4.7 SAFETY/RISK OF UPSET

This EIR section describes the existing physical setting of the Granada Hills–Knollwood and Sylmar Community Plan Areas (CPAs) as it relates to hazards and hazardous materials. This section also provides a summary of the hazardous materials records search performed for the CPAs, and assesses the potential for adverse impacts on human health and the environment from exposure to hazardous materials resulting from the implementation of the proposed Granada Hills–Knollwood and implementing ordinances and the proposed Sylmar Community Plans and implementing ordinances (proposed plans). Hazardous materials include, but are not necessarily limited to, landfill contamination, methane, solvents, mercury, lead, asbestos, fuels, oils, paints, cleansers, and pesticides that are used in activities such as construction activities or building or grounds maintenance. Potential effects include those associated with exposure to hazardous materials used, stored, transported, or disposed of during construction activities or operations. Potential water quality effects from runoff that could contain hazardous or polluted materials during construction or operational activities are discussed in Section 4.8 (Hydrology/Water Quality). Impacts related to toxic air contaminants that could be emitted during construction and operation of projects related to implementation of the proposed plan are discussed in Section 4.2 (Air Quality). Impacts related to seismic activity that poses potential hazards to the project site are discussed in Section 4.5 (Geology/Soils and Mineral Resources).

Three comments were received concerning hazards and hazardous materials. Full bibliography entries for all reference materials are provided in Section 4.8.5 (References) of this section.

4.7.1 Environmental Setting

Definitions

California Health and Safety Code Chapter 6.5 sets forth definitions and regulations related to hazardous materials management and disposal. This EIR uses the definition given in this chapter, which defines a hazardous material as:

> Any material that, 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 environment. "Hazardous Materials" include but are not limited to, hazardous substances, hazardous waste, and any material which the handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

A "hazardous waste" for the purpose of this analysis, is any hazardous material that is abandoned, discarded, or recycled, as defined by California Health and Safety Code Section 25124. The criteria that characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

Hazard versus Risk

Workers and general public health are potentially at risk whenever hazardous materials have been used or where there could be an exposure to such materials. 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. Exposure to some chemical substances may harm internal organs or systems in the human body, ranging from temporary effects to permanent disability, or death. Hazardous materials that result in adverse effects are generally considered "toxic." Other chemical materials, however, may be corrosive, or react with other substances to form other hazardous materials, but they are not considered toxic because organs or systems are not affected. Because toxic materials can result in adverse health effects, they are considered hazardous materials, but not all hazardous materials are necessarily "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.

The risk to human health is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose. That is to say, 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. For example, a high probability of exposure to a low toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to a very high toxicity chemical might. Various regulatory agencies, such as the U.S. Environmental Protection Agency (USEPA), State Water Resources Control Board (SWRCB), the California Department of Toxic Substances Control (DTSC), and state and federal Occupational Safety and Health Administrations (OSHA) are responsible for developing and/or enforcing risk-based standards to protect the public and the environment.

Granada Hills–Knollwood CPA and Adjacent Uses

The Granada Hills–Knollwood CPA encompasses an area of approximately 9,057 acres, located approximately 21 miles north of downtown Los Angeles. The Granada Hills–Knollwood CPA is bounded by County of Los Angeles lands on the northwest, the Sylmar CPA (City of Los Angeles) on the northeast, the Northridge Community Plan Area (City of Los Angeles) on the southwest, and the Mission Hills–Panorama City–North Hills Community Plan Area (City of Los Angeles) on the southeast. The Granada Hills–Knollwood CPA is irregularly shaped and is generally bounded by Devonshire and Lassen Streets on the south, the Santa Susana Mountains on the north, Aliso Canyon on the west, and the Golden State Freeway (I-5) and the San Diego Freeway (I-405) on the east.

Land uses in the Granada Hills–Knollwood CPA consist primarily of single-family and multi-family residential, with commercial and industrial land uses. Residential neighborhoods are located in the southern and western portion of the Granada Hills–Knollwood CPA. Most of the residential land uses are single-family residences, which make up approximately 79 percent of the total housing stock. Commercial development consists of approximately 2 percent of the total land area. Most of the commercial uses are located within the small-scale central business district on Chatsworth Street and in a number of commercial areas along Balboa Boulevard, Chatsworth Street, and Zelzah Avenue. Industrial land uses in the Granada Hills–Knollwood CPA are minimal, comprising only 0.01 percent of the total land area. Some limited industrial use (limited to storage facilities) exists where Balboa Boulevard meets San Fernando Road, at the northern tip of the plan area adjoining the Golden State Freeway, and where Chatsworth Street adjoins the San Diego Freeway. The Granada Hills–Knollwood CPA as a whole

includes a total of 3,044 acres (34 percent) of open space and 1,164 acres (13 percent) of public facility land, the majority of which is located in the northern half of the community.

Sylmar CPA and Adjacent Uses

The Sylmar CPA contains approximately 6,823 acres and is located 28 miles north of the downtown Los Angeles Civic Center. The Sylmar CPA is generally bounded by the Los Angeles City boundary line on the north and east, the City of San Fernando on the south and southeast, and I-405 and I-5 on the west. The adjacent Granada Hills–Knollwood CPA is located to the west of I-405 and I-5. The City of Santa Clarita and the Angeles National Forest are directly to the north and northeast of Sylmar.

The predominant land use in Sylmar is residential, which occurs throughout the Sylmar CPA. Residential uses comprise the largest portion of land uses within Sylmar, with 4,380 acres of the community designated for residential uses. Nearly 89 percent of all residential land is designated for single-family uses, with the remaining 11 percent designated for multi-family use. Public Facilities, such as schools, fire stations, hospitals, and utilities, is the second largest land use designation in the community, representing 1,046 acres or 15 percent. Large areas of open space exist north of I-210, in the northwest corner of the planning area, and in the eastern portion. Open Space comprises 676 acres or 10 percent of the community. The largest open space area is located in the eastern portion of the community, north of the Foothill Freeway. Commercial areas are concentrated along Foothill Boulevard, paralleling I-210, San Fernando Road, and northeast of the interchange between I-5 and I-210. Industrial uses are concentrated along I-5 north of Roxford Street, San Fernando Road, and Foothill Boulevard in the southeastern corner of Sylmar and comprise approximately 530 acres or 8 percent of the CPA.

Records Search

A review of federal and state regulatory agency databases was conducted by Environmental Data Resources (EDR) Inc. on May 18, 2009. The records search identifies properties located in the general vicinity of the CPAs that may have contributed to a release of hazardous substances (e.g., spills, leaks, incidents, etc.) to the soil and/or groundwater.

