

4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 Introduction

This section of the EIR analyzes the potential environmental effects to human health and the environment due to exposure to hazardous materials or hazardous conditions arising out of the accidental release of hazardous material from implementation of the General Plan Update. A hazardous material is defined as any material that, due to its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons, or harmful to the environment if released. Earthquake and landslide hazards are addressed in Section 4.6 (Geology/Soils). Data for this section were taken from the Simi Valley General Plan Update Technical Background Report (2007), and other relevant documents related to hazards and hazardous materials.

Two comment letters were received during the NOP comment period relating to contaminated soils and wildland fire hazards. Comments concerning emergency access are addressed in Section 4.14 (Public Services) of this EIR.

4.8.2 Environmental Setting

■ Definitions

Chapter 6.5 of the California Health and Safety Code (Sections 25110–25124) sets forth definitions and regulations related to hazardous materials management and disposal, as follows:

- **Hazardous Material**—Any material which, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.
- **Hazardous Waste**—A hazardous waste is any hazardous material that is abandoned, discarded, or recycled (California Health and Safety Code Section 25124). Hazardous wastes may occasionally be generated by actions that change the composition of previously non-hazardous materials. The same criteria which characterize a material as hazardous make waste hazardous: ignitability, toxicity, corrosively, reactivity, radioactivity, or bioactivity.

Inherent in the setting and analyses presented in this section are the concepts of the “hazard” of these materials and the “risk” they pose to human health and the ecological environment.

Hazard

Exposure to certain chemical substances may cause harm to internal organs or systems in the human body. These impacts range from temporary to permanent disability, or death. Hazardous materials that result in such adverse effects are generally considered “toxic.” For purposes of the information and analyses presented in this section, the terms hazardous substances or hazardous materials are used interchangeably and include materials that are considered toxic.

Risk

The risk to human health and the ecosystem is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose. Accordingly, the likelihood and means of exposure, in addition to the inherent toxicity of a material, are used to determine the degree of risk to human health or the ecosystem.

■ Use, Transport, and Abatement of Hazardous Materials

Hazardous materials include, but are not limited to, substances, wastes, and any material that a business or the local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released. Businesses that are commonly known to use hazardous materials and generate hazardous waste include, service industries, electronic manufacturing, automobile service stations, dry cleaners, repair shops, chemical warehouses, and most types of manufacturing or assembly industries. In the household, hazardous materials include but are not limited to cleaners, insecticides, paints, and gasoline. Another risk is the accidental spills or leakage of hazardous materials that many occur as hazardous materials are transported (City of Simi Valley 2004).

According to the 2004 Simi Valley Multi-Hazard Mitigation Plan, the number and variety of hazardous materials that are generated, stored, or transported within Simi Valley is a concern to public officials and the community. A number of freight trains transverse the City hauling various types of hazardous and explosive materials including chlorine gas and LPG natural gas. A number of industrial and commercial firms require the use of potentially hazardous materials to operate their businesses. In addition, there are numerous underground pipelines that carry flammable and hazardous liquids (City of Simi Valley 2004).

Hazardous material releases can occur in a wide variety of locations in the City. Areas located along roadways, railways and industrial areas are vulnerable to this hazard. Schools, the Police Station, all five fire stations, City Hall, the Public Services Center, utility companies, and transportation routes are all vulnerable to temporary disruptions during hazardous materials releases, potentially impacting or delaying services to residents and businesses (City of Simi Valley 2004).

As described in the 2004 Simi Valley Multi-Hazard Mitigation Plan, the threat of a major hazardous material incident in Simi Valley exists from four different sources. These are transportation (commercial vehicle, rail, and air); fixed facility; pipeline; and clandestine dumping. Each of these threats is described below (City of Simi Valley 2004).

Transportation

The greatest probability of a major hazmat incident is from a transportation accident. SR-118 transverses the east/west axis of Simi Valley, with heavy truck traffic on this route each day. Approximately one of every 10 commercial vehicles is carrying hazardous materials. Historically, hazardous material incidents frequently occur on the heaviest traveled streets at major intersections and freeway interchanges (City of Simi Valley 2004).

The Union Pacific Railroad Company maintains a railroad that runs east to west through the community. Although the odds of a rail hazmat incident are lower than on a roadway, the potential severity is greater due to the numerous rail tanker cars involved and the potential for chemicals and explosive substances to be grouped together.

Fixed Facility

The second most likely serious hazmat threat exists from an accidental spill and/or incident at a facility that manufactures, stores, and processes toxic chemicals and/or generates hazardous waste materials within or adjacent to City boundaries. Although there are numerous facilities involved with hazardous materials they are less of a threat due to required plant contingency and evacuation plans. Also, the Waters Bill (AB 2185), strengthened previous emergency plans by levying heavy fines on violators who fail to supply plans and requiring industrial firms to disclose the types of chemicals being manufactured, used, and stocked (Right to Know Law).

Pipelines

There are three major underground petroleum pipelines located in Simi Valley. The Chevron 4-inch product line runs east/west in the northwestern part of Simi Valley, then runs along Avenida Simi, then connects with a second 12-inch Chevron line that runs north/south along Tapo Canyon Road which runs southward out of the City. The Shell Oil product line is used to transport a variety of commodities including refined and unrefined oil products. The Shell Oil line is 4 to 6 inches and runs east to west, primarily along Los Angeles Avenue.

Clandestine Dumping

Clandestine dumping is the criminal act of disposing of toxic materials and hazardous waste on public or private property. As the costs and restrictions increase for legitimate hazardous waste disposal sites, it can be anticipated that illegal dumping of hazardous materials will increase proportionately.

■ Existing Hazardous Materials Sites

Leaking Underground Fuel Tanks (LUFTs)

The Ventura County Environmental Health Division maintains a list of LUFT sites in the County that deals specifically with leaking fuel tanks. While there may be other constituents of concern resulting from leaking fuel tanks, the primary substance of concern of this program is fuel. Most frequently, these fuel tank leaks are associated with common neighborhood gasoline service stations. According to the County's Leaking Underground Fuel Tanks (LUFT) database, accessed in May of 2007, the City of Simi

Valley has 124 identified LUFT sites, 100 of which are closed cases. These facilities are listed in Table 4.8-1 (LUFT Site Listing by Address: Simi Valley).

Table 4.8-1 LUFT Site Listing by Address: Simi Valley		
<i>Name</i>	<i>Address</i>	<i>Status</i>
First Street Car Wash	2155 1 st Street	9
Simi Valley Ford	2440 1 st Street	9
Simi Valley 10 Minute Lube	1940 5 th Street	9
Simi Hills Golf Course	5031 Alamo Street	9
P.W. Gillibrand Co.	Bennett Road	9
Spragues Ready Mix	5400 Bennett Road	9
Canyon Truck Co., Inc.	Bennett Road (end of)	9
P.W. Gillibrand (Canyon Truck)	Bennett Road (end of)	9
Rockwell/Santa Susana Field LB	Bldg 005 Tank 1	9
Rockwell/Santa Susana Field LB	Bldg 324 Tank 7	9
County Fire Station #41	1910 Church Street N	9
Haagen Property (Alexander)	1899 Cochran	7
Valley Tire & Auto	1899 Cochran	9
Mobil Oil SS #11-KYB	5195 Cochran	9
Mobil 18-KYB	5195 Cochran Street	9
First Los Angeles Bank	685 Cochran Street	9
V-Fire Station #44	1050 Country Club Drive	9
Bank of America	400 Countrywide Way	9
Simi Valley School District	1725 Deodora Street	9
Simi Unified School Bus Garage	1725 Deodora Street	9
Simi Valley Unified School Dist Trans YD	1725 Deodora Street	9
German Motor Car	1967 Duncan Street B	9
Melody Knitting Mill	45 Easy Street	9
Steve's Automotive	495 Easy Street	9
Pacific Beverage	51 Easy Street	9
Simi Truck Stop	75 Easy Street	5C
Consolidated Freightways	91 Easy Street	9
1 st Street Honda	983 Easy Street	9
Thrifty Oil #216	1356 Erringer	7
Chevron #4756 (Former Tosco—76 SS)	1369 Erringer	7
Arco SS #0201	1706 Erringer	9
Kurkciyan Property (Houry)	1805 Erringer	3B

Table 4.8-1 LUFT Site Listing by Address: Simi Valley

<i>Name</i>	<i>Address</i>	<i>Status</i>
Exxon #7-0462	2395 Erringer Road	7
Orville Stovall	4231 Eve Road	9
Rockwell International	Field Lab/Santa Susana	9
First Nissan	2081 First Street	9
Xpress Lube	2170 First Street	9
Simi Valley Hospital/Behavioral Health Center	1850 Heywood Street	9
G.I. Rubbish/Swinks Towing	4506 Industrial Avenue	9
EZ Serve	1415 Kuehner	9
Mobil Oil SS #18-KJQ	2340 Kuehner Drive	9
Wood Ranch Gold Club	555 Lake Park Drive	9
Mobil Oil SS #18-JR0	1099 Los Angeles Avenue	7
Chevron #9-3499	1105 Los Angeles Avenue	9
Shell SS—Los Angeles	1120 Los Angeles Avenue	7
Texaco SS—Los Angeles	1196 Los Angeles Avenue	5C
S.B.C. Automotive Center	1378 Los Angeles Avenue	9
Jiffy Lube #678	1515 Los Angeles Avenue	9
Hailwood, Inc.	1595 Los Angeles Avenue	8
Simi Radiators	1842 Los Angeles Avenue	9
GI Industries	195 Los Angeles Avenue	5C
Conejo Enterprises, Inc.	195 Los Angeles Avenue	9
Chevron #9-3493	1990 Los Angeles Avenue	8
Pre-Con Products	240 Los Angeles Avenue	9
Chevron #5639	2705 Los Angeles Avenue	9
City of Simi Valley FS #41	3150 Los Angeles Avenue	9
Jiffy Lube #682	4426 Los Angeles Avenue	9
Xpress Lube Facility	4560 Los Angeles Avenue	9
Air Liquide America Corp	4753 Los Angeles Avenue	9
City of Simi Valley (P.W. Yard)	500 Los Angeles Avenue	5R
Tosco—76 SS #4878	501 Los Angeles Avenue	9
Tosco #5237 (Circle K)	510 Los Angeles Avenue	5C
Chevron #9-5515 (Former)	5195 Los Angeles Avenue	9
Exxon SS #7-3545	5795 Los Angeles Avenue	9
Chevron #6126	5798 Los Angeles Avenue	9
Mobil Oil SS #18-KBY	5803 Los Angeles Avenue	7
Pep Boys #619	660 Los Angeles Avenue	9

