas and the installation of a H<sub>2</sub>S siren that will sound in the event of a catastrophic release of H<sub>2</sub>S. The implementation of these measures has substantially reduced the hazard posed by this facility, but a plant upset is still possible.

Two idle wells, one for oil production and one for wastewater injection, and related piers exist in state tidelands at the Pacific shoreline below the Sandpiper Golf Course property. These are the last two remaining shoreline oil wells in the State. Production has been idled since 1994 when the former owner/operator stopped operations following a pipeline rupture and oil spill. The location of the wells within the tidal zone results in a risk of discharge of oil into the seawater in the event of failure of the wells or their components. S.L. 421 is served by several onshore facilities, including pipelines and an access road protected by a riprap seawall at the base of the bluff. The current owner, Venoco, has an interest in recommissioning production at the idled oil well. Processing oil and water at the pier well or transporting oil to the EOF for processing are alternative methods for handling and processing oil produced the S.L. 421 production well.

## **Oil and Gas Pipelines**

Natural gas pipelines operating outside of industrial facilities and public works facilities are located in most City rights-of-way (ROWs). Oil pipelines are less common, but are also typically located within City ROWs. These pipelines are regulated by the U.S. Department of Transportation (DOT) and the California Public Utilities Commission. In part because of regulatory oversight, oil and gas pipelines within the City are not subject to frequent leaks. Third party damage to pipelines, however, remains a major cause of pipeline leaks, and third party-caused gas leaks can result in an explosion. Local governments, unless preempted by state or federal law, can establish standards and policies related to development in proximity to gas pipelines.

The most noteworthy oil and gas pipelines within the City are owned and operated by Venoco as part of its Ellwood operations. Existing active oil and gas pipelines and storage facilities are associated with transporting oil and gas from Platform Holly and shoreline wells at State Lands (S.L.) 421 to the EOF and to Line 96, which transports oil from the EOF to the Ellwood Marine Terminal (EMT). Inactive and abandoned pipelines may exist at various locations within the City, particularly near the shoreline. Oil pipelines from shoreline wells at S.L. 421 to the EOF are currently inactive. According to Venoco's QRA (2000), the EOF processes about 5,000 barrels per day of crude oil, 5 million standard cubic feet per day (SCFD) of gas and 15,000 gallons per day of NGL and mixed LPG.

The EMT is located on 17 acres of property immediately east of the Sperling Preserve/Ellwood Mesa City Park that is leased from UCSB. The EMT property is just outside the City's limits, but is within its planning area. The EMT has the capacity for onshore storage and pumping and has an offshore mooring terminal. The pipeline system consists of a 10-inch diameter, then 6-inch, diameter oil pipeline from the EOF to the EMT. The pipeline length is 3.7 miles nearly all of which is within the City's jurisdiction. The second oil pipeline consists of a 12-inch, then 10-inch, diameter pipeline from the onshore transfer pumps at the EMT to the offshore loading connection.

# 3.7.1.3 Hazardous Materials and Wastes

As defined by the State of California, a hazardous material or waste is a substance that is toxic, ignitable or flammable, reactive, and/or corrosive (California Code of Regulations, Title 22, Section 66261). The distinction between hazardous materials and wastes are that wastes are typically used (spent) hazardous materials (e.g., waste oil and process-generated byproducts like petroleum residue from oil and gas processes). Hazardous materials may be stored and/or used in certain manufacturing or industrial operations in construction, and in operations at other commercial facilities such as gas stations, hospitals, commercial (i.e., dry cleaners), and chemical and paint suppliers), and retail businesses. Hazardous wastes may be generated at such facilities as part of normal operations. Examples of such hazardous waste include aerosols, asbestos, batteries, fluorescent bulbs, mercury, motor oil, and lead-based paint.

Household hazardous wastes are materials commonly used in and around residential households that contain toxic substances. These include household cleaning products (drain cleaners, oven cleaners, floor and furniture polish); painting products (paints, stains, finishing products, thinners); automotive products (motor oil, old gasoline, anti-freeze, car batteries, transmission, brake and steering fluids, solvents); garden products (fertilizers, pesticides, herbicides); hobby supplies (solvents, photochemicals); and pool supplies (chlorine).

The City of Goleta has areas that have historically been used for industrial and commercial purposes. Such industrial and commercial uses typically store and/or use hazardous materials. In particular, manufacturing, small industrial facilities, dry cleaners, and gas stations are present along Hollister Avenue and south of Hollister Avenue in Old Town Goleta. Such sites have the potential for, or have had, hazardous materials and/or waste releases. The primary concerns associated with the release of a hazardous material are the short- and long-term effects that exposure to a hazardous substance may have on the public. To minimize potential impacts, hazardous materials are governed by regulations that require proper storage and handling, employee and public noticing, spill contingency planning, business/environmental management plans, and other emergency preventative and response measures necessary to ensure public safety and to minimize the risk of accidental releases and associated environmental impacts.

In the City of Goleta, the administering agencies for hazardous materials use and hazardous materials and wastes handling, storage, and disposal are the Santa Barbara County Fire Prevention Division (SBCFPD) and the Santa Barbara County Office of Emergency Services (SBCOES). While both agencies require a Hazardous Materials Business Plan (HMBP), the SBFPD administers the HMBPs. A HMBP is a program that requires a business that handles and/or stores hazardous materials to provide an inventory of hazardous materials stored on site. emergency response and contingency procedures, and an employee training program. In addition, businesses that store, in total, at least 1,320 gallons of oil (e.g., gasoline, diesel, fuel, lubricating oil, mineral/transformer oil, etc.) in aboveground storage tanks (ASTs), vessels, and/or equipment are required to prepare a Spill Prevention Control and Countermeasures (SPCC) Plan pursuant to the Code of Federal Regulations, Title 40, Part 112 (40 CFR 112), and to provide secondary containment for each oil-containing AST and/or vessel greater than 55 gallons. The secondary containment shall be capable of containing 110 percent of the respective tank or vessel size, or 110 percent of the largest AST or vessel clustered together in a common containment basin/structure. Like a HMBP, a SPCC Plan would provide an inventory of oil-containing ASTs and vessels stored on site, the amounts of oil stored in each, emergency response and contingency procedures, and an employee training program.

Transportation corridors occupied by vehicles or railcars transporting hazardous material or wastes are also potential sources of accidental releases that could affect various areas of the City. Transportation of hazardous materials and wastes in the City of Goleta is most likely to occur along U.S. Highway 101 (US-101), State Route 217 (SR-217), Hollister Avenue, Cathedral Oaks Road, and the Union Pacific Railroad tracks. US-101 and the Union Pacific Railroad tracks traverse the entire east-west length of the City of Goleta. Hollister Avenue and Cathedral Oaks Road run parallel to US-101. SR-217 extends on a northeast to southwest diagonal between US-101 and the UCSB campus. Goleta is a participant in the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan. The City, in cooperation with the Federal Emergency Management Agency (FEMA), the County, and the State Offices of Emergency Services, is responsible for emergency preparedness and response. The Hazard Mitigation Plan would be utilized to identify evacuation routes and secondary emergency accesses and to provide information to the community regarding appropriate individual actions in the event of accidental releases from vehicles and railcars transporting hazardous materials or wastes. The California Highway Patrol (CHP) enforces Department of Transportation (DOT), Caltrans, and state and local regulations. The CHP and Santa Barbara County Fire Department would respond to incidents associated with transport of hazardous materials.

State and federal hazardous waste laws limit operators who can use hazardous waste collection facilities to businesses that qualify as a Conditionally Exempt Small Quantity Generator (CESQG). To qualify as a CESQG, a generator must not produce more than 100 kilograms (27

gallons, or 220 pounds) of hazardous waste per month, including a maximum of 1 kilogram (1 quart, or 2.2 pounds) of acutely hazardous waste. Businesses or individuals who generate more than this amount are required to use a licensed hazardous waste hauler to manifest and transport their waste.

Goleta residents and businesses that qualify as a CESQG can dispose of hazardous waste items at the Community Hazardous Waste Collection Center located at UCSB. The collection center is managed by the County of Santa Barbara Public Works Department and sponsored by the City of Goleta.

Additionally, the City obtains and administers state grants to assist residents in the proper disposal of used motor oil and oil filters. Three certified collection centers throughout the City offer free collection services to residents.

# 3.7.1.4 Hazardous Materials Disclosure Program

The primary concerns associated with the release of a hazardous material are the short- and long-term effects that exposure to a hazardous substance may have on the public. This is particularly true when a toxic gas is involved because a gaseous toxic plume is more difficult to contain than a soil or liquid spill, and a gas can impact a larger portion of the population in a shorter time span.

Businesses that handle more than a specified amount of hazardous materials are required by both the federal and state governments to submit a HMBP to their local administering agency (e.g., SBCFPD) and SBCOES)]. The specific quantities for acutely hazardous materials vary according to the substance. HMBPs should contain a description of the physical and chemical properties of the substance for each hazardous and extremely hazardous material that is handled, and the symptoms that result from contact with the substance. The plan should also have a site map that shows where each hazardous material is stored and handled, where emergency response equipment is located, and contain evacuation plans and procedures.