The existing and historic hazardous materials likely to be encountered within the CPAs were identified through a search of federal and state regulatory agency databases for a 0.5-mile buffer area surrounding the respective CPA boundaries. The agency lists identify facilities permitted to use hazardous materials, as well as environmental cases and spill sites. Detailed information, including the precise location and identity of these hazardous material sites, is identified in the EDR report (Appendix D1 and Appendix D2). A summary of the sites likely to affect or be affected by the activities related to the proposed plan are listed in Table 4.7-1 (Summary of Permitted Facilities using Hazardous Materials) and Table 4.7-2 (Summary of Environmental Cases and Spill Sites).

Table 4.7-1 Summary of Permitted Facilities Using Hazardous Materials

Agency Database	*No. of Sites Identified*
RCRC-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1kg of acutely hazardous waste per month.	17
RCRA_SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	117
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Transporters are individuals or entities that move hazardous waste from the generator of offsite to a facility that can recycle, treat, store, or dispose of the waste. Treatment, Storage and Disposal Facilities (TSDFs) treat, store or dispose of hazardous waste including land-based disposal sites.	1
SWEEPS UST—Statewide Environmental Evaluation and Planning System: This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	96
UST—Underground Storage Tanks: Facilities permitted to maintain underground storage tanks (USTs)	44
CA FID UST—Facility Inventory Database: Facilities on a historical listing of active and inactive USTs.	109
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of UST sites.	79
AST—Above Ground Storage Tanks: Facilities registered with aboveground storage tanks	0
Dry Cleaners—Dry Cleaner Related facilities: A list of drycleaner-related facilities that have EPA ID numbers, which are facilities with certain SIC codes, such as: power laundries; family and commercial laundries; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	28
TRIS—Toxic Chemical Release System: Facilities that release toxic chemicals to the air, water, and land in reportable quantities under the Emergency Planning and Community Right-to-Know Act (SARA Title III, Section 313).	0
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the California Air Resources Board (CARB) and local air pollution agencies.	77
HAZNET—Hazardous Waste Information System: Facilities that have filed hazardous waste manifests with the Department of Toxic Substances Control (DTSC).	462
FINDS—Facility Index System: FINDS contains both facility information and "pointers" to other sources of information that contain more detail. These include: Resource Conservation and Recovery Information System (RCRIS); Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (which includes both the FIFRA [Federal Insecticides Fungicide Rodenticide Act] and the [Toxic Substances Control Act] TSCA Enforcement System); FTTS (which includes the FIFRA/TSCA Tracking Systems); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLIS); DOCKET (enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PCB Activity Database System (PADS); RCRA-J (Resource Conservation and Recovery Act for medical transporters/disposers); Toxic Chemical Release Inventory System (TRIS); and TSCA.	171
PADS—The PCB Activity Database: Identifies generators, transporters, commercial storers and/or brokers, and disposers of PCBs who are required to notify the United States Environmental Protection Agency of such activities.	0
MLTS—The Material Licensing Tracking System: Sites which poses or use radioactive materials and are subject to NRC licensing requirements.	0
HWT—Hazardous Water Transporters	2

Table 4.7-1 Summary of Permitted Facilities Using Hazardous Materials

Agency Database	*No. of Sites Identified*
HWP—Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1

SOURCE: Environmental Data Resources, Inc., The EDR DataMap Environmental Atlas (January 27, 2011)

Table 4.7-2 Summary of Environmental Cases and Spill Sites

Agency Database	*Number of Sites Identified*
Environmental Cases	
SLIC—Spills, Leaks, Investigations, and Cleanup Program: Sites with small to medium non-fuel contamination. Most are regulated under site cleanup requirements.	13
CERCLIS—Comprehensive Environmental Response, Compensation, and Liability Information System: Sites that are either proposed to or on the National Priorities List (NPL) and sites that are in the screening and assessment phase for possible inclusion on the NPL	0
RAATS—RCRA Administrative Action Tracking System: Enforcement actions taken under RCRA pertaining to major violations	1
VCP—Voluntary Cleanup Program: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DSTC oversee investigation and/or cleanup activities and have agreed to cover DTSC's costs	4
DEED—Deed Restriction Listing: Sites that have been issued a deed restriction because of presence of hazardous materials	2
Notify 65—Proposition 65 Records: Facilities that have reported a release that could threaten a drinking water source	1
SWF/LF—Solid Wastes Facilities and/or Landfill Sites: Contain an inventory of solid waste disposal facilities or landfills in a particular state. Active, inactive, or closed solid waste disposal sites	2
CA WDS—Water Discharge System, California Water Resources Control Board: Sites that have been issued waste discharge requirements	11
SCH—Proposed and existing schools sites that are being evaluated by DTSC for possible hazardous materials contamination	3
FTTS: Tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA, and EPRCA (emergency Planning and Community Right-to-Know Act) over the previous 5 years	5
LUST—Leaking Underground Storage Tanks: An inventory of reported leaking underground storage tank incidents	51
CORTESE: Identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration	2
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration	36
WMUDS/SWAT—Waste Management Unit Database System: Used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board (SWAT)	1
EnviroStor: DTSC recently replaced the "CalSites" database with a new database of hazardous substance release sites, known as the "EnviroStor" database. The DTSC's site Mitigation and Brownfield Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further.	20
RESPONSE: Sites where DTSC is involved in the remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk	3

Table 4.7-2 Summary of Environmental Cases and Spill Sites

Agency Database	*Number of Sites Identified*
US Brownfield: The EPA's listing of Brownfields properties addressed by Cooperative Agreement Recipients and Brownfields properties addressed by Targeted Brownfield Assessments	1
FUDS: Locations of Formerly Used Defense Sites Properties (FUDS) where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.	1
DOT OPS: Department of Transportation, Office Pipeline Safety Incident and Accident data	7
Environmental Cases—No Further Action or Referred to Another Agency	
CERCLIS-NFRAP—Comprehensive Environmental Response, Compensation, and Liability Information System—No Further Remedial Action Planned: Sites that have been removed or archived from the inventory of CERCLIS sites.	2
Spill Sites	
ERNS—Emergency Response Notification System: Records and stores information on reported releases of oils and hazardous substances	127
HMIRS—Hazardous Materials Incident Report System: Contains hazardous material spill incidents reported to the Department of Transportation	6
CHMIRS—California Hazardous Materials Incident Report System: Information on reported hazardous material incidents, i.e. accidental releases or spills	46

SOURCE: Environmental Data Resources, Inc., The EDR DataMap Environmental Atlas (January 27, 2011)

Permitted Facilities Using Hazardous Materials

Permitted uses of hazardous materials include those facilities that use hazardous materials or handle hazardous wastes in accordance with current hazardous materials and hazardous waste regulations. Because the use and handling of hazardous materials from these sites is considered low, although there can be instances of unintentional chemical releases. In such cases, the site would be tracked in the environmental databases as an environmental case (described separately below). Permitted sites without documented releases are, nevertheless, potential sources of hazardous materials in the soil and/or groundwater (compared to sites where there are no hazardous materials used or stored) because of accidental spills, incidental leakage, or spillage that may have gone undetected. Table 4.7-1 identifies the type and total number of permitted facilities within the 0.5-mile buffer area of the CPA boundaries. Many of the facilities are permitted for more than one hazardous material use and, therefore, could appear in more than one database.