Table 4.8-1 LUFT Site Listing by Address: Simi Valley

<i>Name</i>	<i>Address</i>	<i>Status</i>
Thrifty Oil #215	706 Los Angeles Avenue	7
Nelson Property	864 Los Angeles Avenue	9
Pep Boys, Inc.	660 Los Angeles Avenue	9
Chevron #9-4225 (Former)	5602 Los Angeles Avenue	9
Bob's Transmission & Clutch	794 Los Angeles Avenue	8
Eikon	60 Moreland	9
VCO Fire Station #45	790 Pacific Avenue	9
V-Fire Station #45	790 Pacific Avenue	9
Warne Property (Velma)	1196 Patricia Avenue	7
Circle K #5236	1695 Royal Avenue	9
Tosco #5236 (Circle K)	1695 Royal Avenue	9
Daniel Yem Property	6632 Santa Susana Pass Road	9
Poly Tainer Inc.	2220 Shasta Way	9
Leons Transmission	1880 Sinaloa Road	9
Swank Chevron	2449 Stearn Street	9
Shell SS—Sterns	2404 Stearns Street	9
Exxon (Swank's)	2449 Stearns Street	9
Chevron #6067 (Former Tosco—76 SS)	2605 Sterns Street	7
First Interstate Bankcard	1700 Surveyor Avenue	9
Mobil Oil SS #11-J1Y	1220 Sycamore Drive	9
Mobil Oil SS #11-J1Y	1220 Sycamore Drive	9
Sycamore Drive Community Center	1692 Sycamore Drive	9
Chevron #6923 (Former Tosco-76 SS)	2383 Sycamore Drive	7
Shell SS—Sycamore	2405 Sycamore Drive	5R
Chevron #9-1024	2568 Sycamore Drive	9
Simi Valley Hospital	2975 Sycamore Drive	9
Simi Valley Hospital	2975 Sycamore Drive	9
Simi Valley Hospital	3015 Sycamore Drive	9
Chevron SS Simi Alamos	T3N R19W Sec. 31	9
Mobil Oil SS #11-KYL	2500 Tapo Canyon Road	9
Tapo Rock and Sand Products	5141 Tapo Canyon Road	9
P.W. Gillibrand Co.	5131 Tapo Canyon Road	9
Terry Lumber	2000 Tapo Street	9
Simi Valley Car Wash	2068 Tapo Street	9
Simi Valley Car Wash	2068 Tapo Street	9

Table 4.8-1 LUFT Site Listing by Address: Simi Valley

<i>Name</i>	<i>Address</i>	<i>Status</i>
Thrifty Oil Co SS #217	2211 Tapo Street	9
Arco SS #9619	2211 Tapo Street	9
Shell Service STN—Tapo	2390 Tapo Street	9
Texaco SS—Swink's	2390 Tapo Street	9
Chevron SS #4864	2399 Tapo Street	9
Arco SS #0059	2401 Tapo Street	9
Max Small	2500 Tapo Street	9
Mobil Oil SS #11-JTX	2804 Tapo Street	9
V-Fire Station #46	3256 Tapo Street	9
Texaco SS—Tapo	2390 Tapo Street	9
Tosco - 76 SS #4864	2399 Tapo Street	9
Arco SS #0059	2401 Tapo Street	9
Arco #6119	25 Tierra Rejada Road	7
ATT	2250 Ward Avenue	8
Warner/Electra/Atlantic Corp	Ward Avenue (End of)	9
Rockwell	Woolsey Canyon	9
Rockwell/Santa Susana Field LB	Woolsey Canyon Road B 55	9
Rockwell/Santa Susana Field LB	Woolsey Canyon Road B 9	9
Rockwell/Santa Susana Field LB	Woolsey Canyon Road T 67	9
Shell SS—Yosemite	2627 Yosemite	5C

SOURCE: Ventura County Environmental Health Division (May 2007).

Key: 1=Leak Confirmation; 3A3B=Preliminary Site Assessment; 5C=Site Characterization; 5R=Remedial Action Plan; 7=Remedial Action; 8=Monitoring; 9=Closed

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) was developed to protect the water, air, and land resources from the risks created by past chemical disposal practices. Under CERCLA, the United States Environmental Protection Agency (USEPA) maintains a list, known as CERCLIS, of all contaminated sites in the nation that have in the past or are currently undergoing clean-up activities. CERCLIS contains information on current hazardous waste sites, potential hazardous waste sites, and remedial activities. This includes sites that are on the National Priorities List (NPL) or being considered for the NPL (“Superfund”). The database lists two facilities in Simi Valley; both listed with a current status of “Not on the National Priorities List,” and are located at the Santa Susana Field Laboratory in Simi Valley, as described below (USEPA n.d.).

Energy Technology Engineering Center (ETEC). The ETEC is located at the Santa Susana Field Laboratory (SSFL) in eastern Ventura County near the crest of the Simi Hills at the western border of the

San Fernando Valley, south of Simi Valley. ETEC is currently undergoing a closure project to decommission and decontaminate the Department of Energy's (DOE) Radioactive Materials Handling Facility (RMHF) at the SSFL. The SSFL is not on the National Priorities List. The USEPA and DOE agreed in a joint policy statement May 22, 1995, that DOE decommissioning activities will be conducted as non-time critical removal actions consistent with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), effectively integrating USEPA oversight responsibility, DOE lead agency responsibility, and state and stakeholder participation (Sapere and Boeing 2007).

On March 1, 2007, Sapere Consulting, Inc. and The Boeing Company prepared a Draft RMHF D&D Engineering Evaluation/Cost Analysis, which summarizes the objectives of the removal action and evaluates alternatives to implement the decommission and decontamination. The document states that the removal action will be conducted in accordance with the 1995 Joint DOE/USEPA Policy Memorandum in a manner that is consistent with CERCLA. The desired outcome of the removal action is an RMHF footprint that meets radiological standards of protectiveness for unrestricted use (Sapere and Boeing 2007).

The SSFL is a complex of research and development facilities and occupies approximately 2,850 acres. The SSFL is located in southeastern Ventura County, approximately 30 miles northwest of Los Angeles, between the Simi and San Fernando Valleys. The SSFL is bordered by the Santa Monica Mountains Conservancy's Sage Ranch Park and the Brandeis-Bardin Institute to the north, Bell Canyon to the south, ranches and mobile home parks to the east, and Meier and Runkle Canyons to the west (UCLA 2006).

Activities at SSFL since 1948 have included research, development, and testing of liquid fueled rocket engines, water jet pumps, liquid metal heat exchanger components, lasers, coal gasification, and nuclear reactors (Montgomery Watson Harza 2006).

The SSFL is divided into four separate administrative areas and two buffer zones (Ninyo & Moore 2007).

- Area I comprises approximately 671 acres and is located in the northeast portion of the SSFL. Area I has been used for rocket testing and thermal rocket treatment purposes. Facilities within Area I included the North American Kindleberger Atwood Lab, the former Area I Thermal Treatment Facility (an open pit burning facility), and three rocket testing areas. Area I is owned by Boeing.
- Area II comprises approximately 410 acres and is located in the north-central portion of the SSFL. Area II contains two former rocket test firing areas and two current rocket test firing areas, as well as the Systems Test Laboratories. Area II is owned by NASA, and the rocket test areas are currently operated by Rocketdyne.
- Area III comprises approximately 114 acres located in the northwestern portion of the SSFL. The former Engineering Chemistry Lab, owned by Boeing, is located within Area III.
- Area IV comprises approximately 290 acres located in the northwestern portion of the SSFL and owned by Boeing. The Sodium Reactor Experiment Complex operated by Rocketdyne and Department of Energy (DOE) was located in Area IV. Activities included the operation of nuclear reactors, fuel facilities, and laboratories.
- Two Buffer Areas are to the northwest and south of the SSFL, totaling approximately 1,315 acres of undeveloped land (UCLA 2006).

Research, development, and testing of liquid-propelled rocket engines were conducted primarily from the 1950s through the early 1970s. Testing activities decreased in subsequent years. Rocket engine testing activities primarily utilized petroleum-based compounds as the fuel and liquid oxygen as the oxidizer. Chlorinated solvents were utilized to flush residual fuel from the rocket engines prior to and following test firing activities (Montgomery Watson Harza 2003). Solid propellants, some containing perchlorate, were also utilized. Other materials utilized during SSFL operations have included liquid metals, polychlorinated biphenyls (PCBs), and hydraulic oils (UCLA 2006).

Nuclear energy research was conducted by DOE from the 1950s until the mid 1990s. Energy research and development activities included nuclear reactor operation, as well as liquid sodium metal experiments associated with breeder reactor technologies. A total of ten nuclear reactors and seven support facilities, including the Hot Laboratory, the Nuclear Materials Development Facility, and the Radioactive Materials Handling Facility, were operated by DOE (Montgomery Watson Harza 2003).

Chemicals used in liquid form at the SSFL were typically stored in drums, aboveground storage tanks, and underground storage tanks. Solid or powdered chemicals were typically stored in drums. Disposal and treatment of chemical wastes and solid waste generated at SSFL was conducted by several methods. A total of three landfills were operated at the SSFL and utilized generally for the disposal of inert waste, such as construction debris. Chemical waste from rocket engine testing activities, including organic solvents, hydrazine fuel, oxidizers, and kerosene-based fuels, was treated and stored within flow-through and retention ponds (California DTSC 2002b). A total of 28 lined and unlined retention ponds were operated at SSFL. Waste fuels and solvents were also thermally treated (burned), within concrete or earthen “burn pits,” also known as thermal treatment facilities (California DTSC 2002c).