There are approximately 104 businesses in Goleta that have HMBPs (County of Santa Barbara Fire Department 2003). These HMBPs are on file with the Santa Barbara County Fire Department. There are 151 sites listed with the Santa Barbara County Fire Department as hazardous waste generators located in the City of Goleta.

Business and industrial facilities located outside the City limits may also have the potential of causing a hazardous materials release incident that could impact Goleta. Hazardous materials stored in warehouses or in refineries have the potential of being released as toxic fumes during an earthquake or fire. The areas of the City that could be impacted by toxic fumes are in part dependent upon wind direction and other climatological factors. However, because of the risk, facilities that store hazardous materials that could pose a toxic-fume threat often are required to be located away from predominantly residential neighborhoods and/or facilities that house immobile populations (i.e., schools, child care centers, and convalescent homes).

# 3.7.1.5 Hazardous Materials Incidence Response

Releases of hazardous materials may occur during a natural disaster such as an earthquake; improperly stored containers of hazardous substances may overturn or break, pipelines may rupture, and storage tanks may fail. Hazardous materials are also considered to be potential

targets for terrorism or sabotage. Containers may also explode if subject to high temperatures, such as those generated by a fire. If two or more chemicals that are reactive when combined make contact as a result of a spill, the hazard may be compounded. The 1996 Uniform Fire Code includes criteria designed to minimize the risk of an accident.

## Santa Barbara County Fire Prevention Division (SBCFPD)

The SBCFPD and the Central Coast Regional Water Quality Control Board (CCRWQCB) are the local enforcement agencies for the regulation of hazardous materials/wastes. The Santa Barbara County Air Pollution Control District (SBCAPCD) oversees the regulation of airborne hazardous materials/waste issues.

The SBCFPD regulates and enforces underground storage tank installation and monitoring requirements, including permitting and inspecting. The SBCFPD is also responsible for administering the state's leaking underground fuel tank (LUFT) program. The purpose of the LUFT program is to oversee the proper assessment and remediation of contaminants released from underground storage tanks.

The SBCFPD administers HMBPs for businesses that use, store, or handle, at a minimum, 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure that require HMBPs. The HMBP must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a material change).

Businesses using "acutely hazardous materials" (AHM) must submit a Risk Management Plan (RMP) in accordance with the California Accidental Release Prevention (CalARP) Program, pursuant to California Code of Regulations (CCR), Title 19 - Public Safety, Division 2 - Office of Emergency Services (CCR 2004). The Santa Barbara County Fire Department Hazardous Materials Unit (HMU) administers the requirements of CalARP and requires such business to prepare a RMP (or referred to as a Risk Management and Prevention Program (RMPP) by HMU) that details past AHM accidents, AHM equipment condition, maintenance and monitoring, and controls to minimize the risk of accident.

Hazardous-waste-producing businesses must obtain a Santa Barbara County Hazardous Waste Generator Permit and comply with state regulations. Permit applications must be made 30 days prior to beginning operation of a business that will generate hazardous wastes. The permit must be renewed annually.

The CCRWQCB, the State Department of Toxic Substances Control (DTSC), and the SBCFPD enforce state site remediation regulations resulting from soil and/or groundwater contamination. Sites involving groundwater contamination are usually overseen by the CCRWQCB. In addition to the LUFT program, Santa Barbara County has a Site Mitigation Unit (SMU) to address non-LUFT releases that do not fall under the auspices of LUFT. Guidelines for assessment/ remediation in SMUs are very similar, if not the same, as LUFTs.

# 3.7.1.6 Documented Releases of Hazardous Materials and Wastes

The City of Goleta has a history of urban uses, including extensive and diverse industrial, commercial, agricultural and rural lands, and residential uses. The City has a history of known contaminant releases, which includes active remediation sites, some closed sites, and a number of properties that can be considered a higher risk for contamination based on historic or current land uses. As a result of the history of industrial and commercial development, there are several

sites within the City that have the potential to have been impacted by previous or current releases of contaminated materials.

Governmental sources and databases have been searched by Environmental Data Resources (EDR) for listed regulatory sites within Goleta to provide a baseline study as of the date of the NOP. EDR provided the results of the research to the City in a report dated October 2, 2003 (EDR 2003). Figure 3.7-2, Listed Hazardous Materials and Hazardous Waste Sites by Area, illustrates the locations of these sites, and includes areas on the northern part of the Santa Barbara Airport property adjacent to the City of Goleta. EDR makes no claims as to the completeness or accuracy of the referenced sources in their report.

Below are descriptions of Goleta sites listed in the EDR report, organized by the database that was searched.

## **CERCLA Sites**

The 1988 Federal Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) list of potentially hazardous waste sites included one site within the City that was investigated by the Federal Environmental Protection Agency (EPA). The CERCLIS inventory lists sites that have been identified as having a potential for releasing hazardous substances into the environment. According to information provided by EDR, there are no Federal National Priorities List (NPL) sites within the City. However, there is one hazardous waste site, Gibraltar Mining, located at 6144 Calle Real within the City (EDR Map ID #28). As of October 2003, this site was being reviewed/assessed for possible inclusion on the NPL.

## Underground Storage Tank

The EDR report indicated that there were 25 active underground storage tanks (UST), 78 leaking underground storage tanks (LUSTs, also referred to as LUFTs), and 88 historical USTs as of October 2003. According to the Goleta Community Plan, 18 of these historical UST sites have had releases. The locations of these sites are generally shown in Figure 3.7-2 and are discussed in further detail in the EDR report. Additional information on the LUST sites may be obtained from the lead agency (i.e., CCRWQCB or SBCFPD) for the respective sites.

## **Closed and Inactive Landfills**

Closed or inactive landfills have not been identified in the City of Goleta. Santa Barbara County currently has one active solid waste landfill at Tajiguas, which is approximately 15 miles west of Goleta. This Class III landfill accepts municipal solid waste, clean construction and demolition debris loads, hard to handle waste, and dirt loads.

City residents and businesses that qualify can dispose of hazardous waste items at the Community Hazardous Waste Collection Center, located at UCSB.

## 3.7.1.7 Airport-Related Hazards

Though the Santa Barbara Municipal Airport is part of the City of Santa Barbara, it is located near the geographical center of the City of Goleta. For Goleta, the hazards associated with airport operations consist primarily of the risk of aircraft accidents in areas outside of the immediate airport. The risk of accidents is highest during takeoffs and landings. The Airport Land Use Commission (ALUC), a body within the Santa Barbara County Association of

Governments (SBCAG), participates in the regulation of land use within its sphere of influence. The City of Goleta is a member of SBCAG. The ALUC's policies and standards for development are contained in the Airport Land Use Plan (ALUP 1993). The ALUC classifies Zone II Safety Areas that are based on degree of hazard. These areas are:

- Safety Area 1 (Clear Zone): This is the most restrictive area as it is subject to greatest danger. It must contain no obstructions which extend into airspace requirements of landing aircraft as defined in FAA FAR Part 77. The clear zone is defined as land under the approach slope from the primary surface end out to the point where the approach slope is 50 feet above ground level. The length of the clear zone varies with runway class; for Santa Barbara Airport's its extension from the runway's end is: Runway 7 2,700 feet; Runway 25 1,900 feet; Runway 15-33, E, W 1,200 feet (SBCAG ALUP 1993).
- Safety Area 2 (Approach Zone): This zone is an extension of the clear zone in which uses which do not result in a concentration of people or particular fire hazard are generally allowed. Height restrictions in the approach zone are more severe than in other zones except the clear zone and must be absolutely enforced (SBCAG ALUP 1993).
- Safety Area 3 (General): This area encompasses the remainder of Zone II and is least restrictive. This is the area in which airport traffic patterns occur.

In addition, the Federal Aviation Administration (FAA) has requirements for airports including a safety area 1,000 feet long and 500 feet wide extending from the end of all runways. Although the current runway does not meet these requirements, Runway 7-25 will be "shifted" 800 feet to the west in order to comply with FAA standards. Construction for this improvement will be completed in 2007. Noise issues associated with the airport are addressed in Section 3.11, "Noise."

# 3.7.1.8 Electromagnetic Fields

Electromagnetic fields (EMFs) are composed of both electric fields and magnetic fields. Electric and magnetic fields are invisible lines of force that surround any electrical device. Both types of fields occur in nature and in all living things. Electric fields are produced by voltage and increase in strength as the voltage increases. The electric field strength is measured in units of volts per meter (V/m). Magnetic fields result from the flow of current through wires or electrical devices and increase in strength as the current increases. Magnetic fields are measured in units of gauss (G) or tesla (T). Most electrical equipment has to be turned on (i.e., current must be flowing) for a magnetic field to be produced. Electric fields, however, are present even when the equipment is switched off, as long as it remains connected to the source of electric power.