Environmental Cases and Spill Sites

Environmental cases are open for those sites that are suspected of releasing hazardous materials or have had cause for hazardous materials investigations and are identified on regulatory agency lists. Identification of hazardous materials in soil or groundwater at these sites is generally detected during site disturbance activities, such as removal or repair of an underground storage tank (UST), a spill of hazardous materials, or excavation for construction purposes. The status of each case can change with time, and new cases are periodically added to the databases. Table 4.7-2 list the type and number of "Environmental Cases," "Environmental Cases—No further Action or Referred to Another Agency,"

and "Spill Sites" within a 0.5-mile buffer of the CPA boundaries. Many of the facilities are permitted for more than one hazardous material use and, therefore, could appear in more than one database.

Use, Transport, and Abatement of Hazardous Materials

Hazardous Materials Use

Hazardous materials in the CPAs are routinely used, stored, and transported in commercial and industrial uses. The CPAs includes hazardous materials users and waste generators. Federal, state, and local agency databases maintain comprehensive information on the locations of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require accidental release scenario modeling and risk management plans to protect surrounding land uses.

Transportation of Hazardous Materials

The transport of hazardous materials throughout the CPAs is regulated by the State Department of Transportation and California Highway Patrol (Caltrans). The Granada Hills–Knollwood CPA is located west of the Golden State Freeway (I-5) and the San Diego Freeway (I-405). The Sylmar CPA is located east of the I-5 and I-405. There is a heightened risk of a hazardous material leak or spill in the CPAs due to the volume of traffic and the nature of the materials that are be routinely transported through the freeways.

Asbestos

Asbestos, a naturally occurring fibrous material, was used in many building materials for fireproofing and insulating properties before many of its most common construction-related uses were banned by the USEPA between the early 1970s and 1991 under the authority of the Clean Air Act (CAA) and the Toxic Substances Control Act (TSCA). Loose insulation, ceiling panels, and brittle plaster are potential sources of friable (easily crumbled) asbestos. Since inhalation of airborne asbestos fibers is the primary mode of asbestos entry into the body, friable asbestos presents the greatest health threat. Nonfriable asbestos is generally bound to other materials such that it does not become airborne under normal conditions. Any activity that involves cutting, grinding, or drilling during demolition (especially demolition of older (pre-1980 structures), or relocation of underground utilities, could result in the release of friable asbestos fibers unless proper precautions are taken. Asbestos-related health problems include lung cancer and asbestosis. Therefore, demolition of the existing structures could result in the release of friable asbestos within the CPAs.

Lead

Lead is a naturally occurring metallic element. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with lead-based paint. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems, because

it is easily absorbed into developing systems and organs. Inspection, testing, and removal (abatement) of lead-containing building materials must be performed by state-certified contractors who are required to comply with applicable health and safety and hazardous materials regulations. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities for the CPAs. It is likely that structures constructed prior to 1978 used lead-based paint and abatement will be required.

Household Hazardous Waste

The USEPA defines household waste as "leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive." According to the USEPA, Americans generate approximately 1.6 million tons of household waste per year, while the average home can accumulate as much as 100 pounds of household hazardous waste in the basement or garage or in storage closets. Methods of improper disposal of household hazardous wastes commonly include pouring them down the drain, on the ground, into the storm sewers, or in some cases, putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

Aviation Hazards

The closest airport to the CPAs is Whiteman Airpark located at 12653 Osborne Street in Pacoima. Whiteman Airpark is approximately 3 miles east of Granada Hills–Knollwood CPA and 3.75 southeast of Sylmar CPA. The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. The Van Nuys Airport is approximately 5 miles south of the Granada Hills–Knollwood CPA and 7 miles southwest of the central portion of the Sylmar CPA. Granada Hills–Knollwood CPA and Sylmar CPA are not subject to greater aviation hazards than the rest of the City of Los Angeles.

Chlorine Gas

The Department of Water and Power's Filtration Plant located at 13101 Sepulveda Boulevard in Sylmar and the Metropolitan Water District's Joseph Jensen Filtration Plant located at 13100 Balboa Boulevard in Granada Hills still use chlorine gas for disinfection purposes. Chlorine gas is used for water purification but can be deadly when inhaled. A rupture, either by accident or attack, could endanger people within 14 miles in urban areas or 25 miles in suburban and rural areas, depending on wind conditions.[66] Storage, use and handling of chlorine gas are regulated by the Los Angeles Fire Department and the Los Angeles County Certified Unified Program Agency program (as discussed below under Regulatory Framework).

Methane Gas (Granada Hills–Knollwood)

Methane gas is produced by anaerobic decay of organic matter deep under the earth's surface and is the major component of natural gas, about 87 percent by volume. In common usage, deposits rich in natural gas (i.e., methane) are called natural gas fields. At room temperature and standard pressure, methane is a

[66] Harrison Sheppard, *Valley Water Plants at Risk Study: Rail Cars Easy Terror Target* (April 10, 2007), http://www.thefreelibrary.com/_/print/PrintArticle.aspx?id=161831118 (accessed January 17, 2012).

colorless, odorless gas. While not toxic, it is highly flammable and may form explosive mixtures with air. Methane is also an asphyxiant and may displace oxygen in an enclosed space. The concentrations at which flammable or explosive mixtures form are much lower than the concentration at which asphyxiation risk is significant. Because natural gas is lighter than water, it tends to rise from its sources until it either seeps to the surface or is trapped by a nonpermeable layer of rock. When structures are build on or near landfills or naturally occurring gas fields, methane gas can penetrate the buildings' interiors and expose occupants to significant levels of methane.