The DTSC, a Division of California Environmental Protection Agency (Cal/EPA), began oversight into the contamination investigation associated with the SSFL beginning in 1997. The role of DTSC is to protect California and Californians from exposures to hazardous wastes by regulating hazardous waste, cleaning up existing contamination, and looking for ways to reduce the hazardous waste produced in California. The DTSC regulates hazardous waste in California primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 (RCRA) and the California Health and Safety Code. Under RCRA, DTSC has the authority to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. As such, the management of hazardous waste in the planning area would be under regulation by the DTSC to ensure that state and federal requirements pertaining to hazardous waste are complied with.

DTSC has divided the SSFL investigations into two areas or operable units (OUs). The first is designated the Surficial OU and comprises soil, sediment, surface water, near surface groundwater, air, and weathered bedrock, which may have been impacted by spills or releases (Montgomery Watson Harza 2006).

Contaminants found within the Surficial OU at the SSFL include lead, mercury, arsenic, chromium, trichloroethylene (TCE), tetrachloroethylene (PCE), PCBs, carbon tetrachloride, 1,2-dichloroethylene, cesium 137, and plutonium-238. Corrective action is currently underway at approximately fifty locations associated with the Surficial OU (California DTSC 2006). For example, one area under investigation has

been designated “Area I Burn Pit.” Contaminants found within the Area I Burn Pit include dioxins, TCE, chromium, petroleum hydrocarbons, and perchlorate (California DTSC 2002b).

Contaminants have also been found in soil in off-site recreational and residential areas south and north of the SSFL. These contaminants may have originated at the SSFL and were transported via surface runoff. Beryllium and lead have been found in soil at Bell Canyon, an area south of SSFL. Arsenic and cesium-137 were also found in soil south of the SSFL at an area known as the Ahmanson Ranch (UCLA 2006).

The second DTSC area of investigation is designated the Chatsworth Formation OU. The Chatsworth Formation OU comprises the Chatsworth formation groundwater (i.e., deep groundwater) and saturated and unsaturated unweathered bedrock impacted by both spills and migration of dissolve phase contaminants. Groundwater characterization and monitoring activities at SSFL utilize a network of both shallow and deep monitoring wells (California DTSC 2002a).

Groundwater plumes impacted by chlorinated solvents, primarily TCE and its degradation products, have been found at various depths and locations throughout SSFL. TCE has been found in over 80 percent of the monitoring wells sampled at SSFL (California DTSC 2002a). Chlorinated solvent plume sources have been identified at numerous facilities, including former solvent handling and disposal facilities, rocket test areas, and a former sodium disposal facility. In addition, TCE has been found in off-site monitoring wells to the south, northeast, and northwest of the SSFL. Perchlorate has also been found in groundwater samples collected at SSFL and in shallow non-potable monitoring wells in Simi Valley. However, perchlorate has not been found in municipal wells operated by the City of Simi Valley.

In addition to the DTSC investigations associated with Surficial OU and the Chatsworth OU, the California Department of Health Services Radiologic Health Branch (DHS-RHB) is overseeing the decontamination and decommissioning of former nuclear facilities at SSFL (California DTSC 2007).

Boeing, NASA, and DOE have been designated “responsible parties” as defined in environmental regulations. The DTSC is responsible for overseeing the soil and groundwater remedial investigation and clean up of chemical contaminants at SSFL that may pose a risk to human health and the environment. A DTSC Corrective Measures Study is due in September 2010, an Environmental Impact Report is due in 2011, and Corrective Measures Implementation is due to begin in October 2012. The Boeing Company continues to submit quarterly reports to the DTSC to outline the progress and activities regarding the SSFL cleanup by Boeing, NASA, and DOE.

Cortese List

The Hazardous Waste and Substances Sites (Cortese) List is a tool used by the state and local agencies and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the Cal/EPA to develop an updated Cortese List at least annually. There are no sites listed under the Cortese List in Simi Valley (California DTSC n.d.a).

DTSC Site Mitigation and Brownfields Reuse Program (“CalSites”) Database

The Site Mitigation and Brownfields Reuse Program serve to cleanup and redevelop Brownfield sites for future use. Brownfields are properties that are contaminated, or thought to be contaminated, and are underutilized due to remediation costs and liability concerns. Often the remediation cost associated with a contaminated site serves as a major deterrent to any planned reuse of that site.

The DTSC introduced the Voluntary Cleanup Program (VCP) to protect human health, clean up the environment, and get property back to productive use. Participants in the VCP are able to restore properties quickly and efficiently, and eliminate competition for DTSC funding. Sites eligible for VCP are generally low-priority hazardous waste sites. Two sites in Simi Valley are listed in the Site Mitigation and Brownfields Reuse Program database, as described below (California DTSC n.d.b).

Simi Valley Hospital and Health Care. Located at 1850 East Heywood in Simi Valley, the site consists of approximately 4.6 acres. The on-site hospital buildings have been demolished. One 10,000-gallon underground diesel storage tank was removed from the site in 1991. Diesel-impacted soils were excavated and removed from the site prior to submission of the Preliminary Endangerment Assessment (PEA). The DTSC completed review of the PEA in 1994 and reported that the site does not pose a threat to public health and/or the environment. The Department recommended “No Further Action.”

Marufuji/Big Sky, Ltd. This site, located at Tapo and Dry Canyons in Simi Valley includes a thousand acres of abandoned oil wells. According to the Site Mitigation and Brownfields Reuse Program database, the status of this site since November 1994 is “No Further Action” required.

Regional Water Quality Control Board (RWQCB) Spills, Leaks, Investigations, and Cleanup (SLIC) List

The SLIC Program was established by the State Water Resources Control Board (SWRCB) to allow each of its nine Regional Boards to oversee the cleanup of illegal discharges, contaminated properties, and other unregulated releases adversely impacting the state’s waters. Sites managed within the SLIC Program include sites polluted as a result of recent or historic spills, subsurface releases (e.g., pipelines, sumps), complaint investigations, and all other unauthorized discharges that pollute or threaten to pollute surface and/or ground waters.

Nine sites within the City of Simi Valley were identified in the SLIC List maintained by the Los Angeles Regional Water Quality Control Board (LARWQCB). The SLIC Section of the LARWQCB oversees activities at non-underground storage tank (UST) sites where soil or groundwater contamination have occurred due to former industrial facilities and dry cleaners, where chlorinated solvents were spilled, or have leaked into the soil or groundwater. Table 4.8-2 (Facilities on SLIC List for the City of Simi Valley) identifies SLIC facilities and the associated substances that were released.

■ Historical Hazardous Materials Incidents

The latest hazardous material event in Simi Valley that occurred in 1989 involved a chemical emergency. A business on Easy Street operated a chlorine gas tank for industrial purposes. The tank developed a leak

that resulted in the response of the Ventura County Hazardous Materials Response Unit. In an effort to secure the leak, the tank valve was broken, resulting in the release of all of the tank's contents.

The leak was large enough to produce a large chlorine gas cloud that began to move to the south towards a residential tract. The Police Department ordered an evacuation of approximately 12,000 persons, and closed all schools (two elementary schools, one Junior High School and one High School) and public facilities in an area approximately 2 miles south of the release point.

Table 4.8-2 Facilities on SLIC List for the City of Simi Valley

	<i>Site Name</i>	<i>Address</i>	<i>Substance</i>	<i>Status</i>
1	Andrews Property	884 Moffatt Circle Drive	No data submitted	Open
2	Joes Cleaners	2890 Cochran Street	Perchloroethylene	Open
3	Marafuji—Big Sky Ltd. Property	Tapo Canyon Road	No data submitted	Closed
4	Melody Knitting Mill (Formert)	45 West Easy Street	No data submitted	Open
5	Moving Solutions	45 West Easy Street	VOC	Open
6	Sycamore Square Dry Cleaners	2837 Cochran Street	No data submitted	Closed
7	Tapo Dry Cleaner	2196-2538 Tapo Street	No data submitted	Closed
8	Chevron—Broadoaks Central Facility	2400 Tapo Canyon Road	No data submitted	Closed

SOURCE: LARWQCB LUFT List, <http://geotracker.swrcb.ca.gov/search/> (accessed March 7, 2007).

"Open" status indicates that the site is still under investigation and/or cleanup.

"Closed" status indicates that no additional investigation or cleanup is required at the site at this time, but does not mean that the contamination has been remediated.

VOCs are any organic compound which evaporates readily to the atmosphere. VOCs contribute significantly to photochemical smog production and certain health problems.

Polyethylene terephthalate (PET) is a plastic resin of the polyester family that is used to make beverage, food and other liquid containers, as well as for some other thermoforming applications.

The cloud eventually dissipated and there were no reports of injury. There were significant disruptions to commerce, transportation routes, and the public during the 8-hour event. The City's Emergency Operation Center was activated to support the field response and a Red Cross shelter was opened at Simi Valley High School (City of Simi Valley 2004).

Emergency Response

Emergency response to hazardous materials accidents in the planning area is usually undertaken by the County of Ventura Bureau of Emergency Services (Bureau) within the Ventura County Fire Department (VCFD). The Bureau provides specialized emergency services including fire suppression, emergency medical care, hazardous materials response, urban search and rescue, public education in fire safety and fire prevention programs. The Bureau focuses on all aspects of field services, but primarily emergency operations and preparedness through a network of fire station-assigned resources and personnel. The Bureau is divided into four area Divisions. Simi Valley is located in Division 16, Battalion 4. Fire stations are staffed by companies utilizing structural firefighting and wildland firefighting engines, rescue engines, medic engines, paramedic squads, ladder trucks and other specialized apparatus for countywide response to emergencies requiring technically skilled operations, including hazardous materials incident response, swift water rescue, and confined space rescue (VCFD n.d.).

Depending on the situation and location of a hazardous waste incident, agencies other than the VCFD would also help provide emergency response. The agencies may include, but are not limited to the following:

- California Department of Fish and Game
- United States Army Corps of Engineers
- United States Department of Transportation
- California Department of Transportation
- California Highway Patrol
- Southern California Air Quality Management District
- City of Simi Valley

■ Wildland Fire Hazard

Major fires are generally classified as one of two types: urban fire, or wildland fire. Generally, the wildland fire season extends from early spring to late fall, however unseasonable hot, dry or windy weather conditions can present wildland fire hazards at any time. Hazards arise from a combination of hot weather, an accumulation of vegetation, and low moisture content of the air. These conditions, if coupled with high winds and years of drought, can compound the potential impact of a fire.