Electric fields are shielded or weakened by materials that do not conduct electricity (including trees, buildings, and human skin). Magnetic fields pass through most materials and are therefore more difficult to shield. Both electric and magnetic fields decrease as the distance from the source increases.

Power transmission and distribution lines are commonly associated with EMF, but household wiring, lighting, and appliances also produce EMF. Frequencies generated by human-made mechanisms, measured in hertz (Hz), range from extremely low frequency (ELF; 60 Hz),

associated with power transmission and electrical appliances, to 3 x 10<sup>10</sup> Hz, associated with microwaves. Considerable controversy remains over the health effects of EMF, particularly ELF. Many studies show that no link exists between electromagnetic fields and adverse health effects. However, bioeffects have been observed in isolated cells, animals, and humans at electromagnetic fields at the 1.0 milligauss level. Epidemiological evidence points to human health hazards resulting from exposures to ambient power frequency magnetic field environments exceeding 2.0 milligauss. Although it is not known where electromagnetic field levels of greater than 1.0 milligauss are present, it is anticipated that such levels would more likely be present in areas of power generation and transmission, such as at power generation facilities and substations.

Located between Hollister Avenue and the Union Pacific Railroad, west of Ellwood School, the Reliant Peaking Facility is not a regular electrical substation, but generates electrical power for the Goleta Valley during emergencies and peak electrical use periods. Reliant Energy reserves the right to use the substation on a more continuous basis. Under normal energy demand conditions, it is not in use. The facility consists of two natural gas turbines capable of supplying 54 megawatts of electrical energy. When operating, the facility emits combustion products (nitrogen oxides, sulfur oxides, carbon monoxide and reactive organic compounds).

Southern California Edison (SCE) provides electricity service to the City of Goleta. Three substations serve the City: Hollister Avenue (35 Megawatt capacity), Isla Vista (12 Megawatt capacity), and the Camino Contigo substation (36 Megawatt capacity).

# 3.7.1.9 <u>Emergency Preparedness</u>

Effective emergency preparedness and response is necessary to avoid or minimize the loss of life and property as a result of natural and industrial disasters; to reduce the social, cultural, environmental and economic costs of disasters; and to assist the rapid recovery from disasters. The effectiveness of a community's emergency preparedness and response can affect the severity of the consequences of any given disaster event. Goleta is a participant in the Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan, which was submitted to and accepted by the FEMA in January 2005. The City, in cooperation with FEMA, the County, and the State Offices of Emergency Preparedness and response include identifying evacuation routes and secondary emergency accesses and providing information to the community regarding appropriate individual actions in the event of various types of emergencies.

# 3.7.2 Regulatory Framework

# 3.7.2.1 Federal and State

# Clean Water Act Section 402 (National Pollutant Discharge Elimination System Program)

The Clean Water Act (CWA) provides for the restoration and maintenance of the physical, chemical, and biological integrity of the Nation's waters. Discharges of pollutants must be authorized through National Pollution Discharge Elimination System (NPDES) permits. These permits can include Waste Discharge Requirements (WDRs) and Stormwater Pollution Prevention Plans (SWPPPs). The CWA (33 United States Code [U.S.C.] Section 1344) seeks to restore and maintain the chemical, physical, and biological integrity of the waterways of the

nation. The act sets up a system of water quality standards, discharge limitations, and permit requirements.

The California Porter-Cologne Act (State Water Code Sections 13000 et seq.) is the basic water quality control law for California and works in concert with the federal CWA. The Act is implemented by the State Water Resources Control Board (SWRCB) and the nine regional boards. The boards implement the permit provisions of Section 402 of the CWA and certain planning provisions of Sections 205, 208, and 303 of the CWA. This means that the State issues one discharge permit for purposes of state and federal law.

# Resource Conservation and Recovery Act of 1976 (42 United States Code [U.S.C.] Section 6901-6987)

The goal of the Resource Conservation and Recovery Act (RCRA), a federal statute passed in 1976, is the protection of human health and the environment, the reduction of waste, the conservation of energy and natural resources, and the elimination of the generation of hazardous waste as expeditiously as possible. The Hazardous and Solid Waste Amendments (HSWA) of 1984 significantly expanded the scope of RCRA by adding new corrective action requirements, land disposal restrictions, and technical requirements. The corresponding regulations in 40 CFR 260 299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste.

# Emergency Planning and Community Right-To-Know Act (EPCRA) (42 U.S.C. 11001 et seq.)

Also known as Title III of the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning and Community Right-To-Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERCs were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. EPCRA provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals.

# FAR Part 77, Objects Affecting Navigable Airspace, (14 C.F.R. §§77.1, et seq.)

Federal Aviation administration (FAA) Federal Aviation Regulations (FAR) Part 77 "Objects Affecting Navigable Airspace" sets forth criteria for preservation of navigable airspace in the area of airport traffic patterns. Obstruction standards and procedure for notification of the FAA prior to construction or alteration of an existing or potential obstruction to navigable airspace are included within FAR Part 77. Santa Barbara County, the City of Goleta, the City of Santa Maria, and Lompoc have zoning ordinances, which include airport approach zone overlays which apply more rigorous standards than generally imposed by FAR Part 77 (ALUP 1993). Planning boundaries and airport specific recommendations for height restrictions are included in the ALUP.

## **Proposition 65**

Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. The Proposition was intended by its authors to protect California citizens and the State's drinking water sources from chemicals known to cause

cancer, birth defects, or other reproductive harm, and to inform citizens about exposures to such chemicals. Proposition 65 requires the governor to publish, at least annually, a list of chemicals known to the State to cause cancer or reproductive toxicity. Proposition 65 requires that a warning be posted in businesses with 10 or more employees except "city, county, or district or any department or agency thereof or the state or any department or agency thereof or the federal government or any department or agency thereof; or any entity in its operation of a public water system" where listed chemicals are used or present.

## Asbestos Emissions from Demolition/Renovation Activities

SBCAPCD has implemented the State Air Resources Board's *Airborne Toxic Control Measure for Emissions of Asbestos from Construction, Grading, Quarry, and Surface Mining Operations* in lieu of adopting a county-specific rule. This rule is designed to limit asbestos emissions from building demolition/renovation activities. The rule requires buildings to be surveyed for asbestos-containing material (ACM) before building demolition. It also mandates ACM removal procedures to limit emissions.

# Hazardous Material Release Response Plans and Inventory Law (California Heath and Safety Code, Chapter 6.95)

This State law requires businesses that handle more than 500 pounds (solid), 55 gallons (liquid), or 200 cubic feet (gas) of hazardous materials to develop a Release Response Plan for hazardous material emergencies. In addition, the business must prepare a Hazardous Materials Inventory of hazardous materials stored or handled at the facility above these thresholds. In addition, hazardous materials must be stored in a safe manner.

This law is designed to reduce the occurrence and severity of hazardous materials releases. An exemption exists for facilities (retail stores) handling hazardous materials contained solely in a consumer product and prepackaged for direct distribution to, and use by, the general public.

Before a new certificate of occupancy is issued to a business that must comply with this law, the local agency must find that the business is in compliance with this law or the certificate will be denied. Both the Release Response Plan and the Hazardous Materials Inventory must be supplied to the Certified Unified Program Agency (CUPA) for the program. In Goleta, the CUPA is the SBCFPD.

# Hazardous Waste Control Law (California Health and Safety Code, Chapter 6.5)

The Hazardous Waste Control Law is the basic hazardous waste law for California. It establishes criteria for defining hazardous waste and its safe handling, storage, treatment, and disposal. The law is designed to provide cradle-to-grave management of hazardous wastes, as well as to reduce the occurrence and severity of hazardous material releases. The SBCFPD administers the program.

# Aboveground Storage of Petroleum (California Health and Safety Code, Chapter 6.67 and Code of Federal Regulations, Title 40, Part 112))

Under Chapter 6.67 of the California Health and Safety Code, state law regulates construction, installation, operation, and monitoring of aboveground petroleum storage tanks. This law is designed to prevent release of hazardous materials into the environment by either leakage from tanks and associated pipelines or from overfilling and spillage. As such, the program works to reduce the occurrence of hazardous material releases.

Pursuant to the 40 CFR Part 112 (federal law), secondary containment is required for ASTs that are greater than 1,320 gallons, and for ASTs and/or vessels greater than 55 gallons for facilities that store 1,320 gallons or more of petroleum. Spill prevention, control, and countermeasures are to be documented in SPCC Plans. Compliance with 40 CFR Part 112 is administered by the EPA, which typically delegates oversight to the CUPA. For applicable businesses in the City of Goleta, oversight of SPCC Plans is administered by SBCFPD.