The Sunshine Canyon Landfill is located at 14747 San Fernando Road within the Granada Hills–Knollwood CPA. Landfill methane is produced when organic materials (such as yard waste, household waste, food waste, and paper) are decomposed by bacteria under anaerobic conditions (i.e., in the absence of oxygen). Methane production varies greatly from landfill to landfill depending on site-specific characteristics such as waste in place, waste composition, moisture content, landfill design and operating practices, and climate. Unless captured first by a gas recovery system, methane generated by the landfill is emitted when it migrates through the landfill cover. The Granada Hills–Knollwood CPA is located in a designated Methane and Methane Buffer Zone. The Sylmar CPA is not located in a designated Methane and Methane Buffer Zone. As such, methane gas, commonly known as natural gas, may underlay individual development sites in the Granada Hills–Knollwood CPA. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable substance, and human health risks associated with natural gas poisoning. Special development regulations apply to projects located in methane and methane buffer zone areas.

Methane Zones and Methane Buffer Zones in the Granada Hills–Knollwood CPA are shown on Figure 4.7-1 (Methane and Methane Buffer Zones).

Oil Fields (Granada Hills–Knollwood)

Oil fields and oil production activities that take place therein present a variety of hazards that take on heightened concern in urbanized areas. As a contaminant released into the environment, oil is harmful to human health and wildlife. For example, nearby residents and employees of unrelated businesses as well as workers in the oil fields can be exposed to toxic air contaminants and dust from oil production. When released into an aquatic environment, such as the ocean or estuary, oil can poison fish, shellfish, birds and mammals. Furthermore, the economic costs of clean up and disruption of commercial activities can be very high. In the soil, unconstrained oil seepage contaminates both the soil and renders groundwater unfit for consumption. Oil is also flammable and explosive; hence oil production activities can also pose both fire and explosion hazards. According to the State of California Department of Conservation, Division of Oil and Gas, there are no oil wells or state designated oil fields within the Sylmar CPA.[67] However, there are three state-designated oil fields within the Granada Hills–Knollwood CPA that coincide with the three methane zones as shown in Figure 4.7-1.[68]

[67] Los Angeles City Planning Department, Geographic Information System.
[68] Los Angeles City Planning Department, Geographic Information System.

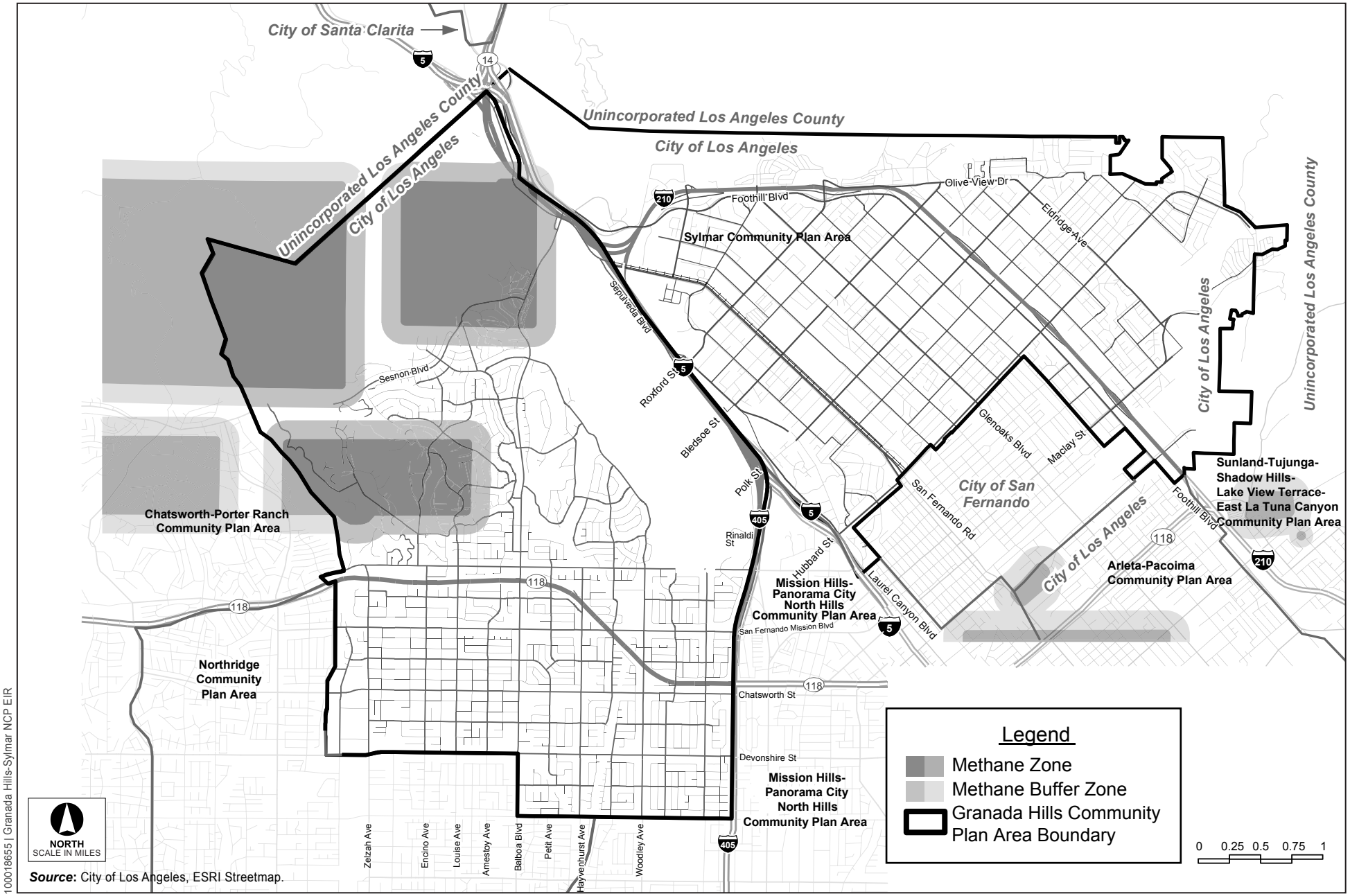

Figure 4.7-1

Methane and Methane Buffer Zones

ATKINS

Existing Hazardous Materials Sites

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. This act is also referred to as the Superfund Act, and the sites listed under it are referred to as Superfund sites. Under CERCLA, the 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. CERCLIS includes sites which are on the National Priorities List (NPL) or are being considered for the NPL. No sites within the Granada Hills are currently listed in the CERCLIS database or the NPL.[69] Three sites within the Sylmar are currently listed in the CERCLIS database but not on the NPL.[70]