Cities such as Simi Valley, that are built within or adjacent to hillsides or mountainous areas, have increased the number of people living near heavily vegetated areas where wildlands meet urban development. This is also referred to as the wildland/urban interface. A fire along the wildland/urban interface can result in major losses of property and structures unless adequate protection measures have been provided. Cal Fire has adopted the Wildland-Urban Interface (WUI) regulations that have been adopted as part of the California Building Code (CBC). The WUI includes building materials list, construction methods, as well as project siting requirements to lessen the potential impacts of wildland fires on urban uses.

Generally, there are three major factors that sustain wildfires and allow for predictions of a given area's potential to burn. These factors include fuel (materials that feed a fire), topography, and weather. In addition, other factors complicate the issues, including the wildland urban interface, diversified responsibility for wildland vegetation management, destructive insects, and diseases.

Other causes of wildfires include power line failure, sparks from off-road vehicles, construction equipment, and other power-driven equipment used in industry, agriculture, and recreation. In developed areas, wildfires can start from children playing with matches, bonfires, rubbish burning, sparks from chimneys, and fireworks. Natural causes, primarily lightning, are now relatively minor causes of local fires. Rugged terrain will also hinder fire suppression attempts by hampering the mobility and effectiveness of firefighters and equipment (City of Simi Valley 1999).

The integration of five fire determinants (human proximity, vegetation, access, slope, wind direction) has delineated four natural fire hazard potential zones in the City. The high wildfire hazard areas are shown in Figure 4.8-1 (Wildfire Hazard Area). High risk equates to areas lying to the immediate west of developed areas; chaparral or dense sage scrub cover; very steep (40 percent) slope; and somewhat

limited access. Medium risk equates to areas fronting developments and backcountry, sage scrub and less developed chaparral cover, moderate (20 to 40 percent) slope, and somewhat limited access. Low risk equates to areas in the vicinity of developed property; grassland and less developed sage scrub cover; level to gentle (0-20 percent) slope; and available access. No risk equates to developed areas; cultivated urban cover; flat slope; and available urban access (City of Simi Valley 2004).

Oil production and storage facilities are also located in areas susceptible to high fire hazards. Numerous residential areas are located in and adjacent to the hazard wildfire area and could be exposed to wildfires and related damage (City of Simi Valley 2004).

■ Historical Wildland Fires

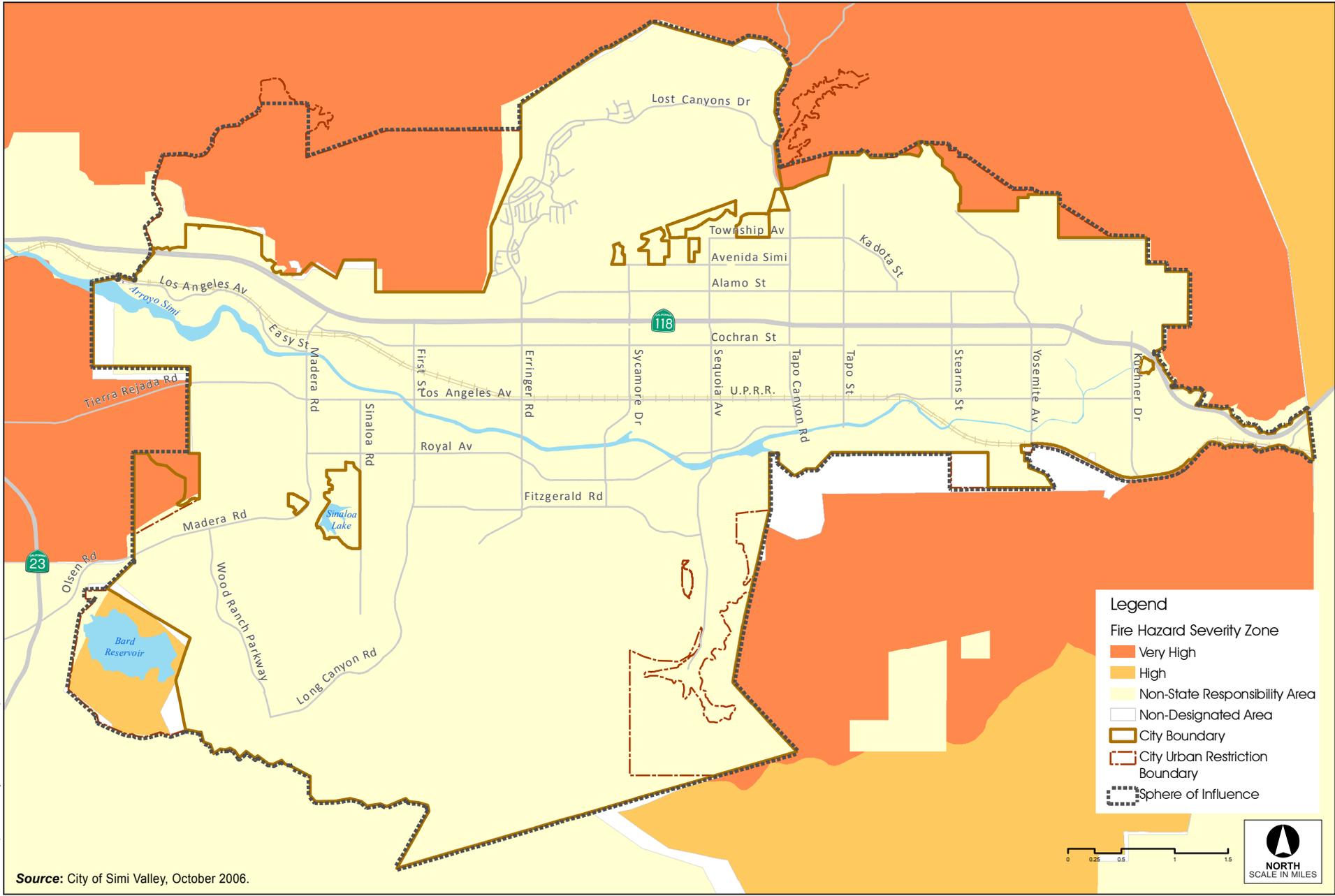
Large wildfires have historically occurred in the planning area every two to five years. Fires in the hilly areas surrounding the valley have occurred frequently according to records dating back to 1897. The Simi Fire in September 2005 began near the SR-118 Freeway and Topanga Canyon Boulevard in Chatsworth. When the fire had only burned 2,000 acres, FEMA approved a grant to help fight this fire. A total of 24,175 acres were burned, 3 residences were destroyed, 1 damaged, 3 commercial properties destroyed, 2 damaged and 7 outbuildings were destroyed as a result of this fire. The fire initially started on September 28, 2005 and was fully controlled by October 13, 2005. Parts of Corriganville Park (which had burned in the October 2003 fire) burned, as well as neighboring Santa Susana Knolls and Hidden Ranch areas of Simi Valley. Hot, dry, and windy Santa Ana conditions contributed to the rapid spread of the fire. Topography also presented a serious challenge to the suppression effort, as the fire burned into an area of steep and rugged terrain that borders the southern edge of Simi Valley (Adams 2007).

The more recent Sesnon Fire in October 2008 began in the Porter Ranch area of the San Fernando Valley, to the east of Simi Valley, and reached to the Lost Canyon area north of the SR-118 Freeway in Simi Valley. Residents in east Ventura County were evacuated and the SR-118 Freeway was closed in both directions between Yosemite Avenue and Reseda Boulevard. The fire ultimately burned 14,000 acres and the source attributed to a downed power line.

■ Urban Fire Hazards

The risk of life or property loss from fires in urban settings is influenced by a variety of factors. Some factors include building construction materials, the type of occupancy, and the type of items stored within the structure, fire response time, the availability of adequate fire flows of water and adequate emergency ingress and egress.

The potential for a high loss of life may result from fire and smoke damage to hotels, nursing homes, theaters, libraries, and other areas where large groups of people tend to gather. Businesses, factories, and shopping areas may suffer a large property or monetary loss due to a major fire. Residential neighborhoods with large concentrations of houses with wood shingle or shake roofs are at a greater fire risk than neighborhoods where the majority of the residences utilize fire retardant roofing material.



Source: City of Simi Valley, October 2006.

Figure 4.8-1
Wildfire Hazard Area

An urban fire will produce varying levels of damage or disruption to critical facilities. Facilities located within 500 feet of the wildland interface are vulnerable. This includes two fire stations (Stations 43 and 44). Although located beyond 500 feet, the Simi Valley Hospital is located in an area near the wildland interface and is situated near many mature trees and older construction homes. The Southern California Edison Company transformers and power lines, telephone company switches, and television cable lines are also subject to loss during these incidents (Adams 2007).

■ Fire Prevention and Suppression Programs

The Ventura County Fire Protection District (District) provides fire prevention, fire suppression, and life safety services in Simi Valley. The District also provides protection for the cities of Ojai, Moorpark, Port Hueneme, Camarillo, Thousand Oaks, and the unincorporated areas of Ventura County via thirty-one fire station delivery centers covering approximately 865 square miles.

The State Board of Forestry and the California Department of Forestry and Fire Protection have drafted a comprehensive update of the fire plan for wildland fire protection in California. The Ventura County Fire Protection District maintains a contractual relationship with the California Department of Forestry and Fire Protection and utilizes the 2005 California Fire Management Plan within Ventura County.

The Ventura County Fire Protection District has a wildland fire protection strategy that includes the following components: prevention, passive protection, fire suppression, and fuel bed management. The Ventura County Fire Department's Wildland Fire Division, within the Bureau of Support Services, also provides safety and tactical education and training in wildland incident responses for employees. The Division sustains a long-term plan of maintaining a patchwork of modified fuel beds to control historical wildland fires that provide control zones for assets of value and range improvement (VCFD n.d.).

Due to Ventura County's diverse geography and six different microclimates, the County is broken down into ten different "fuel beds" that serve as the geographical basis from which the plan was developed. The City of Simi Valley planning area is within two fuel beds: the Simi Fuel Bed and the Oakridge Fuel Bed.