## Department of Toxic Substances Control

The DTSC mission is to restore, protect, and enhance the environment and to ensure public health, environmental quality, and economic vitality by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA of 1976, the California Health and Safety Code, and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

# Central Coast Regional Water Quality Control Board

The CCRWQCB, working on behalf of the SWRCB, is given the task of implementing the CWA. In particular, the CCRWQCB regulates NPDES discharges and associated reporting requirements, and requires investigations from responsible parities where groundwater has been or may have been impacted by hazardous materials and/or waste releases to soil and groundwater.

The CCRWQCB requires SWPPPs from industrial facilities, as defined by their respective State Industrial Codes, that use and/or store hazardous materials and wastes. The intent of SWPPPs is to ensure that non-point source discharges from respective industrial facilities to surface waters of the State are eliminated. Monitoring of stormwater discharge and reporting of stormwater analyses are required by the CCRWQCB to verify compliance. Secondary containment around hazardous material and waste storage and facility process areas are required to ensure containment of material releases and stormwater that may otherwise come in contact with industrial areas of the facility. Often such facilities will have a HMBP and a SPCC Plan.

# 3.7.2.2 <u>Local</u>

# City of Goleta Ordinances

Development in the City is subject to the City's Inland Zoning Ordinance for those portions of the City outside of the Coastal Zone and the Coastal Zoning Ordinance for those portions of the City within the Coastal Zone. Following the adoption of the GP/CLUP, the existing Inland and Coastal Zoning Ordinances will be replaced by a single, unified zoning code that includes zoning regulations applicable to inland areas and the coastal zone. Existing City ordinances are not applicable in the context of this EIR because state law requires the zoning code to be amended to be consistent with the GP/CLUP within a reasonable period of time following its adoption.

## Santa Barbara County Fire Prevention Division

The SBCFPD regulates and enforces State UST installation and monitoring requirements, including permitting and inspecting, for businesses within the County including those in Goleta. The SBCFPD is also responsible for administering the State's LUFT program. The purpose of

the LUFT program is to oversee the proper assessment and remediation of contaminants released from USTs.

The SBCFPD administers HMBPs for businesses within the County, including those in Goleta, that use, store, or handle 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure that require HMBPs. HMBPs must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a material change).

## Santa Barbara County Air Pollution Control District

The SBCAPCD is a local government agency that works to protect the people and the environment of Santa Barbara County from the harmful effects of air pollution, including asbestos. SBCAPCD's jurisdiction covers the entire County, including the City of Goleta.

# 3.7.3 **Project Impacts and Mitigation**

The Goleta General Plan/Coastal Land Use Plan (GP/CLUP) was analyzed with respect to potential buildout that would result in potential public safety hazards caused by the presence, use, manufacture, or transport of hazardous materials within the City. Available site investigation reports were reviewed to assess whether potential hazardous materials release sites exist within the City and, if so, to assess the status of those sites. A qualitative assessment of potential impacts on the community was then made based on the location and condition of the sites and on the current and planned uses of the location. To evaluate impacts on the environment, the risk of upset impact analysis (focused on impacts to humans) assessed potential impacts from accidents, explosions, and other releases.

Impacts to public safety from hazards and hazardous materials and wastes due to upset conditions, accidental releases, or natural phenomena have been evaluated in relation to the GP/CLUP. Corresponding policies and elements assess the adequacy to which the GP/CLUP and the corresponding policies and elements address hazards and hazardous materials related impacts.

No quantitative analysis of the risk potential was performed for this report. QRAs had been conducted by Venoco for the EOF and Platform Holly in 2000 as discussed above in Section 3.7.1.2. RMPPs would be required by the Santa Barbara County Fire Department HMU if future industrial facilities with acutely hazardous materials are introduced during planned future development. QRAs may be conducted to quantify associated risks to existing and buildout populations due to releases of acutely hazardous materials.

# 3.7.3.1 Thresholds of Significance

## City of Goleta Environmental Thresholds and Guidelines Manual

The City's adopted Environmental Thresholds and Guidelines Manual (Thresholds Manual) (City of Goleta 2003) provides specific thresholds for conducting CEQA analysis. Section 14, "Public Safety Thresholds" and Section 9 "Electromagnetic Fields Thresholds," provides guidance for assessing the significance of hazards impacts associated with a proposed project.

The City's adopted thresholds address public safety impacts resulting from involuntary exposure to hazardous materials. These thresholds focus on the activities that include the installation or

modification to facilities that handle hazardous materials, transportation of hazardous materials, or nonhazardous land uses in proximity to hazardous facilities. A significant impact with regard to hazards and hazardous materials would be expected to occur if the proposed project (i.e., the GP/CLUP) resulted in an increase of public safety risks that exceed risk-based thresholds contained in the City's Thresholds Manual. For the purposes of this analysis, an impact would be considered significant if it results in an unsafe exposure of people to a variety of hazards or hazardous materials as listed in Section 3.7.1 above. For hazardous materials releases, determination of whether unsafe exposure levels exist is dependent upon the following: type of hazardous material released, media to which the hazardous material was released (e.g., to air, soil, or water), concentration to which such hazardous material exists in air, soil, or water, duration of the release, and persistence of the hazardous material in the environment. Permissible exposure levels if such releases occur are estimated in the National Institute of Occupational Safety and Health (NIOSH) Handbook (NIOSH 2005).

According to the Thresholds Manual, there is potential of significant impact to public safety from a project if the following conditions within the proposed development exist:

- oil wells and gas wells and associated production;
- gas and hazardous liquid pipelines; or
- oil and/or gas processing and storage facilities.

Hazards and hazardous materials releases associated with these types of facilities, which may result in significant impacts are discussed in Section 3.7.1.2.

The Threshold Manual also includes a threshold for EMF exposure—in particular, radio frequency radiation (RFR). No specific threshold has been adopted in the City of Goleta for ELF; instead, ELF exposure should be analyzed on a case-by-case basis using the most current scientific data. For RFR, standards have been established for effects resulting from thermal heating of body tissue. The most widely used conservative standards are the IEEE-ANSI C95.1-1992, which are based on power densities (see Figures 2 and 3 of Section 9, City of Goleta 2003). A significant impact to humans would occur if:

 humans are exposed to radio frequency radiation (RFR) in excess of the IEEE-ANSI C95.1-1992 standard, through the siting of new projects next to RFR sources or through the siting of new RFR sources adjacent to sensitive receptors (If the FCC rulemaking committee adopts a revised standard, said standard shall apply).

## **CEQA** Thresholds

The following thresholds of significance are based on Appendix G of the CEQA Guidelines. For the purposes of this document, implementation of the GP/CLUP may have a significant adverse impact related to hazards and hazardous materials if it would result in any of the following:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- include a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, creates a significant hazard to the public or the environment;
- create a safety hazard for people residing or working in an area within two miles of a public or public use airport;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

## 3.7.3.2 Discussion of Relevant GP/CLUP Policies

The Safety and Land Use Elements of the City's GP/CLUP contain policies that minimize the risk to humans and structures from hazards associated with production, use, and transport of hazardous materials, natural hazards, and hazards related to other City operations. These policies are discussed below.

#### Safety Element

Policies in the Safety Element focus on protecting humans and structures from potential hazards. The policies aim to avoid siting of development or land use activities in hazardous areas, and where this is infeasible, require appropriate mitigation to lessen (minimize) exposure to hazards. Policies addressing these hazards are listed below:

- Policy SE 1: Safety in General
- Policy SE 7: Urban and Wildland Fire Hazards
- Policy SE 8: Oil and Gas Industry Hazards
- Policy SE 9: Airport-Related Hazards
- Policy SE 10: Hazardous Materials and Facilities

## Land Use Element

Land use plans are the major means to control development within the City. Hazards are not uniformly distributed within the City. Therefore, land use decisions have a direct effect on public safety. Restrictions concerning types of industry, location of permissible industrial activity, where residential areas can be developed, and the density of those developments are controlled by the GP/CLUP policies under the Land Use Element. Policies addressing these hazards are listed below:

- Policy LU 1: Land Use Plan Map and General Policies
- Policy LU 10 Energy-Related On- and Off-Shore Uses

## 3.7.3.3 Project Impacts

#### Methodology

As discussed above, impacts related to hazards and hazardous materials resulting from implementation of the GP/CLUP involve the potential effects associated with:

- A change in land use designation of existing developed parcels;
- The future development (buildout) of currently vacant parcels;
- Increased quantity of hazardous materials associated with the use of land;
- Increased exposure of population (residents, employees, others) to hazards; or
- The adoption of policies that guide development in areas subject to potential impacts to public safety from hazards and hazardous materials/wastes.

The GP/CLUP was analyzed with respect to potential buildout that would result in potential public safety hazards caused by the presence, use, manufacture, or transport of hazardous materials within the City. Available site investigation reports were reviewed to assess whether potential hazardous materials release sites exist within the City and, if so, to assess the status of those sites. A qualitative assessment of potential impacts on the community was then made based on the location and condition of the sites and on the current and planned uses of the location. To evaluate impacts on the environment, the risk of upset impact analysis (focused on impacts to humans) assessed potential impacts from accidents, explosions, and other releases.