Toxic Release Inventory

The Toxics Release Inventory (TRI) is a USEPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain industry groups as well as Federal facilities. TRI sites are known to release toxic chemicals into the air. The USEPA closely monitors the emissions from these facilities to ensure that their annual limits are not exceeded. TRI reports provide accurate information about potentially hazardous chemicals and their uses to the public in an attempt to give communities more power to hold companies accountable for their actions and to make informed decisions about how such chemicals should be managed. According to the USEPA records, there are no facilities in the Granada Hills that are listed on the TRI for year 2009 (the most recently available data).[71] According to the USEPA records, there are six facilities in the Sylmar that are listed on the TRI for year 2009 (the most recently available data).[72]

Hazardous Waste Generators

Many types of businesses can be producers of hazardous waste. Small businesses such as light industrial, auto sales and services are usually generators of small quantities of hazardous waste. Generally, small-

[69] U.S. Environmental Protection Agency. Superfund—Search Superfund Site Information City Granada Hills. http://cumulis.epa.gov/supercpad/cursites/srchrslt.cfm?start=1&CFID=5049713&CFTOKEN=24409386&jsessionid=e0301295bd1f21f06c8d5b44686d285b761d (accessed March 29, 2011).
[70] U.S. Environmental Protection Agency. Superfund—Search Superfund Site Information Sylmar. http://cumulis.epa.gov/supercpad/cursites/srchrslt.cfm?start=1&CFID=5049713&CFTOKEN=24409386&jsessionid=e0301295bd1f21f06c8d5b44686d285b761d (accessed March 29, 2011).
[71] U.S. Environmental Protection Agency. Toxic Release Inventory Program (TRI) Database. http://www.epa.gov/cgi-bin/broker?zipcode=+91344&submit2=Go&view=ZPFA&trilib=TRIQ0&sort=_VIEW_&sort_fmt=1&state=&city=&spc=&zipcode=12345&zipsrch=yes&chemical=_ALL_&industry=ALL&year=2009&tab_rpt=1&fld=TRIID&fld=RELLBY&fld=TSFDSP&_service=oiaa&_program=xp_tri.sasmacr.tristart.macro (accessed March 29, 2011).
[72] U.S. Environmental Protection Agency. Toxic Release Inventory Program (TRI) Database. http://www.epa.gov/cgi-bin/broker?zipcode=+91344&submit2=Go&view=ZPFA&trilib=TRIQ0&sort=_VIEW_&sort_fmt=1&state=&city=&spc=&zipcode=12345&zipsrch=yes&chemical=_ALL_&industry=ALL&year=2009&tab_rpt=1&fld=TRIID&fld=RELLBY&fld=TSFDSP&_service=oiaa&_program=xp_tri.sasmacr.tristart.macro (accessed March 29, 2011).

quantity generators are facilities that produce between 100 and 1,000 kilograms (Kg) of hazardous waste per month (approximately equivalent to between 220 and 2,200 pounds, or between 27 and 275 gallons).

Larger businesses such as chemical manufacturers, large electroplating facilities, and petroleum refineries, can generate large quantities of hazardous waste. The USEPA defines a large-quantity generator as a facility that produces over 1,000 Kg (2,200 pounds or about 275 gallons) of hazardous waste per month. As discussed later in Section 4.6.2 (Regulatory Framework), large-quantity generators are fully regulated under the Resources Conservation and Recovery Act (RCRA). According to the most recent USEPA and City data available, there are 10 large-quantity generators[73] and 41 small-quantity generators[74] scattered in Granada Hills. In addition, there are 15 large-quantity generators[75] and 72 small-quantity generators[76] scattered in Sylmar.

Leaking Underground Storage Tanks

Leaking underground storage tanks (LUSTs) are one of the greatest environmental concerns of the past several decades. According to data from the State Water Resources Control Board, there are underground storage tank leaks that have been reported in the CPA. Table 4.7-3 (LUST Cleanup Status Summary for the Granada Hills–Knollwood and Sylmar CPAs) provides a summary of the status of each LUST site within each CPA. Complete detail of the LUST site, address, and cleanup status are shown in Appendix D1 and Appendix D2.

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[73] U.S. Environmental Protection Agency. RCRA Info Search Result: Granada Hills LQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=granada+hills&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=LQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

[74] U.S. Environmental Protection Agency. RCRA Info Search Result: Granada Hills SQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=granada+hills&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=SQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

[75] U.S. Environmental Protection Agency. RCRA Info Search Result: Sylmar LQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=Sylmar&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=LQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

[76] U.S. Environmental Protection Agency, RCRA Info Search Result: Sylmar SQG, http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=sylmar&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=SQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

Table 4.7-3 LUST Cleanup Status Summary for the Granada Hills–Knollwood and Sylmar CPAs

Granada Hills–Knollwood CPA	
Not Available	18
Completed—case closed	10
Open/ Open(Remediation)/ Open (Referred)	3
Open—site assessment	1
Total	*32*
Sylmar CPA	
Not Available	16
Completed—case closed	12
Open—site assessment	4
Total	*32*

SOURCE: State Water Resources Control Board, Geotracker, http://geotracker.waterboards.ca.gov/map.