The southern portion of the Simi Valley planning area, (generally south of Los Angeles Avenue) is within the Simi Fuel Bed, while northern portions of the Simi Valley planning area, north of Los Angeles Avenue are within the Oak Ridge Fuel Bed. The Simi Fuel Bed is bordered on the north by the City Simi Valley, on the south by Highway 101, on the east by the San Fernando Valley and on the west by Highway 23 and Olsen Road. The ground cover of the bed consists of medium brush in the steep canyons and light flashy fuels make up much of the fuel bed on the north and south slopes. According to the Ventura County Fire Protection District (VCFPD 2005), the predominant risk in this area is the east end of Thousand Oaks, the community of North Ranch and the City of Oak Park that have many assets that are exposed to hazardous fuels along the interface area. The south side of the City of Simi Valley, while exposed to the fuels along the north side of this fuel bed, does not have as great a risk due to the historical patterns of east wind driven fires.

The Oak Ridge Fuel Bed is bordered on the north by the Santa Clara River, on the south by the Simi fuel bed, on the east by the Los Angeles/Ventura County line and on the west by Highway 23. The ground cover of the bed consists of medium brush on the North Slope and light, flashy fuels on the south slope.

According to the Ventura County Fire Protection District (VCFPD 2005), the predominant risk exposure in this area is the interface area along the northern boundary of the City of Simi Valley. As this residential area grows, so does the risk from wildfire.

4.8.3 Regulatory Framework

A number of federal, state, and local laws have been enacted to regulate the management of hazardous materials. Implementation of these laws and the management of hazardous materials are regulated independently of the CEQA process through programs administered by various agencies at the federal, state, and local levels. An overview of the key hazardous materials laws and regulations that apply to the General Plan Update is provided below.

■ Federal

Several federal agencies regulate hazardous materials. These include the USEPA, the Occupational Safety and Health Administration (OSHA), and the DOT. Applicable federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). In particular, Title 49 of the CFR governs the manufacture of packaging and transport containers, packing and repacking, labeling, and the marking of hazardous material transport. Some of the major federal laws and issue areas include the following statutes (and regulations promulgated thereunder):

- Resources Conservation and Recovery Act (RCRA)—hazardous waste management
- Hazardous and Solid Waste Amendments Act (HSWA)—hazardous waste management
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—cleanup of contamination
- Superfund Amendments and Reauthorization Act (SARA)—cleanup of contamination
- Emergency Planning and Community Right-to-Know (SARA Title III)—business inventories and emergency response planning

The USEPA is the primary federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to state and local environmental regulatory agencies.

In addition, with respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the federal, state, and local levels. This includes the development of a national capability to mitigate against, prepare for, respond to, and recover from a full range of emergencies.

■ State

Primary state agencies with jurisdiction over hazardous chemical materials management are the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB). Other state agencies involved in hazardous materials management are the Department of Industrial Relations (state OSHA implementation), Office of Emergency Services (OES—California Accidental Release Prevention implementation), Department of Fish and Game (DFG), Air Resources Board (ARB), Caltrans, state Office of Environmental Health Hazard Assessment (OEHHA—

Proposition 65 implementation) and California Integrated Waste Management Board (CIWMB). The enforcement agencies for hazardous materials transportation regulations are the CHP and Caltrans. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Hazardous chemical and biohazardous materials management laws in California include the following statutes (and regulations promulgated thereunder):

- Hazardous Materials Management Act—business plan reporting
- Hazardous Waste Control Act—hazardous waste management
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)—releases of and exposure to carcinogenic chemicals
- Hazardous Substances Act—cleanup of contamination
- Hazardous Waste Management Planning and Facility Siting (Tanner Act)
- Hazardous Materials Storage and Emergency Response
- California Medical Waste Management Act—medical and biohazardous wastes

State regulations and agencies pertaining to hazardous materials management and worker safety that are applicable to the City and General Plan Update are described below.

California Environmental Protection Agency

The Cal/EPA has broad jurisdiction over hazardous materials management in the state. Within Cal/EPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Department of Toxic Substances Control

The RCRA of 1976 is the principal federal law that regulates the generation, management, and transportation of hazardous materials and other wastes.

The DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA, and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that the position reflects the DTSC's goals. From these laws, DTSC's major program areas develop regulations and consistent program policies and procedures. The regulations spell out what those who handle hazardous waste must do to comply with the laws. Under RCRA, DTSC has the authority to implement permitting, inspection, compliance, and

corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. As such, the management of hazardous waste in the planning area would be under regulation by the DTSC to ensure compliance with state and federal requirements pertaining to hazardous waste.

California law provides the general framework for regulation of hazardous wastes by the Hazardous Waste Control Law (HWCL) passed in 1972. DTSC is the state's lead agency in implementing the HWCL. The HWCL provides for state regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage and disposal of hazardous wastes.

Tanner Act

Although there are numerous state policies dealing with hazardous waste materials, the most comprehensive is the Tanner Act (AB 2948) that was adopted in 1986. The Tanner Act governs the preparation of hazardous waste management plans and the siting of hazardous waste facilities in the state of California. The act also mandates that each county adopt a Hazardous Waste Management Plan. To be in compliance with the Tanner Act, local or regional hazardous waste management plans need to include provisions that define (1) the planning process for waste management, (2) the permit process for new and expanded facilities, and (3) the appeal process to the State available for certain local decision.

Hazardous Materials Management Plans

In January 1996, Cal/EPA adopted regulations implementing a "Unified Hazardous Waste and Hazardous Materials Management Regulatory Program" (Unified Program). The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous material release response plans and inventories, risk management and prevention program, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency—the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. California's Hazardous Materials Release Response Plans and Inventory Law, sometimes called the "Business Plan Act," aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on site, to prepare an emergency response plan, and to train employees to use the materials safely.

California Accidental Release Prevention Program (CalARP)

The CalARP program (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The CalARP program regulations became effective on January 1, 1997, and include the provisions of the federal Accidental Release Prevention program (Title 40, CFR Part 68) with certain additions specific to the state pursuant to Article 2, Chapter 6.95, of the Health and Safety Code.

The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of a RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers.

Hazardous Materials Transportation

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping regulations. The Office of Emergency Services (OES) also provides emergency response services involving hazardous materials incidents.

Investigation and Cleanup of Contaminated Sites

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary state agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine if a release of hazardous wastes/substances exists at a site and delineates the general extent of contamination; estimates the potential threat to public health and/or the environment from the release and provides an indicator of relative risk; determines if an expedited response action is required to reduce an existing or potential threat; and completes preliminary project scoping activities to determine data gaps and identifies possible remedial action strategies to form the basis for development of a site strategy.

Siting of Schools

The California Education Code (Sections 17210 et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation be completed to determine the health and safety risks (if any) associated with a site. Recent legislation and changes to the Education Code identify DTSC's role in the assessment, investigation, and cleanup of proposed school sites. All proposed school sites that will receive state funding for acquisition and/or construction must go through a comprehensive investigation and cleanup process under DTSC oversight. DTSC is required to be involved in the environmental review process to ensure that selected properties are free of contamination, or if the property is contaminated, that it is cleaned up to a level that is protective of students and faculty who will occupy the new school. All proposed school sites must be suitable for residential land use, which is DTSC's most protective standard for children.

California Fire Code (Title 24, Part 9, California Code of Regulations)

The California Fire Code is CCR Part 9, Title 24, also referred to as the California Building Standards Code. The California Fire Code incorporates the Uniform Fire Code with necessary California amendments. This Code prescribes regulations consistent with nationally recognized good practice for the safeguarding to a reasonable degree of life and property from the hazards of fire explosion, and dangerous conditions arising from the storage, handling and use of hazardous materials and devices, and from conditions hazardous to life or property in the use or occupancy of buildings or premises and provisions to assist emergency response personnel.

California Health and Safety Code

State fire regulations set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

■ Local

Ventura County Resource Management Agency

The Ventura County Resource Management Agency (VCRMA) department serves as the CUPA for Ventura County. The VCRMA provides regulatory oversight six statewide environmental programs, including: Hazardous Waste Program, Hazardous Materials Business Plan, California Accidental Release Prevention Program, Underground Hazardous Material Storage Tanks, Aboveground Petroleum Storage tanks/ Spill Prevention Control & Countermeasure Plan, and the Onsite Hazardous Waste Treatment/ Tiered Permit. For implementation of these programs, the VCRMA implements various state and federal laws and regulations, County Code, and local policies.

City of Simi Valley Municipal Code

The Simi Valley Municipal Code is a collection of codes—laws, ordinances, and regulations that are codified according to the activities they regulate (traffic, income taxes, fire prevention, etc.). This collection forms the City's overall legal code. The Simi Valley Municipal Code is organized in outline form. Each individual code is literally a "part" (Part One [Administrative Code], Part Three [Traffic Code], etc.) of the overall code. Title 6 (Sanitation and Health), Chapter 10, Title 5 (Public Welfare), and Title (Sanitation and Health), and Title 9 (Development Code) may apply to this section.

4.8.4 Project Impacts and Mitigation

■ Analytic Method

The analysis provided below considers the potential direct, indirect, and cumulative effects of construction and implementation of the proposed project described in Chapter 3. The scope of the analysis of hazards and hazardous materials includes the Planning Area (see Figure 3-2 [Planning Area]), as disposal, handling, and transport of hazardous materials and contaminated soils would occur throughout the City. Similarly, hazards from wildland fires, although primarily located in the hillside areas on the periphery, can occur Citywide. Analysis in this section focuses on the use, disposal, transport, or management of hazardous or potentially hazardous materials resulting from development or redevelopment envisioned under the General Plan Update. Disposal options, the probability for risk of upset, and the severity of consequences to people or property associated with the increased use, handling, transport, and/or disposal of hazardous materials associated with implementation of the General Plan Update are also analyzed. This section also addresses short-term construction impacts resulting from demolition of existing (usually older) structures, as well as from disturbance of contaminated soils. Operational impacts would generally be associated with the type of uses proposed and the materials that operation of these uses would entail. In determining the level of significance, the analysis assumes that any development under the General Plan Update) would comply with relevant federal and state laws and regulations, as well as the Simi Valley Municipal Code.

The potential increased hazards resulting from development under the General Plan Update were evaluated against the 2011 CEQA Thresholds (described below), as well as the potentially mitigating effects of applicable General Plan Update policies on those impacts.