Potential impacts were described in terms of relative significance as Class I, Class II, Class III, or Class IV Impacts as described in Section 1.3.1 - Scope of the EIR. Corresponding policies assess the adequacy to which the GP/CLUP and the corresponding policies address hazards and hazardous materials related impacts.

GP/CLUP policies used in the analysis are listed below. Federal, state, and local regulations referenced in the impact methodology are described in Section 3.7.2 – Regulatory Framework

#### **Applicable Policies**

The GP/CLUP contains numerous policies that would address the potential for hazards and hazardous materials/waste to affect existing as well as GP/CLUP-related buildout. These policies include:

- Policy SE 1: Safety in General
- Policy SE-7: Urban and Wildland Fire Hazards
- Policy SE 8: Petroleum Extraction, Processing, and Transport Hazards
- Policy SE 10: Handling, and Transportation of Hazardous Materials and Siting of Hazardous Facilities
- Policy LU 2: Residential Land Uses
- Policy LU 10: Energy-Related On- and Off-Shore Uses

#### Class I Impacts

#### Short-Term Impacts

Plan implementation would not result in any short-term significant and unavoidable (Class I) impacts involving the creation of a public safety hazard, exposure of people to hazardous materials, or conflicts with any emergency response or evacuation plan.

## Long-Term Impacts

# Impact 3.7-1. Risk of Upset at Venoco Facilities

The main risk to the existing and GP/CLUP buildout population from the EOF is due to the separation and storage of LPG and NGL. These gas liquids produce large flame jets or BLEVEs if released can affect a large area. Potential new populations closest to the EOF would be expected to be at greater risk to released BLEVEs than those populations further away, and the overall risk would be expected to increase following buildout as more population in closer proximity to the EOF is introduced.

A QRA was required by the Santa Barbara County Fire Department in compliance with Cal ARP for the EOF and Platform Holly; Venoco conducted the QRA for these facilities in 2000. As a result of the QRA, a number of risk-reducing measures were developed to reduce the overall risk from the EOF. The measures included items such as fireproofing the LPG and NGL tanks to reduce the rate of vessel failures due to fire impingement and the installation of remotely operated flow valves and flow orifices to reduce flows in the event of an equipment leak or rupture. The risk-reducing measures identified in the QRA and implemented between 2000 and 2003 have substantially reduced the level of risk associated with the EOF; however, the hazards resulting from an upset condition at the EOF would remain significant.

Platform Holly does not store large quantities of flammable gas liquids and therefore has smaller hazard zones than the EOF. This, combined with the low populations around Platform Holly (boats only), produces an acceptable level of risk. None of the serious injury or fatality hazard zones associated with Platform Holly extends onshore.

Two idle wells, one for oil production and one for wastewater injection, and related piers exist in State tidelands at the Pacific shoreline below the Sandpiper Golf Course property. S.L. 421 is served by several onshore facilities, including pipelines and an access road protected by a riprap seawall at the base of the bluff. Venoco has an interest in recommissioning production at the idled oil well, and if permitted, is contemplating oil separation processes at the pier prior to the EOF. Production has been idled since 1994 when the former owner/operator stopped operations following a pipeline rupture and oil spill. It is the City's intent that oil production not be recommenced at S.L. 421 because of the potential environmental hazards and the impacts to visual resources and recreation at the beach, and possibly to the future proposed development planned located near S.L. 421. If resumption of production is considered for approval, the City contends in Part b. of Policy LU 10.4 that on-pier processing of the oil at the site within the tidal zone should not be approved unless it is demonstrated that there is no feasible and less environmentally damaging alternative to processing on the pier. The development of new processing facilities over the sea would result in an increased and unacceptable level of risk of environmental damage.

The recommissioning of the oil production well would create risks to marine and land resources, and neighboring populations associated with spills, leaks, or pipeline ruptures. Impacts would be significant and unavoidable if releases occurred during oil separation processes at the pier; such risks are discussed above. Pursuant to Policy SE 8.6, a QRA would be required by the City to evaluate the risks associated with oil processing at the pier and the transfer of separated oil and water by pipeline to the EOF. Due to its proximity to marine habitat, residential, and recreational areas, hazards associated with recommencing oil production at S.L. 421 are considered significant. The hazards would be somewhat reduced by Policy LU 10.4b, although they would remain significant.

Hazards associated with the risk of upset at the Venoco Facilities represent a significant impact. GP/CLUP policies and subpolicies listed below would help reduce the impacts by reducing the likelihood of an upset and/or the impacts resulting from upset. Impacts, however, would remain significant.

- Policy LU 10: Energy-Related On- and Off-Shore Uses
  - LU 10-4b: State Lands Commission Lease 421
- Policy SE 1: Safety in General
  - SE 1.2: Guidelines for Siting Highly Sensitive Uses and Critical Facilities
- Policy SE 8: Oil and Gas Industry Hazards
  - SE 8.1: Nonconforming Status of EOF
  - SE 8.2: Consideration of Offshore Gas Processing
  - SE 8.3: Annual Safety Audits Required
  - SE 8.4: Enhanced Preparedness for Hydrogen Sulfide Release
  - SE 8.6: Quantitative Risk Assessment
  - SE 8.7: Routing of Gas Pipelines
  - SE 8.8: Development near Gas Pipelines
  - SE 8.9: Safety Requirements for New Petroleum Pipelines
  - SE 8.10: Safety, Inspection, and Maintenance of Oil and Gas Pipelines
  - SE 8.11: Safety Measures for Pipelines Transporting Produced Gas
  - SE 8.12: Consultation with Pipeline Operators
  - SE 8.13: Setbacks from Gas Pipelines
  - SE 8.14: Pipeline Burial Depths
  - SE 8.15: Pipeline Marking and Warning
- Policy SE 11: Emergency Preparedness
  - SE 11.1: Education and Awareness Programs
  - SE 11.2: Improved Information Transfer during Emergencies
  - SE 11.4: Incorporation of Emergency Response Plans into GIS
  - SE 11.5: Monitoring of Trends and Improvements in Emergency Preparedness

# Impact 3.7-2. Transport

US-101, SR-217, Hollister Avenue, and the Union Pacific Railroad tracks all pass near highdensity residential and commercial areas. These transport lanes can be used to transport hazardous materials to and through the City. Although there are no specific factors to provoke a release of these materials, there is inherent risk associated with the transport of hazardous materials that is enhanced by the close proximity to the community. Hazards include the risk of a trucking or rail accident and subsequent release of hazardous materials. The severity of an accidental release would depend greatly on the amount and characteristics of the hazardous material released. These hazards are considered significant. The overall risk associated with transport of hazardous materials would be expected to increase following buildout as more population in closer proximity to the transportation routes is introduced. Conformance with DOT and Caltrans regulations pertaining to the transport of hazardous materials along with the County's Multi-Jurisdictional Hazard Mitigation Plan would be expected to reduce but not fully mitigate such impacts. Additionally, the CP/CLUP policies below would help reduce hazards associated with transportation of hazardous materials. These policies would help reduce these impacts by reducing the likelihood of an upset and/or the impacts resulting from upset. Impacts would, however, remain significant.

- Policy SE 8: Oil and Gas Industry Hazards
  - SE 8.2: Consideration of Offshore Gas Processing
  - SE 8.3: Annual Safety Audits Required
  - SE 8.4: Enhanced Preparedness for Hydrogen Sulfide Release
  - SE 8.6: Quantitative Risk Assessment
  - SE 8.10: Safety, Inspection, and Maintenance of Oil and Gas Pipelines
- Policy SE 10: Hazardous Materials and Facilities
  - SE 10.1: Identification of Hazardous Materials Facilities
  - SE 10.2: Compliance with Law
  - SE 10.4: Prohibition on New Facilities Posing Unacceptable Risks
- Policy SE 11: Emergency Preparedness
  - SE 11.1: Education and Awareness Programs
  - SE 11.2: Improved Information Transfer during Emergencies
  - SE 11.4: Incorporation of Emergency Response Plans into GIS
  - SE 11.5: Monitoring of Trends and Improvements in Emergency Preparedness

# Class II Impacts

# Short-Term Impacts

Plan implementation would not result in any short-term, potentially significant but mitigable (Class II) impacts involving the creation of a public safety hazard, exposure of people to hazardous materials, or conflicts with any emergency response or evacuation plan.

# Long-Term Impacts

# Impact 3.7-3. Risk of Upset at S.L. 421 Wells

The recommissioning of oil production at the idled oil well would create risks to marine and land resources and neighboring populations associated with spills, leaks, or pipeline ruptures. Impacts due to releases oil emulsion during pumping from the S.L. 421 production well to the EOF would be significant but mitigable. Processing at the EOF rather than at the pier well would reduce the risk of oil processing related spills at the pier and potential releases of BLEVEs, both of which would impact marine and nearshore environments and potential new populations in the surrounding area. The volume of such an oil emulsion spill may also be reduced if oil processing is limited to the EOF since a produced water separation tank at the pier would not be necessary. The resulting risk associated with pumping oil emulsion to the EOF could be reduced by the implementation of a pipeline safety, maintenance, operation, and inspection program. A QRA will be required by the City as stated in SE 8.6 to assess potential releases from pumping oil emulsion to the EOF, if recommissioning of oil production at S.L. 421 is permitted.