Fire Hazards

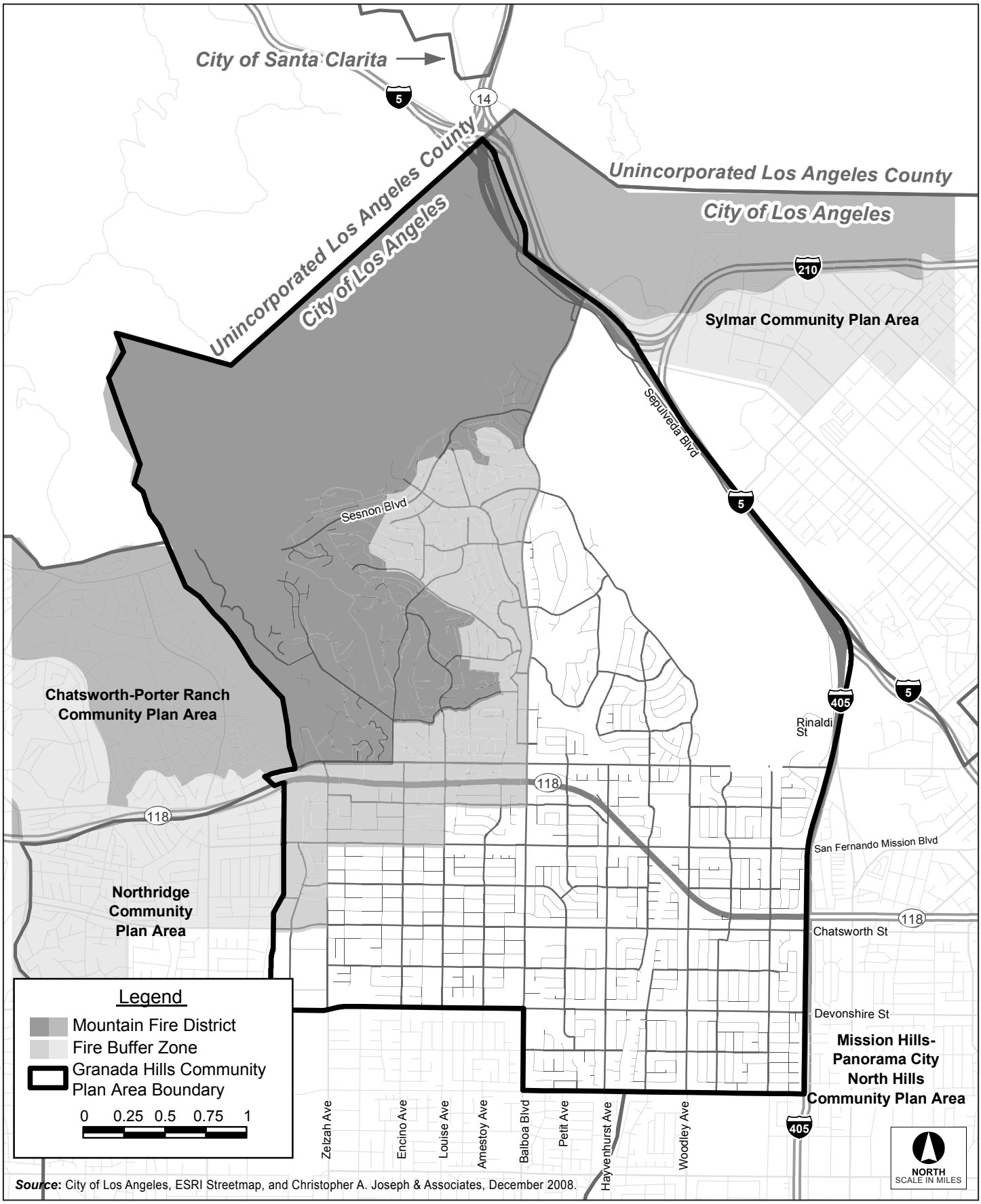
Wildland Fires

Brush fires continue to be a major threat to life and property throughout the region due to unique fuel, terrain, and climatic conditions. The hazard is especially great when the dry "Santa Ana" winds arrive, usually in the fall and winter seasons. In response to such conditions, the Very High Fire Hazard Severity Zone was established in the City of Los Angeles in 1999 and replaced the older "Mountain Fire District" and "Buffer Zone." Based on the premise that fire prevention is the best method for deducing fire incidence and devastation, new construction in the "Zone" must comply with a variety of strict requirements including provisions for emergency vehicle access, use of approved building materials and design, brush clearance and so forth. Within the CPAs, lands designated Very High Fire Hazard Severity Zone are located in the hilly northern and western portions of the Granada Hills–Knollwood CPA and hilly northern and eastern portions of the Sylmar CPA.[77] Fire zones are illustrated on Figure 4.7-2a (Fire Zones [Granada Hills–Knollwood CPA]) and Figure 4.7-2b (Fire Zones [Sylmar CPA]).

Urban Fires

The CPAs and surrounding area are characterized by features typical of the urban landscape and include commercial and industrial uses. Urban fires can result from a number of causes, including arson, carelessness, home or industrial accidents, or from ignorance of proper safety procedures. The Uniform Building Code regulates developments and requires certain built-in fire protection devices when

[77] Los Angeles Fire Department Brush Clearance Unit, Brush Clearance Zones Map (December 2003), http://lafd.org/brush/lafd_bcz8x11.pdf.



100018655 | Granada Hills-Sylmar NCP EIR

Figure 4.7-2a

Fire Zones (Granada Hills–Knollwood CPA)