■ Thresholds of Significance

The following thresholds of significance are based on Appendix G to the 2011 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would:

- Create 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 0.25 mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result create a significant hazard to the public or the environment
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- 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

■ General Plan Policies that Mitigate Potential Impacts on Hazards and Hazardous Materials

Policies and goals from the Safety and Noise Chapter that would mitigate potential impacts on hazards and hazardous materials include the following. All General Plan policies are followed by a set of numbers in parentheses. These numbers reference applicable measures that will be undertaken by the City to implement the policy.

- Policy S-1.1** **Multi-Hazard Mitigation Plan and NIMS Plan.** Implement the strategies in the City's Multi-Hazard Mitigation Plan and National Incident Management System (NIMS) Plan to prevent the replication of pre-disaster conditions. (*Imp A-1, A-2, LU-18, S-1*)
- Policy S-1.2** **NIMS Compliance.** Maintain compliance with the Federal Emergency Management Agency National Incident Management System (NIMS), which is a template for the management of incidents to reduce the loss of life and property and harm to the environment. (*Imp A-1, A-2, LU-18, S-1*)
- Policy S-1.3** **Consistent and Current Emergency Response Plans.** Develop and maintain consistent, comprehensive, and up-to-date plans and regulations, including the General Plan and the Multi-Hazard Mitigation Plan, to prepare for and respond to disasters. (*Imp A-1, A-2, LU-18, S-1*)
- Policy S-1.4** **Disaster Skills Training.** Enhance the capabilities of the City's first responders to effectively function in disasters, including the City's Disaster Service Worker Team, Police Department, and City employees. (*Imp A-1, A-2, LU-18, S-1*)

- Policy S-1.5** **Data and Information Tracking.** Maintain an up-to-date Geographic Information System (GIS) database that tracks new development and structures in hazard areas in order to enhance the City’s capability to assess and respond to emergency incidents. *(Imp A-1, A-2, LU-18, S-1)*
- Policy S-1.6** **Evacuation Planning.** Coordinate evacuation planning, including evacuation routes, among emergency responders including the Ventura County Fire Protection District, Sheriff’s Department, the California Highway Patrol, and law enforcement agencies in other local jurisdictions. *(Imp A-1, A-2, LU-18, S-1)*
- Policy S-1.7** **Post-Disaster Response.** Plan for the continued functioning of critical facilities following a major disaster to help prevent major problems during post-disaster response, such as evacuations, rescues, large numbers of injuries, and major cleanup operations. *(Imp A-1, A-2, LU-18, S-1)*
- Policy S-1.8** **Funding Programs.** Pursue funding for programs related to preparedness, training, mitigation, and response for catastrophic events. *(Imp A-1, A-2, LU-18, S-1)*
- Policy S-2.1** **Mutual Aid Agreements.** Continue to participate in mutual-aid agreements to ensure adequate resources, facilities, and other support for emergency response. *(Imp A-1, A-2, LU-18, S-2)*
- Policy S-2.2** **Intergovernmental Partnership.** Maintain ongoing partnerships with federal, state, county, and local governmental agencies to identify and implement disaster mitigation actions, including information sharing. *(Imp A-1, A-2, LU-18, S-2)*
- Policy S-2.3** **Emergency and Disaster Exercises.** Coordinate with Ventura County, Los Angeles County and other jurisdictions to conduct emergency and disaster-preparedness exercises to periodically test operational and emergency plans. *(Imp A-1, A-2, LU-18, S-2)*
- Policy S-3.1** **Educational Outreach.** Sponsor and support education programs to increase awareness regarding disaster preparedness protocols and procedures, and disaster risk reduction strategies to all segments of the community, including local officials, residents, businesses, property owners and others who have interests in the City. *(Imp A-1, A-2, LU-18, S-3)*
- Policy S-7.1** **Intergovernmental Coordination.** Cooperate with the Ventura County Fire Protection District in periodically evaluating services and service criteria to ensure that the City continues to receive adequate fire protection, prevention services, and information-sharing protocols. *(Imp A-1, A-2, LU-18, S-2, S-7)*
- Policy S-7.2** **Fire Department Review.** Continue review by the Ventura County Fire Protection District of all proposed structures and developments within the community to mitigate potential wildland fire loss and damage. *(Imp A-1, A-2, LU-18, S-2, S-5, S-7)*
- Policy S-7.3** **Fire Inspection.** Work with the Ventura County Fire Protection District to ensure an ongoing fire inspection program to reduce fire hazards associated with critical facilities, public assembly facilities, industrial buildings, and nonresidential buildings. *(Imp A-1, A-2, LU-18, S-2, S-7)*

- Policy S-7.4** **Fire Protection Systems.** Encourage existing commercial and multiple-unit residential uses to install fire protection systems, as required by the state, building, and fire codes for new development, and encourage the use of automatic sprinkler systems in existing structures. (*Imp A-1, A-2, LU-18, S-6*)
- Policy S-7.5** **Fuel Modification.** Ensure that new development complies with fuel modification requirements of the Ventura County Fire Protection District, as applicable. (*Imp A-1, A-2, LU-18, S-5*)
- Policy S-7.6** **Post-Fire Debris Flow.** Develop and implement a comprehensive approach to mitigate damage and loss due to post-fire debris flow. (*Imp A-1, A-2, LU-18, S-8*)
- Policy S-7.7** **Public Education.** Promote public education of residents regarding site design, landscaping, location of materials, and brush landscaping to prevent and reduce fire hazards. (*Imp A-1, A-2, LU-18, S-3*)
- Policy S-7.8** **Funding.** Ensure that new developments pay a pro-rata share for increased fire protection as necessitated by their construction. (*Imp A-1, A-2, LU-14, LU-18, ED-8, S-5*)
- Policy S-8.5** **Facility Use or Storage of Hazardous Materials.** Require that all facilities storing, using, or otherwise involved with substantial quantities of on-site hazardous materials within flood zones comply with applicable standards of elevation, anchoring, and flood proofing, and that hazardous materials be stored in watertight containers. (*Imp A-1, A-2, LU-18, S-6*)
- Policy S-9.1** **Interjurisdictional Coordination.** Continue to carry out inspections, emergency response, and enforcement of hazardous materials and waste compliance procedures for Simi Valley. (*Imp A-1, A-2, LU-18, S-2, S-10*)
- Policy S-9.2** **Educate Residents/Businesses.** Educate residents and businesses regarding methods to reduce or eliminate the use of hazardous materials, including the disposal of household hazardous materials, including medications, batteries, e-waste, biomedical waste, etc., and the use of safer nontoxic equivalents. (*Imp A-1, A-2, LU-18, S-3*)
- Policy S-9.3** **Emergency Response.** Maintain and enhance the City’s first responders’ ability to safely and effectively respond to hazardous materials incidents and releases. (*Imp A-1, A-2, LU-18, S-1, S-7*)
- Policy S-9.4** **Hazardous Materials Regulation.** Work with relevant agencies regarding enforcement of applicable laws requiring all users, producers, disposers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, produce, dispose, or transport, and to notify the appropriate City, county, state, and federal agencies in the event of a violation. (*Imp A-1, A-2, LU-18, S-2*)
- Policy S-9.5** **Known Areas of Contamination.** Require proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments, in accordance with applicable standards. If contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development through a cleanup program under the supervision of the Ventura

County Environmental Health Division, Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination). (*Imp A-1, A-2, LU-18, S-5, S-6*)

Policy S-9.6 Siting of Sensitive Uses. Develop and implement strict land use controls, performance standards, and structure design standards for uses that generate, use or store hazardous materials, including development setbacks from sensitive uses such as residential homes, schools, hospitals, daycare and eldercare facilities, high density population facilities (such as movie theaters, auditoriums, museums), and other sensitive uses. (*Imp A-1, A-2, LU-18, S-6*)

Policy S-9.7 Hazardous Waste Collection. Conduct frequent and convenient household hazardous waste collection events. (*Imp A-1, A-2, LU-18, S-3, S-10*)

■ Effects Not Found to Be Significant

Implementation of the General Plan Update would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The General Plan Update would lead to an increase in the residential population of the City, as well as additional retail and commercial growth that would increase the daily working population. As a result, traffic conditions could become more congested. In the event of an accident or natural disaster, the increase in traffic in the City could impede the rate of evacuation for employees and residents. Traffic could also increase response times for emergency medical or containment services. The General Plan Update goals and policies identified in Section 4.15 (Transportation/Traffic) are proposed to reduce impacts to the maximum extent possible. In any case, there are no adopted emergency response plans or emergency evacuation plans with which the General Plan Update would conflict.

The County of Ventura and the City of Simi Valley both implement programs to facilitate emergency preparedness. Specifically, the County of Ventura's Office of Emergency Services (OES) administers the County's disaster preparedness and response program and development of the County's Emergency Response Plan. The Emergency Operations Center (EOC) is a centralized location for coordinating Countywide emergency response activities. The EOC is the coordination point between the cities, special districts and the state Office of Emergency Services. The City of Simi Valley Emergency Services Program plans for, responds to, and coordinates the recovery from disasters. The goal of Disaster Service Worker Team personnel is to save lives and protect property by developing programs and emergency operational capabilities in the event of a natural or man-made disaster. Planning for and responding to disasters and emergencies requires many different actions, such as evacuations, shelter set-ups for earthquakes, or preparations for power outages. All of these activities are coordinated and directed by the Emergency Operations Center. Additionally, the City of Simi Valley implements the Community Emergency Response Training (CERT) program, which is designed to provide residents and businesses with skills to become self-reliant and to assist others during disasters.

The City of Simi Valley Multi-Hazard Mitigation Plan provides guidance for the City's response to emergency situations associated with natural and manmade disasters. The mitigation plan provides a list of activities that may assist the City in reducing risk and preventing loss from future hazard events. The

strategies address multi-hazard issues, as well as activities for earthquakes, earth movement, flooding, terrorism, fires, and windstorms.