Policy That Would Reduce Impact 3.7-3. The following policy should ensure that impacts associated with oil production at the idled S.L. 421 production well are identified and reduced to the extent feasible:

- Policy LU 10: Energy-Related On- and Off-Shore Uses
  - LU 10-3a: Oil and Gas Transport and Storage Facilities
  - LU 10-4a and b: State Lands Commission Lease 421

If resumption of production is considered for approval, the City contends in Part b. of Policy LU 10 that on-pier processing of the oil at the site within the tidal zone should not be approved unless it is demonstrated that there is no feasible and less environmentally damaging alternative to processing on the pier. The development of new processing facilities over the sea would result in an increased and unacceptable level of risk of environmental damage. Implementation of Policy LU 10 ensures that alternatives to on-pier processing of the oil would be evaluated.

- Policy SE 8: Oil and Gas Industry Hazards
  - SE 8.3: Annual Safety Audits Required
  - SE 8.6: Quantitative Risk Assessment
  - SE 8.9: Safety Requirements for New Petroleum Pipelines
  - SE 8.10: Safety, Inspection, and Maintenance of Oil and Gas Pipelines
  - SE 8.14: Pipeline Burial Depths
  - SE 8.15: Pipeline Marking and Warning

Implementation of elements of Policy SE 8, including the subpolicies above, would minimize the risk of hazards associated with the operation of S.L. 421 oil production well and associated oil emulsion transportation equipment and facilities. Proper implementation of these policies would ensure that any new onshore oil pipelines associated with S.L. 421 would be adequately designed, installed, marked, operated, and inspected so as to reduce the risk of hazards associated with the operation and transfer of oil to a less-than-significant level.

## Impact 3.7-4. Risk of Upset at Ellwood Marine Terminal

The EMT is located on 17 acres of property immediately east of the City-owned Sperling Preserve/Santa Barbara Shores. Located outside but adjacent to the City limits, the EMT is located on UCSB-leased land. The onshore storage facilities are located south of the planned Ocean Meadows residential project and about 0.5 mile from UCSB residential development at its North and West Campus areas. A 10-inch diameter, then 6-inch, diameter oil pipeline connects the EMT to the EOF; this pipeline is 3.7 miles, nearly all of which is within the City's jurisdiction. A second oil pipeline consists of a 12-inch, then 10-inch, diameter pipeline from the onshore transfer pumps at the EMT to the offshore loading connection. Oil storage and transfer operations at EMT create risks to marine and land resources and planned neighboring populations associated with spills, leaks, or pipeline ruptures. Impacts due to oil releases would be significant but mitigable through implementation of SPCC Plans, pursuant to 40 CFR Part 112, that are currently required of the EMT and implementation of a pipeline safety, maintenance, operation and inspection program. A QRA will be required by the City as stated in SE 8.6 to assess potential releases from the EMT and the associated risks to neighboring populations. <u>Policy That Would Reduce Impact 3.7-4.</u> The Safety Element includes policies that would ensure that impacts associated with oil storage and transfer operations are identified and mitigated to the extent feasible.

- Policy SE 8: Oil and Gas Industry Hazards
  - SE 8.3: Annual Safety Audits Required
  - SE 8.5: Inventory of Oil and Gas Pipelines
  - SE 8.9: Safety Requirements for New Petroleum Pipelines
  - SE 8.10: Safety, Inspection, and Maintenance of Oil and Gas Pipelines
  - SE 8.14: Pipeline Burial Depths

Implementation of Policy SE 8 would minimize the risk of hazards related to risk of upset at the Ellwood Marine Terminal by reducing the probability of an oil leak and ensuring that a leak if one were to occur would be promptly identified and effectively addressed. In particular, Annual Safety Audits would examine the integrity of storage tanks, secondary containment, pipelines, and related equipment, as well as insure safety and emergency response procedures are up-to-date and effective. Aspects related to ample pipeline inventories, marking/warning, and burial depths would help avoid pipeline exposure and third party damage to oil pipelines.

In addition, a detailed characterization of the hazards associated with an oil release will be developed as part of the QRA for the facility as required by SE 8.6 in the event of any alternations to the EMT. Proper implementation of these policies would ensure that any risk of upset associated with the operation of the EMT is reduced to a less than significant level.

## Impact 3.7-5. Airport

Nearly the entire City of Goleta is contained within the influence area of the Santa Barbara Municipal Airport. A significant exception is the Venoco's EOF, located at the west end of the City and outside of the influence area. Within the influence area, the areas underneath the takeoff and landing paths are subject to the greatest risk from accidents involving flight operations. Based on raw accident reports obtained from the National Transportation Safety Board, from 1975 through 1999, for a total of approximately 3.9 million aircraft flights into and out of Santa Barbara Airport, 21 accidents occurred (Cabrillo Business Park DEIR, 37-SB-EIR, June, 2002). All of the reported accidents were in the general aviation category; no commuter air carrier or air taxi accidents occurred during this time. Although the report does not distinguish between takeoff and landing accidents, the historical accident data similarly indicated that the majority of general aviation aircraft accidents (about 80 percent) occurred at locations near the end of the runway (within ¼ mile of the runway centerline) (37-SB-EIR, June, 2002). The Runway Safety Areas (RSAs) at each end of Runway 7-25 (east-west) do not meet the current FAA design standard of 1000 feet long. Currently, the safety areas are 215 feet long on the east end terminating at San Pedro Creek and Fairview Avenue, and 320 feet long on the west end terminating at Tecolotito Creek (SBA website 2006). This adds to the inherent risk associated with takeoff and landing routes. To alleviate such hazards, the City of Santa Barbara is currently in the process of shifting Runway 7-25 800 feet to the west. Construction will be completed in 2007. When complete, the new RSAs will meet the FAA design standards of 500 feet wide and 1000 feet long at both ends of this runway.

In the City, existing land uses within any of the Airport's Clear Zones are limited to the business park at 6300 Hollister and portions of the existing Cabrillo Business Park, and a mix of industrial development along Kellogg west of SR-217. There are two existing residential areas within the

One-Mile Zone. A portion of an existing residential area zoned for single-family use north of US-101 and east of La Patera Lane falls within the northern one-mile marker of the Approach Zone for Runway 15-33. The area inside of the one-mile marker of the Approach Zone off the east end of Runway 7-25 includes a portion of the existing Rancho Goleta mobile home park. Other existing land uses within the one-mile markers of the Approach Zones of Runways 7-25 and 15-33 include general industrial, office and institutional, and business park developments.

Under the GP/CLUP, approximately 20 acres of currently undeveloped land within the airport's Clear Zone off the east end of Runway 7-25 would be designated for future Service Industrial development with approximately 26 acres of undeveloped land within the Clear Zone off the west end of Runway 7-25 proposed for Service Industrial. Within the one-mile marker inside of the Approach Zone off the west end of Runway 7-25, the GP/CLUP proposes a mix of future office/institutional (3.09 acres), community commercial (3.82 acres), and business park (16.82 acres) development. In addition, a two-acre portion of the business park at 6300 Hollister that lies within the one-mile marker of the northerly Approach Zone of Runway 15-33 is designated as a future hotel site with a Hotel Overlay on the property. Assuming no other development constraints exist on these properties, buildout under the Plan based on the maximum allowable floor area ratios (FARs) for various land use classifications noted in the Land Use Element could result in the following:

- approximately 28 acres of service industrial development within Airport Clear Zones;
- approximately 12 acres of office/institutional development within Airport one-mile markers;
- approximately 7 acres of business park development within Airport one-mile markers;
- approximately 1.5 acres of community commercial development within Airport one-mile markers; and
- a possible hotel at 6300 Hollister.

Under the ALUP, only storage type land uses generating a population of less than 25 people/acre are considered compatible uses if approved by the ALUC. Within the one-mile marker, commercial and business park land uses may be acceptable if population densities are below 25 people/acre and such projects are approved by the ALUC. Given the amount of potential office/institutional, commercial, business park, and hotel development that could occur within the one-mile markers of the airport, under the GP/CLUP with buildout of these properties would be considered potentially significant.