ATKINS

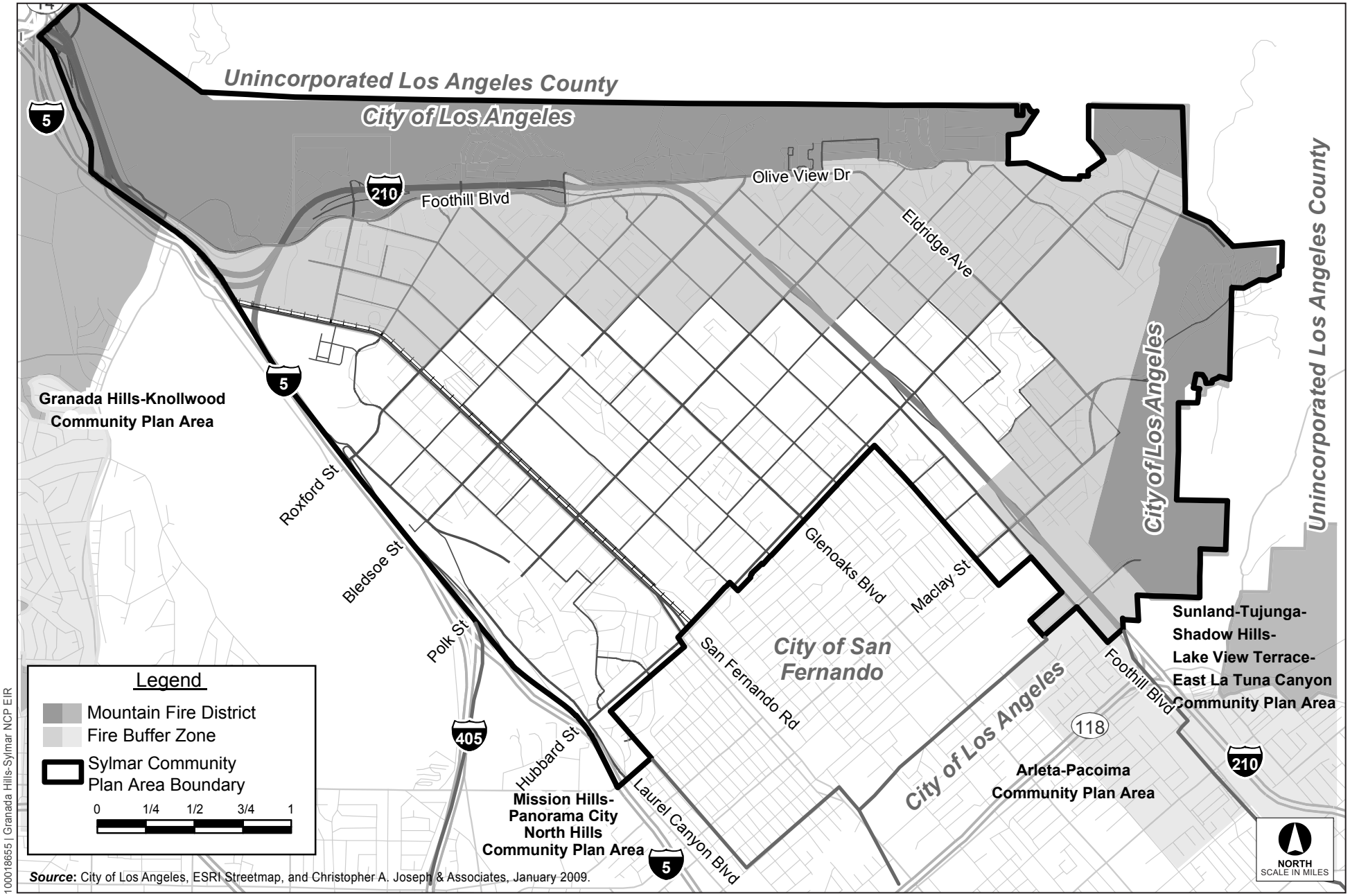


Figure 4.7-2b
Fire Zones (Sylmar CPA)

ATKINS

maximum allowable uses or heights are exceeded, or the building use presents a life or property protection problem. In addition, Los Angeles Fire Department (LAFD) has guidelines to lessen the impacts of a fire hazards such as inspection programs.

Oil Field Fires (Granada Hills–Knollwood)

Oil is also both flammable and explosive; hence, oil production activities can also pose both fire and explosion hazards. There are no oil fields in Sylmar; however, three state-designated oil fields within the Granada Hills–Knollwood CPA.[78] Oil field fires can exist on a small scale, such as an oil field spill catching fire, or on a huge scale with ignited high pressure wells. The crude oil that is burned during the oil fire could be hazardous to the environment. The LAFD has guidelines to lessen the impacts of these kinds of fire hazards as well as equipment and staff to combat such fires.

Emergency Response

Any potential hazard in the CPAs resulting from a manmade or natural disaster may result in the need for evacuation. Homeland Security has brought disaster awareness to the forefront of the minds of the community, safety officials, and City staff. The release of a hazardous material to the environment can result in adverse impacts to the environment, property, and/or human health. The significance of those impacts is dependent on the type, location, and quantity of the material released. Although hazardous material incidents can happen almost anywhere, uses such as industrial centers, where hazardous materials are used or stored, may be susceptible to a higher risk.

In 1980 the City adopted the Emergency Operations Ordinance (Ordinance No. 153, 772) which established a multi-agency Emergency Operations Organization (EOO) under the direction of the Mayor and administration of an Emergency Operations Board (EOB).[79] The City Emergency Operations Organization (EOO) implements the goals and policies of Safety Element. The Safety Element outlines the scope of the EOO's ongoing efforts to use experiences and new information to improve the City's hazard program. The EOO Master Plan (Master Plan) and individual agency Emergency Response Plans set forth procedures for City personnel to follow in the event of an emergency. Annexes to the Master Plan include hazards-specific plans (e.g., flood), situational contingency plans for known or anticipated events and pre-and post events plan (e.g., Recovery and Reconstruction Plan). In the event of a disaster or emergency, the Mayor assumes emergency powers, as defined by law. City agencies follow procedures contained in their emergency plans, under the discretion of the Mayor and Chief of Police, pursuant to EOO protocols set for in the EOO ordinance and plans. In addition, the CPAs adjoin other cities as well as County and federally controlled lands, and the City of Los Angeles participates in a variety of agreements with other jurisdictions for cooperative response and management of fires and other emergency incidents.

[78] Los Angeles City Planning Department, Geographic Information System.
[79] City of Los Angeles, City of Los Angeles *General Plan*, Safety Element (November 26, 1996), p. 1-1.

4.7.2 Regulatory Framework

Federal

Several federal agencies regulate hazardous materials. These include the USEPA, Department of Labor (Federal Occupational Health and Safety Administration [OSHA]), and the Department of Transportation (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 there under):

- 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
- Clean Air Act (CAA)—Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) rules
- Toxic Substances Control Act (TSCA)—Asbestos ban and phase-out rules
- Federal Regulation 49 CFR Title 14 Part 77—Establishes standards and notification requirements for objects affecting navigable airspace.

The USEPA is the primary federal agency responsible for 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. The U.S. Consumer Product Safety Commission (CPSC) has also developed bans on the use of asbestos in certain consumer products such as textured paint and wall patching compounds.

State

Primary state agencies with jurisdiction over hazardous chemical materials management include 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), state Office of Emergency Services (OES—California Accidental Release Prevention implementation), Department of Fish and Game (DFG), Air Resources Board (CARB), Department of Transportation (Caltrans), state Office of Environmental Health Hazard Assessment (OEHHA—Proposition 65 implementation), and the California Integrated Waste Management Board (CIWMB). The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol (CHP) and Caltrans. Hazardous materials 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)—release of and exposure to carcinogenic chemicals
- Hazardous Substances Act—cleanup of contamination
- Hazardous Waste Management Planning and Facility Siting (Tanner Act)—preparation of hazardous waste management plans and the siting of hazardous waste facilities
- Hazardous Materials Storage and Emergency Response—including response to hazardous materials incidents

State regulations and agencies pertaining to hazardous materials management and worker safety are described below.

California Environmental Protection Agency (Cal/EPA)

The California Environmental Protection Agency (Cal/EPA) has broad jurisdiction over hazardous materials management in the state. Within Cal/EPA, the Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of state 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 Regional Water Quality Control Board (RWQCB), which operates under the jurisdiction of Cal/EPA, 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 (DTSC)

The DTSC regulates hazardous waste in California under the authority granted to it by the federal Resource Conservation and Recovery Act (RCRA) of 1976, 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 relevant pending legislation to ensure that it reflects the goals of the DTSC. Once legislation is adopted, the DTSC's major program areas develop implementing regulations and consistent program policies and procedures. The implementing regulations spell out what hazardous waste handlers must do to comply with the law. Under the provisions of 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.

California's Hazardous Waste Control Law (HWCL), adopted in 1972, provides the general framework for the regulation of hazardous wastes within the state. The DTSC is the state's lead agency charged with the responsibility for 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 permit for, and inspection of, facilities involved in the generation and/or treatment, storage and disposal of hazardous wastes.