In addition, Policy S-1.1 (Multi-Hazard Mitigation Plan and NIMS Plan) through Policy S-2.3 (Emergency and Disaster Exercises) of the General Plan Update are directly related to emergency services within the City. For example, Policy S-1.1 (Multi-Hazard Mitigation Plan and NIMS Plan) and Policy S-1.3 (Consistent and Current Emergency Response Plans) requires periodic evaluation of emergency response to Citywide disasters to determine if service improvements are needed. Policy S-2.1 (Mutual Aid Agreements) through Policy S-2.3 (Emergency and Disaster Exercises) would coordinate with the Ventura County Fire Department, the Ventura County Sheriff Department, Los Angeles County and other jurisdictions to identify and implement disaster mitigation actions and to conduct emergency and disaster-preparedness exercises to periodically test operational and emergency plans. Implementation of the policies in the Safety and Noise Element of the General Plan Update would further ensure that there would be *no impact* to the City's emergency response plan.

■ Less-Than-Significant Impacts

Impact 4.8-1 **Implementation of the General Plan Update could result in an increase in the overall routine transport, use, storage, and disposal of hazardous materials within the City. However, with the implementation of the General Plan Update goals and policies, and compliance with local, state, and federal regulations, hazards related to the routine transport, use, storage, or disposal of hazardous materials would be a *less-than-significant* impact.**

The General Plan Update EIR comprehensively addresses the impacts of the proposed Land Use and Circulation policies throughout the City. The introduction of new land uses and the continued build-out of the City overall may result in increased use of hazardous materials and/or the generation of hazardous materials. While there is a possibility that new or changed land uses could result in the transport, use, storage, or disposal of hazardous materials, because the General Plan Update does not include specific development projects, it is impossible to reliably quantify the potential future amount of hazardous materials. However, with additional development, an increase in the potential for hazards associated with hazardous materials and waste would likely occur within the City. The following analysis provides generalized information on the potential for hazards through the routine transport, use, storage, or disposal of hazardous materials associated with the future commercial and industrial uses.

Exposure of persons to hazardous materials could occur in the following manners: improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; transportation accidents; environmentally unsound disposal methods; or fire, explosion or other emergencies. The types and amounts of hazardous materials would vary according to the nature of the activity. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that could present a hazard.

Whether a person exposed to a hazardous substance would suffer adverse health effects depends upon a complex interaction of factors that determine the effects of exposure to hazardous materials: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to

which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; the frequency and duration of exposure; and the individual's unique biological characteristics such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer. Implementation of existing hazardous materials regulations were established at the state level to ensure compliance with federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances.

Improper use, storage, and/or transport of hazardous materials have the potential to adversely affect the environment and current and future residents and visitors to the area. These impacts could result from existing and future land uses in the area, the existing natural gas pipeline(s) in the area, and routine transport of hazardous materials along roadway corridors within or adjoining the project area. There are three major underground petroleum pipelines located in Simi Valley, as described above. Section 4.7.2 (Regulatory Framework) identifies existing federal and state regulations in place to ensure the safe transport of hazardous materials, including natural gas, and to minimize the hazards associated with accidental release of such materials.

Although the overall quantity of hazardous materials and waste generated in the City could increase as a result of implementation of the General Plan Update, all new developments that handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by the USEPA, state, Ventura County, and City of Simi Valley related to storage, use, and disposal of hazardous materials. Both the federal and state governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to a regulating agency. Specifically, any new business that meets the specified criteria must submit a full hazardous materials disclosure report that includes an inventory of the hazardous materials generated, used, stored, handled, or emitted; and emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. The plan needs to identify the procedures to follow for immediate notification to all appropriate agencies and personnel in the event of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators of the business, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel. The Ventura County Fire Department conducts yearly inspections of all these businesses to confirm that their business plan is in order and up to date.

In addition, policies in the Safety and Noise Element of the General Plan Update would reduce the potential exposure of people and the environment to hazardous materials. These include General Plan Policies S-1.1, S-1.2, S-1.3, S-1.4, S-1.5, S-1.6, S-1.7, S-1.8, S-2.1, S-2.2, S-2.3, S-3.1, Sp7.1, S-7.2, S-7.3, S-7.4, S-7.5, S-7.6, S-7.7, S-7.8, S-8.5, S-9.1, S-9.2, S-9.3, S-9.4, S-9.5, S-9.6, and S-9.7. For example, Policy S-9.4 (Hazardous Materials Regulations) would enforce applicable laws requiring all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, produce, or transport, and to notify the appropriate City, county, state, and federal agencies in

the event of a violation. Oversight by the appropriate federal, state, and local agencies regarding compliance of new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these substances. Therefore, impacts associated with hazards to the public or the environment through the routine transport, use, storage, or disposal of hazardous materials within the City would be *less than significant*.

Impact 4.8-2 **Implementation of the General Plan Update could result in a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials to the environment. However, with the implementation of the General Plan Update goals and policies, and compliance with local, state, and federal regulations, hazards related to the accidental release of hazardous material into the environment would be a *less-than-significant* impact.**

Construction

As implementation of the General Plan Update would primarily result in infill and redevelopment of existing uses within the City, existing structures may need to be demolished prior to the construction of new buildings. Demolition of existing structures in the City could result in exposure of construction personnel and the public to hazardous substances such as asbestos and lead-based paints. In addition, the disturbance of soils and the demolition of existing structures could result in the exposure of construction workers or employees to health or safety risks if contaminated structures and/or soils are encountered during construction or maintenance activities. Exposure to contaminated structures or soil could occur from any of the following:

- Possible asbestos-containing materials and lead-based paints associated with the existing on-site structures, pipes, and/or debris
- Unknown contaminants that have not previously been identified

Exposure to hazardous materials during construction activities could occur through any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

While specific development projects are not associated with approval of the General Plan Update, it is assumed that older buildings could be demolished as uses are redeveloped according to the proposed land use plan. With that activity, construction workers and nearby residents and/or workers could potentially be exposed to airborne lead-based paint dust, asbestos fibers, and/or other contaminants. In addition, there is the possibility that future development may also uncover previously undiscovered soil contamination as well as result in the release of potential contaminants that may be present in building materials (e.g., mold, lead, etc.).

Lead and Asbestos

Federal and state regulations govern the renovation and demolition of structures where materials containing lead and asbestos are present. These requirements include: SCAQMD Rules and Regulations pertaining to asbestos abatement (including Rule 1403); Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from CCR Title 8; Part 61, Subpart M of the CFR (pertaining to asbestos); and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the state Department of Health Services. In addition, Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. While specific development projects are not associated with approval of the General Plan Update, a regulatory planning document, it is assumed that older buildings where materials containing lead and asbestos are present could be demolished as part of the General Plan Update. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards.

Soil and Groundwater Contamination

Unknown Contaminated Sites

Aside from the potential release of hazardous materials from demolition of existing structures within the City, grading and excavation of sites for future development resulting from implementation of the General Plan Update may also expose construction workers and the public to potentially unknown hazardous substances present in the soil or groundwater. If any unidentified sources of contamination are encountered during grading or excavation, the removal activities required could pose health and safety risks such as the exposure of workers, materials handling personnel, and the public to hazardous materials or vapors. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In addition, exposure to contaminants could occur if the contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by future development at the contaminated location. If exposed to the hazardous substances, this could result in a significant hazard to the public.

Existing Contaminated Sites

Another potential hazard to construction workers and the public could involve construction activities on existing sites that are known to be contaminated. These sites represent potential health hazards, from the release of hazardous substances into the soil. However, any new development occurring on these documented hazardous materials sites would be preceded by remediation and cleanup under the supervision of the state Department of Toxic Substance Control (DTSC) before construction activities could begin.

Additionally, it is possible that old underground storage tanks (USTs) that were in use prior to permitting and record keeping requirements may be present in the City. If an unidentified UST were uncovered or disturbed during construction activities, it would be closed in place or removed. Removal activities could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing standards as enforced and monitored by the Department of Environmental Health. The extent to which groundwater may be affected, if at all, depends on the type of contaminant, the amount released, and depth to groundwater at the time of the release. If groundwater contamination is identified, remediation activities would be required by the Los Angeles Regional Water Quality Control Board (LARWQCB) prior to the commencement of new construction activities.

Policy S-9.5 (Known Areas of Contaminations) in the Safety and Noise Element would require proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments and remediate the sites, as necessary.

Implementation of, and compliance with, existing state and local regulations as well as General Plan Update Policy S-9.5 (Known Areas of Contamination) and compliance with existing regulations, policies would ensure that construction workers and the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction activities. As such, impacts associated with the exposure of construction workers and the public to hazardous materials during construction activities would be *less than significant*. No mitigation measures are required.

Operation

The precise potential future increase in the amount of hazardous materials transported within the Simi Valley area as a result of implementation of the General Plan Update cannot be predicted because specific development projects are not known at this time. The following discussion focuses on the potential nature and magnitude of risks associated with the accidental release of hazardous materials often used during operations of typical retail-commercial development projects.

Off-Site Transportation of Hazardous Materials

The United States Department of Transportation (USDOT) Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 of the CFR, and implemented by Title 13 of the CCR. The greatest probability of a major hazmat incident is from a transportation accident. Highway 118 transverses the east/west axis of Simi Valley, with heavy truck traffic on this route each day. Approximately one of every 10 commercial vehicles is carrying hazardous materials. Historically, hazardous material incidents frequently occur on the heaviest traveled streets at major intersections and freeway interchanges (City of Simi Valley 2004).

The Union Pacific Company maintains a railroad that runs east to west through the community. Although the odds of a rail hazmat incident are lower than on a roadway, the potential severity is greater due to the numerous rail tanker cars involved and the potential for chemicals and explosive substances to be grouped together.

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. It is possible that licensed vendors could bring some hazardous materials to and from new retail-commercial sites in or outside the Simi Valley area as a result of the projects constructed pursuant to the General Plan Update. However, appropriate documentation for all hazardous waste that is transported in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in CCR Titles 8, 22, and 26, and their enabling legislation set forth in Division 20, Chapter 6.95 of the California Health and Safety Code. In addition, specific project-site developers shall comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to, Title 49 of the CFR. Compliance with all applicable federal and state laws related to the transportation of hazardous materials would reduce the likelihood and severity of accidents during transit.

Hazardous Materials Storage

Hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment. CBC requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable federal and state laws related to the storage of hazardous materials would be implemented to maximize containment (through safe handling and storage practices described above) and to provide for prompt and effective clean up if an accidental release occurs.