<u>Policy That Would Reduce Impact 3.7-5.</u> Land use and building restrictions contained within the following policy would be imposed on all future development within the various Airport safety zones to minimize the risks to people and property in the event of an airplane crash during takeoff or landing:

- Policy SE 9: Airport-Related Hazards
  - SE 9.1: Clear Zone and Airport Approach Zone Regulations
  - SE 9.2: Height Restrictions
  - SE 9.3: Limitations on Development and Uses
  - SE 9.4: Maintenance of an Airport Safety Corridor for Runway 7
  - SE 9.5: Limitations on Density

- SE 9.6: Limitations on Residential Development
- SE 9.7: Real Estate Disclosure
- SE 9.8: Limitations on Hazardous Facilities

Implementation of this policy, along with compliance with ALUC and FAA standards and requirements, would ensure that the residual impacts associated with future buildout of the Plan within the various safety zones of the Airport would be reduced to less-than-significant levels.

### Impact 3.7-6 Wildland Fires

The City includes areas that are classified by the California Department of Forestry and Fire Protection (CDF) as wildland fire hazard areas (Figure 3.7-1). The undeveloped hills and canyons that border the City to the north can feature rough terrain, vegetation, and high velocity winds. This combination of existing natural conditions creates a challenge to firefighting crews and puts homes and property at risk. Future residential development is planned for three parcels totaling 9.06 acres within the high wildfire hazard area of the City under the GP/CLUP. Due to the proximity of these vacant properties to undeveloped wildland, the fire risk to future homes and other structures within these areas resulting from GP/CLUP implementation is considered potentially significant.

<u>Policies That Would Reduce Impact 3.7-6.</u> The following policies should ensure that fire hazards for future development as a result of Plan implementation are identified and mitigated to the extent feasible:

- Policy SE 1: Safety in General
  - SE 1.1: Maintenance of Maps and Resources on Hazards
  - SE 1.2: Guidelines for Siting Highly Sensitive Uses and Critical Facilities
  - SE 1.3: Site-Specific Hazards Studies
  - SE 1.4: Deed Restriction in Hazardous Areas
  - SE 1.5: Subdivision of New Lots in Hazard Areas
  - SE 1.6: Enforcement of Building Codes
  - SE 1.7: Abatement of Public Safety Hazards
  - SE 1.8: Reduction of Non-Conforming or Substandard Structural Conditions
- Policy SE 7: Urban and Wildland Fire Hazards
  - SE 7.1: Fire Prevention and Response Measures for New Development
  - SE 7.2: Review of New Development
  - SE 7.3: Identification of Fire Hazard Areas
  - SE 7.4: Fuel Modification Plans
  - SE 7.5: Automatic Fire Sprinkler Systems
  - SE 7.6: Standards for Rebuilding in High Fire Hazard Areas

Implementation of the policies above would expect to reduce impacts to less-than-significant levels.

## Impact 3.7-7. Surface Water

Surface water quality could be adversely affected by ordinary use or spills of hazardous materials used during site grading and construction activities. Fuels, solvents, paint, and other similar substances used during grading and construction could adversely impact local surface water quality if they were spilled directly into the runoff drainage system. Impacts to water quality associated with spills of such materials would be considered potentially significant.

<u>Policies That Would Reduce Impact 3.7-7.</u> Implementation of SWPPPs and SPCC Plans as discussed in the GP/CLUP would greatly reduce the impact to the environment of any spills. These plans would help minimize the potential for spills of hazardous materials in drainages and creeks. In addition, implementation of the following policies identified in the Conservation Element of the GP/CLUP would ensure that construction impacts on surface water quality resulting from Plan implementation would be less than significant.

- Policy CE 1: Environmentally Sensitive Habitat Area Designations and Policy
  - CE 1.1: Definition of Environmentally Sensitive Habitat Areas
  - CE 1.2: Designation of Environmentally Sensitive Habitat Areas
  - CE 1.3: Site-Specific Studies and Unmapped ESHAs
  - CE 1.4: Illegal Destruction of ESHAs
  - CE 1.5: Corrections to Map of ESHAs
  - CE 1.6: Protection of ESHAs
  - CE 1.7: Mitigation of Impacts to EHSAs
  - CE 1.8: ESHA Buffers
  - CE 1.9: Standards Applicable to Development Projects
  - CE 1.10: Management of ESHAs
- Policy CE 2: Protection of Creeks and Riparian Areas
  - CE 2.1: Designation of Protected Creeks
  - CE 2.2: Streamside Protection Areas
  - CE 2.3: Allowable Uses and Activities in Streamside Protection Areas
  - CE 2.4: Dedication of Easements or Other Property Interests
  - CE 2.5: Maintenance of Creeks as Natural Drainage Systems
  - CE 2.6: Restoration of Degraded Creeks
- Policy CE 3: Protection of Wetlands
  - CE 3.1: Definition of Wetlands
  - CE 3.2: Designation of Wetland ESHAs
  - CE 3.3: Site-Specific Wetland Delineations
  - CE 3.4: Protection of Wetlands
  - CE 3.5: Wetland Buffer Areas
  - CE 3.6: Mitigation of Wetland Fill

- CE 3.7: Lagoon Protection
- CE 3.8: Vernal Pool Protection
- Policy CE 10: Watershed Management and Water Quality
  - CE 10.1: New Development and Water Quality
  - CE 10.2: Siting and Design of New Development
  - CE 10.3: Incorporation of Best Management Practices for Stormwater Management
  - CE 10.4: New Facilities
  - CE 10.5: Beachfront and Blufftop Development
  - CE 10.6: Stormwater Management Requirements
  - CE 10.7: Drainage and Stormwater Management Plans
  - CE 10.8: Maintenance of Stormwater Management Facilities
  - CE 10.9: Landscaping to Control Erosion

## Impact 3.7-8. Exposure of Population to Listed/Contaminated Sites

The City of Goleta contains numerous locations that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could present significant hazards to the public or the environment. None of the sites identified by EDR within the City are currently listed on the NPL, although a single site (Gibralter Mining, 6144 Calle Real) is currently being reviewed/assessed for possible inclusion on the NPL.

The significance of NPL sites is that the level of contamination and the toxicity of the chemicals of concern found in soil and groundwater at such sites may pose a risk to human health and the environment within one mile or more from the NPL site. Impacts to human health and the environment from exposure routes, such as vapor migration from contaminated soil and/or groundwater to the surface or into overlying buildings, and ingestion of contaminated groundwater if used without well head treatment or municipal treatment, may occur. Short-and long-term mitigations (e.g., remediation and engineered controls) would be or have been developed under the direction of EPA, DTSC, and local oversight agencies (i.e., SBCFPD) to reduce public safety hazards. Exposure to contaminated soil or groundwater associated with a NPL or listed hazardous waste site could present long-term health hazards to residents directly exposed on a daily basis, and to the public from recreational activities, if assessment and remediation activities were not conducted in the area to be used for development.

Impacts due to releases of hazardous materials from LUSTs sites (approximately 100 sites were identified in the EDR report) are usually limited to the specific site with the LUSTs, or in some cases, to the adjoining properties within 0.5 mile of the documented release. Exposure to impacted soil or groundwater associated with a LUST site could present long-term health hazards to residents directly exposed on a daily basis, and to the public from recreational activities, if assessment and remediation activities were not conducted in the area to be used for development.

<u>Policy That Would Reduce Impact 3.7-8.</u> The following policy would help ensure that the community is protected from exposure to residual contamination:

• Policy SE 10: Hazardous Materials and Facilities

- SE 10.1: Identification of Hazardous Materials Facilities
- SE 10.3: Hazard Assessment Required for Hazardous Materials Facilities
- SE 10.4: Prohibition on New Facilities Posing Unacceptable Risks
- SE 10.5: Restriction on Residential Development near Hazardous Facilities
- SE 10.6: Responsibility for Cleanup by Responsible Party
- SE 10.7: Identification, Transport, and Disposition of Potentially Contaminated Soil

Cleanup of contaminated sites prior to proposed future development (recreational, residential, commercial or industrial) pursuant to Policy SE 10 would reduce potentially significant exposure of the public to hazardous waste associated with listed/contaminated sites to less-than-significant levels.

# Impact 3.7-9. Contaminated Soil

Areas within the City affected by hazardous materials associated with past oil development activities may include contaminated soils. Contaminants of concern include petroleum hydrocarbons (benzene, crude oil, waste oil, and light petroleum distillates), metals, volatile organic compounds, semi-volatile organic compounds, and polynuclear aromatic hydrocarbons (PAHs). Although some sites impacted from past oil development have been assessed and remediated, there are additional areas that have not been assessed or, in some potential cases, even identified. As such, construction activities associated with future residential or other development could potentially uncover contaminated soils and expose construction workers and the public to potential health hazards. Exposure to contaminated soil left in place could present long-term health hazards to residents directly exposed on a daily basis, and to the public from recreational activities, if assessment and remediation activities were not conducted in the area to be used for development. Left unmitigated, contaminated soils present a significant hazard to the public. Implementation of the policies discussed below would reduce hazards associated with contaminated soils to a less-than-significant level.