Hazardous Materials Use

Hazardous materials use would present a slightly greater risk of accident than hazardous materials storage. However, for those employees who would work with hazardous materials, the amount of hazardous materials that are handled at any one time are generally relatively small, reducing the potential consequences of an accident during handling. Further, specific project-site activities would be required to comply with federal and state laws to eliminate or reduce the consequence of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment, and safety equipment is routinely available in all areas where hazardous materials are used.

The County of Ventura Bureau of Emergency Services personnel would respond to hazardous materials incidents. Major hazardous materials accidents associated with retail-commercial uses are extremely infrequent, and additional emergency response capabilities are not anticipated to be necessary to respond to the potential incremental increase in the number of incidents that could result from implementation of the General Plan Update. Further, adherence to applicable regulations as discussed above would be required to reduce any potential consequences of a hazardous materials operational accident.

Compliance with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and handling through the implementation of established safety practices, procedures, and reporting requirements, as well as compliance with CCR Titles 8, 22, 26, and 49, and their enabling legislation set forth in California Health and Safety Code Division 20, Chapter 6.95, would ensure that impacts associated with hazards to the public or the environment through reasonably foreseeable upset

and accident conditions involving the release of hazardous materials into the environment would be *less than significant*.

Impact 4.8-3 **Implementation of the General Plan Update has the potential to emit hazardous emissions or result in the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. However, adherence to local, state, and federal regulations, as well as the General Plan Update goals and policies would result in a *less-than-significant* impact.**

Under the General Plan Update, there is the potential for a construction site and/or new development to use or emit hazardous or acutely hazardous materials within 0.25 mile of an existing or proposed school. Because the General Plan Update does not include any specific development projects, the type or quantity of hazardous materials used at future construction sites or by developments is unknown.

Simi Valley is served by the Simi Valley Unified School District (SVUSD), which includes twenty-one elementary schools (grades K–6), three middle schools (grades 6–8), three high schools (grades 9–12), one continuation high school (grade 10–12), one adult school, and one independent/alternative school. Refer to Section 4.13 (Public Services). Given the wide distribution of schools in the City, it is probable that one or more schools currently exists within 0.25 mile of a facility that has or could emit hazardous air emissions or handle hazardous materials or wastes. It is equally likely that future development and redevelopment within the City may result in an increase in hazardous emissions and handling of hazardous materials and wastes within 0.25 mile of an existing or proposed school. The California Education Code (Sections 17210, et seq.) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste.

Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, all businesses that handle or have on-site transportation of hazardous materials would be required to comply with the provisions of the VCFD Fire Code and any additional elements as required in the California Health and Safety Code, Division 20, Chapter 6.95, Article 1 for Business Emergency Plan. Both the federal and state governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to a regulating agency. In addition, Policy S-9.6 (Siting of Sensitive Uses) would protect sensitive uses, such as schools, hospitals, daycare facilities, eldercare facilities, residential, and other sensitive uses from uses that generate, use or store hazardous materials. Refer to the discussions for Impact 4.8-1 and Impact 4.8-2 for a list of all federal, state, and local regulations required, addressing hazardous materials as well as any applicable General Plan Update policies.

Compliance with the provisions of the VCFD Fire Code, as well as federal, state, and local regulations, and conformance with the Policy S-9.6 (Siting of Sensitive Uses) of the General Plan Update, would minimize the risks associated with the exposure of schoolchildren to hazardous materials. This impact would be *less than significant*.

Impact 4.8-4 **Implementation of the General Plan Update could place development on a site that is included in a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; however, it would not result in a significant hazard to the public or the environment, since projects would need to adhere to General Plan Update goals and policies, as well as local, state, and federal requirements for remediation and cleanup. This is a *less-than-significant* impact.**

As discussed under Section 4.7.1 (Environmental Setting), the planning area contains sites that have been contaminated by the release of hazardous substances into the soil or groundwater, including sites containing leaking underground storage tanks, voluntary cleanup sites, and small-quantity generators of hazardous waste. Implementation of the General Plan Update could lead to development or re-development of these sites that could create a significant hazard to the public or environment. However, current federal, state, and local regulations require remediation and clean up of such sites before development could take place. Policy S-9.5 (Known Areas of Contamination) requires proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments. If contamination exceeds regulatory action levels, the proponent would be required to undertake remediation procedures prior to grading and development. Therefore, with implementation of existing state and local regulations, as well as with General Plan Update Policy S-9.5 (Known Areas of Contamination), impacts associated with sites listed as a hazardous material site pursuant to Government Code Section 65962.5 within the planning area would be *less than significant*.

Impact 4.8-5 **Implementation of the General Plan Update could expose people or structures to the risk of loss, injury, or death involving wildland fires; however, with the implementation of the fire hazard policies in the Community Safety Element of the General Plan Update, this impact would be *less than significant*.**

Implementation of the General Plan Update could lead to an increase in residential or commercial infill development projects. The City of Simi Valley is an area that is susceptible to wildland fires, therefore, land development is governed by special state and local codes, and property owners are required to follow maintenance guidelines aimed at reducing the amount and continuity of the fuel (vegetation) surrounding structures.

In addition, Policy S-7.1 (Intergovernmental Coordination) through Policy S-7.8 (Funding) of the General Plan Update are directly related to reducing the threat of fire hazards within the City. For example, Policy S-7.5 (Fuel Modification) would require that new development complies with fuel modification requirements of the Ventura County Fire Protection District and Policy S-7.2 (Fire Department Review) would require all new development to incorporate current state, county, and City fire safe building code requirements, as appropriate. Policy S-7.3 (Fire Inspection) would maintain an ongoing fire inspection program to reduce fire hazards associated with critical facilities, public assembly facilities, industrial buildings, and nonresidential buildings. With implementation of the hazard reduction standards, as well as the fire hazard policies in the Safety and Noise Element of the General Plan Update, this impact resulting in the risk of loss, injury, or death involving wildland fires would be *less than significant*.

■ Significant and Unavoidable Impacts

No significant and unavoidable impacts have been identified with respect to hazards/hazardous materials.

■ Cumulative Impacts

Impacts associated with hazardous materials are often site-specific and localized. However, for purposes of this cumulative analysis, the geographic context for cumulative hazards impacts would vary depending on threshold and is identified in the discussions below. Cumulative impacts are only addressed for those thresholds that have a project-related impact, whether it is less than significant, significant, or significant and unavoidable. If “no impact” occurs, no cumulative analysis is provided for that threshold.

The geographic context for an analysis of impacts pertaining to the routine transport or hazardous materials and reasonably foreseeable risk of upset and accident conditions includes a geographic area outside City limits, as hazardous materials and waste would be transported into the City from various locations outside City limits and to off-site disposal sites in a broader area. Specifically, the Gold Coast Recycling Facility in Ventura and the Del Norte Recycling Facility in Oxnard accept a limited amount of recyclable hazardous waste, including electronics, antifreeze, auto and household batteries, oil, oil filters, latex paint, high intensity lamps, and fluorescent tubes. Large quantities of hazardous materials could be taken to any one of numerous hazardous materials disposal facilities in southern California, or even out of state. Routine household chemicals and landscaping materials, including pesticides and herbicides, could be transported into the City from various locations in southern California. However, regardless of the route along which hazardous materials could be transported, compliance with all applicable federal, state, and local regulations related to hazardous materials would ensure that the routine transport, use, or disposal of hazardous materials from cumulative development, even in the larger geographic context, would not result in adverse impacts. Currently no significant hazard exists within the Planning Area. All demolition activities in the City involving removal or disturbance of asbestos or lead-based paint must comply with SCAQMD Rule 1403 and OSHA Construction Safety Orders, which would ensure that impacts from this activity would be less than significant. Site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers and the public to hazardous substances. The amounts of hazardous materials and wastes that could be transported as a result of development under the General Plan Update would be relatively small, as noted, above. Compliance with applicable regulations would ensure that the proposed project would not make a cumulatively considerable contribution to the risk of foreseeable accident or upset from transportation of hazardous materials, including hazardous waste.

The geographic context for an analysis of cumulative impacts relative to hazardous emissions within 0.25 mile of an existing or proposed school would be the service area of the Simi Valley Unified School District. Risks to schools are addressed by General Plan Update Policy S-9.6, which implements strict land use controls, performance standards, and structure design standards for uses that generate, use or store hazardous materials, including development setbacks from sensitive uses such as residential homes, schools, hospitals, daycare and eldercare facilities, high density population facilities (such as movie theaters, auditoriums, museums), and other sensitive uses.

The geographic context for an analysis of development on identified hazardous materials sites is the Planning Area, as these impacts are localized and site specific. Past development has occurred on sites listed on hazardous materials databases, but compliance with federal, state, and local regulations and appropriate remediation of these sites has reduced any impact for residents, visitors, and construction workers on these sites to less than significant. For development pursuant to the General Plan Update, General Plan Policy S-9.5 requires that proponents of projects in known areas of contamination from oil operations or other uses perform comprehensive soil and groundwater contamination assessments, in accordance with applicable standards. If contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development through a cleanup program under the supervision of the Ventura County Environmental Health Division, Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination).

The geographic context for an analysis of risk from wildland fires is the Planning Area and adjacent communities of Moorpark, Thousand Oaks, Agoura Hills, Westlake Village, and the west San Fernando Valley because of the contiguous nature of the mountain ranges surrounding the City. This geographic area is extremely susceptible to wildland fires, particularly during dry weather. Past development in this geographic area, particularly on hillsides, has increased the number of people and structures exposed to the risk of wildland fires. Development in areas identified as at moderate to high risk from wildland fires is governed by special state and local codes, particularly those codified in the California Wildland–Urban Interface Code (contained in the CBC), which reduces risk from wildland fire. Some future development pursuant to the General Plan Update would occur in hillside areas, although the focus of future growth is on infill development. Any development in hillside areas would be required to follow these restrictions and guidelines to reduce risk of wildland fire. With adherence to applicable federal, state, and local regulations governing hazardous materials and compliance with the General Plan Update policies indicated below, the proposed project would not make a cumulatively considerable contribution to any cumulative impact related to risk from wildland fires.

Compliance with federal, state, and local regulations, as well as General Plan Update policies related to hazardous materials and development in areas of moderate to high risk of wildland fires, would ensure that the cumulative impact of the General Plan Update would be *less than significant*.

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