<u>Policy That Would Reduce Impact 3.7-9.</u> The following policy would help ensure that the community is protected from exposure to contaminated soils:

- Policy SE 10: Hazardous Materials and Facilities
  - SE 10.1: Identification of Hazardous Materials Facilities
  - SE 10.2 Compliance with Law
  - SE 10.5: Restriction on Residential Development near Hazardous Facilities
  - SE 10.6 Responsibility for Cleanup by Responsible Party
  - SE 10.7 Identification, Transport, and Disposition of Potentially Contaminated Soil (formerly MM 3.7-1)

Furthermore, these policy subsections would ensure that uses and development incompatible with exposure to hazardous materials are not allowed on a given site unless and until any required remediation has been completed.

#### Class III Impacts

#### Short-Term Impacts

No short-term, adverse but less-than-significant (Class III) impacts involving the exposure of people or the environment to hazards and hazardous materials would occur as a result of Plan implementation.

### Long-Term Impacts

Impact 3.7-10. Exposure of Populated Areas to Oil and Gas Pipelines Oil and gas pipelines are regulated by the DOT and the California Public Utilities Commission. Third party (i.e., non owners or operators of the pipelines) damage to oil and gas pipelines typically during construction projects remains a major cause of pipeline leaks; third party-caused gas leaks can result in an explosion. Damage to below grade oil and gas pipelines may be significant if the contents of the pipeline are released to the environment resulting in impacts to soil, underlying groundwater, and air.

Several factors, practices, and policies are already in place that collectively can reduce potentially adverse public safety and environmental impacts associated with oil and gas pipelines to less-than-significant levels. These pipelines are typically constructed below ground which helps insulate the public from pipeline accidents and releases. Pipelines are typically in ROWs, including public streets, sidewalks, and electrical transmission corridors. In part because of regulatory oversight, oil and gas pipelines within the City that transport hazardous materials and gases are not subject to frequent leaks. Valves are typically installed within secondary containment structures so as to minimize the release of the hazardous materials resulting from leaks or repairs of pipeline valves. Local governments, unless preempted by State or Federal law, can establish standards and policies related to development in proximity to gas pipelines. Also, a toll free number has been established to report projects where digging is planned. The service is referred as Underground Services Alert, or "Dig Alert." Owners and operators of the pipelines are notified of the pending construction project and therefore digging pending excavation in the area of existing pipelines. Pipeline risk assessments may be conducted as part of the environmental analysis of future developments to assess risk associated with hazardous material releases from oil and gas pipelines.

#### Impact 3.7-11. Ellwood Facility

The risk of fatality due to  $H_2S$  releases from the EOF is considered acceptable based upon the City's Environmental Thresholds for Public Safety; therefore, such risks are potentially adverse but less than significant.

<u>Policy That Would Further Reduce Impact 3.7-11.</u> The following policy would ensure that any significant increase in Venoco's gas sweetening operations be performed offshore at Platform Holly, away from the community:

• Policy SE 8: Oil and Gas Industry Hazards

This would maintain the long-term hazards associated with a  $H_2S$  release as adverse but less-than-significant impacts.

## Impact 3.7-12. EMFs

Impacts from EMFs are considered potentially adverse but less than significant. Development should consider the appropriate setbacks from transmission corridors and substations to

minimize potential EMF related hazards. Such setbacks would reduce the potential impacts of EMFs. The impact would remain less than significant.

## Impact 3.7-13. Upset and Accident Conditions

Implementation of the GP/CLUP would not result in a significant hazard to the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment from residential or school properties. Operation of schools and residential areas would involve the use and storage of hazardous materials such as pesticides, herbicides, and other chemicals or solvents used in landscaping and building maintenance. Maintenance of single-family detached homes would be the responsibility of individual homeowners, such that amounts of these materials stored at any one time or one place and resulting hazards would not be substantial. Professionals with knowledge of standard hazardous materials handling requirements would be expected to manage maintenance activities for multiple-family residences, community parks, and schools. In addition, maintenance activities would similarly not require storage and/or handling of substantial quantities of hazardous materials. Therefore, impacts associated with potential release of hazardous materials would be considered adverse but less than significant. No additional mitigation measures are needed, nor have any been identified.

# Impact 3.7-14. Contaminated Groundwater

Hazards associated with contaminated groundwater are discussed in Section 3.9, "Water Resources." Exposure to contaminated groundwater associated with an NPL, listed hazardous waste site, or LUST site could present long-term health hazards to residents directly exposed to the contaminated water on a daily basis, and to the public from recreational activities, if assessment and remediation activities were not conducted in the area to be used for development.

<u>Policy That Would Further Reduce Impact 3.7-14.</u> The following policy would help ensure that the community is protected from exposure to groundwater contamination:

• Policy SE 10: Hazardous Materials and Facilities

# **Class IV Impacts**

No short- or long-term beneficial (Class IV) impacts involving exposure of people and the environment to hazards and hazardous materials would result from Plan implementation.

# 3.7.3.4 <u>Cumulative Impacts</u>

Implementation of the GP/CLUP, as well as other development outside the City, would increase the number of persons that could be potentially exposed to hazards and hazardous materials. Development of Emergency Preparedness Programs, as well as implementation of the GP/CLUP policies noted above would provide adequate safety protection for the public and the environment resulting from exposure to hazards and hazardous materials.

Furthermore, as with geologic impacts, risks resulting from exposure of people and the environment to hazards and hazardous materials are usually site-specific and generally do not combine with similar effects that could occur with other projects throughout the cumulative study area. Laws and regulations that apply to hazards and hazardous materials are extensive and quite stringent, which generally serves to mitigate any potential project-specific and/or cumulative impacts that could result.

## 3.7.3.5 Mitigation

## Modifications to GP/CLUP Policies

No modifications are required.

#### Other Mitigation

No additional mitigation is identified.

## 3.7.3.6 Residual Impacts

Significant residual impacts exist associated with accidental releases of hazardous materials during operation of Venoco EOF facility and supporting oil transportation facilities (e.g., pier well and pipelines) and routine transport of hazardous materials and wastes. These hazards are significant and can be reduced through implementation of Safety Element and Land Use Element policies, but not to a less-than-significant level.

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# Acronyms

Ellwood Oil & Gas Processing Facility (EOF	1
hydrogen sulfide (H <sub>2</sub> S	2
liquefied petroleum gas (LPG	2
natural gas liquids (NGL	2
raw sour (H <sub>2</sub> S-rich	2
sweet (H <sub>2</sub> S-low	2
boiling liquid expanding vapor explosions (BLEVE	2
quantitative risk assessment (QRA	2
rights-of-way (ROWs	3
Ellwood Marine Terminal (EMT)	3
standard cubic feet per day (SCFD	3
Fire Prevention Division (FPD	4
Office of Emergency Services (OES	4
Hazardous Materials Business Plan (HMBP	4
Spill Prevention Contingency, and Countermeasures (SPCC	4
U.S. Highway 101 (US-101	4
State Route 217 (SR-217	4
California Highway Patrol (CHP	4

Conditionally Exempt Small Quantity Generator (CESQG	. 4
Regional Water Quality Control Board (RWQCB	6
Santa Barbara Count Air Pollution Control District (SBCAPCD	6
leaking underground fuel tank (LUFT	6
acutely hazardous materials" (AHM	6
Hazardous Materials Unit (HMU	6
Risk Management and Prevention Program (RMPP	6
Department of Toxic Substances Control (DTSC	6
Site Mitigation Unit (SMU	6
Environmental Data Resources (EDR	7
Comprehensive Environmental Response, Compensation and Liability Act Information System	1
(CERCLIS	7
Environmental Protection Agency (EPA	7
National Priorities List (NPL	7
underground storage tanks (UST	7
leaking underground storage tanks (LUSTs	7
Area of Influence (AIA	7
Airport Land Use Commission (ALUC	7
Santa Barbara County Association of Governments (SBCAG	8
Federal Aviation Administration (FAA	8
Electromagnetic field (EMF	8
volts per meter (V/m	8
hertz (Hz	8
extremely low frequency (ELF	8
Southern California Edison (SCE	9
Federal Emergency Management Agency (FEM	9
Clean Water Act (CWA	9
National Pollution Discharge Elimination System (NPDES	9
include Waste Discharge Requirement (WDRs	9
Stormwater Pollution Prevention Plans (SWPPPs	9
State Water Resources Control Board (SWRCB	10
Resource Conservation and Recovery Act (RCRA	10
Hazardous and Solid Waste Amendments (HSWA	10
Superfund Amendments and Reauthorization Act (SARA	10
Emergency Planning and Community Right-To-Know Act (EPCRA	10
State Emergency Response Commission (SERC	10
Local Emergency Planning Committee (LEPC	10
asbestos-containing material (ACM	11
Certified Unified Program Agency (CUPA	11
Department of Toxic Substance Control (DTSC	12
Central Coast Regional Water Quality Control Board (CCROCB	12
Leaking Underground Fuel Tank (LUFT	12
Air Pollution Control District (APCD	13
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liquefied petroleum gas (LPG	17
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