Tanner Act

Although there are numerous state policies that deal with hazardous waste materials, the most comprehensive is the Tanner Act (AB 2948) adopted in 1986. The Tanner Act governs the preparation of hazardous waste management plans and the siting of hazardous waste facilities within the State of California. The act also mandates the adoption of a Hazardous Waste Management Plan by every county in the state, which must include provisions to 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. The CUPA that has jurisdiction in the City of Los Angeles is the Los Angeles County CUPA.

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 California Health and Safety Code Division 20, Chapter 6.95.

The list of regulated substances is found in Article 8, Section 2770.5, of the CalARP program regulations. The businesses which store or handle a regulated substance in quantities exceeding the regulatory threshold are required to implement an Accidental Release Prevention Program. In addition, some businesses 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 site and the mitigation measures that can be implemented to reduce this accident potential. The purpose of an 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 of the site 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 the potential impact of external events such as seismic activity.

Worker and Workplace Hazardous Materials Safety

Federal and state Occupational Safety Standards are intended to enhance worker safety by reducing 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. Cal/OSHA rules require provision of Material Safety Data Sheets that must be available in the workplace, and the training of employee in the proper handling of materials.

Hazardous Materials Transportation

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) enforce 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 with often overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary state agencies responsible for the regulation, investigation, and cleanup of 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 have the potential for disturbing or releasing 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 either 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, or 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 must 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.

Regional

Los Angeles County Certified Unified Program Agency (CUPA)

There are six state programs that regulate business and industry's use, storage, handling and disposal of hazardous materials and hazardous wastes that were consolidated under Senate Bill 1082 in 1994 to be part of a single environmental control program managed by a Certified Unified Program Agency (CUPA) at the city or county level. Los Angeles County has been certified by the state to be the CUPA for the Granada Hills–Knollwood and Sylmar CPAs. The Los Angeles Fire Department has entered into an agreement with the County of Los Angeles perform the Hazardous Waste components of the Unified Program. CUPA coordinates six programs Hazardous Materials Disclosure and Business Plan, Underground Storage Tank Program, Aboveground Storage Tank Spill Prevention Control and Countermeasure (SPCC Plan), Hazardous Waste Generator Program, California Accidental Release Prevention Program, and the Unified Program.

Local

General Plan Safety Element

The City of Los Angeles General Plan Safety Element identifies various policies and programs for addressing and mitigating risks from hazardous materials and hazardous wastes. Potential new development within the CPAs would generate hazardous waste used by commercial and industrial uses. Accordingly, the following goals, objectives and policies would apply to future development occurring under the proposed plans:

Table 4.7-4 General Plan Policies Relevant to Hazards

No.	*Policy*
Goal 1	A city where potential injury, loss of life, property damage and disruption of the social and economic life of the City due to fire, water related hazard, seismic event, geologic conditions or release of hazardous materials disasters is minimized.
Objective 1.1	Implement comprehensive hazard mitigation plans and programs that are integrated with each other and with the City's comprehensive emergency response and recovery plans and programs.
Policy 1.1.4	Health/environmental protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.
Goal 2	A city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage and disruption of the social and economic life of the City and its immediate environs.
Objective 2.1	Develop and implement comprehensive emergency response plans and programs that are integrated with each other and with the City's comprehensive hazard mitigation and recovery plans.
Policy 2.1.2	Health and environmental protection. Develop and implement procedures to protect the environment and public, including animal control and care, to the greatest extent feasible within the resources available, from potential health and safety hazards associated with hazard mitigation and disaster recovery efforts.
Policy 2.1.5	Response. Develop, implement and continue to improve the City's ability to respond to emergency events.
Goal 3	A city where private and public systems, services, activities, physical condition and environment are reestablished as quickly as feasible to a level equal to or better than that which existed prior to the disaster.
Objective 3.1	Develop and implement comprehensive disaster recovery plans which are integrated with each other and with the City's comprehensive hazard mitigation and emergency response plans and programs.
Policy 3.1.1	Coordination. Coordinate with each other, with other jurisdictions and with appropriate private and public entities prior to a disaster and to the greatest extent feasible within the resources available, to plan and establish disaster recovery programs and procedures which will enable cooperative ventures, reduce potential conflicts, minimize duplication and maximize the available funds and resources to the greatest mutual benefit following a disaster.
Policy 3.1.2	Health/safety/environment. Develop and establish procedures for identification and abatement of physical and health hazards which may result from a disaster. Provisions shall include measures for protecting workers, the public and the environment from contamination or other health and safety hazards associated with abatement, repair and reconstruction programs.
Policy 3.1.4	Interim services/systems. Develop and establish procedures prior to a disaster for immediate reestablishment and maintenance of damaged or interrupted essential infrastructure systems and services so as to provide communications, circulation, power, transportation, water and other necessities for movement of goods, provision of services and restoration of the economic and social life of the City and its environs pending permanent restoration of the damaged systems.
Policy 3.1.5	Restoration. Develop and establish prior to a disaster short- and long-term procedures for securing financial and other assistance, expediting assistance and permit processing and coordinating inspection and permitting activities so as to facilitate the rapid demolition of hazards and the repair, restoration and rebuilding, to a comparable or a better condition, those parts of the private and public sectors which were damaged or disrupted as a result of the disaster.

Source: Los Angeles Department of City Planning, *General Plan of the City of Los Angeles*, Safety Element (adopted November 26, 1996).

Proposed Plan Policies

The proposed plans include several policies that are directly and indirectly related to hazards and safety. Table 4.7-5 (Proposed Granada Hills–Knollwood Community Plan Policies) and Table 4.7-6 (Proposed

Sylmar Community Plan Policies) list the Land Use Goals and Policies that are applicable to issues of Hazardous Materials, Safety and Risk of Upset.

Table 4.7-5 Granada Hills–Knollwood Proposed Community Plan Policies

Policy No.	*Policy*
Policy LU4.2	Emergency Access. Design developments for safe, direct, and efficient exit of residents during emergency events. Investigate and consider feasible secondary access connections as part of the hillside subdivisions. Require extensions, completions, and connections of the existing street network, where feasible, to provide secondary access to hillside development.
Policy CF1.1	Adequate Level of Service. Maintain police facilities and services at a level that is adequate to protect the community of Granada Hills–Knollwood.
Policy CF1.2	Project Review. Consult with LAPD to consider public safety and crime prevention as part of the review of new development projects (i.e., lighting, security, and visibility) and proposed land use changes to determine needs and services to ensure an appropriate level of service.
Policy CF2.1	Facility Location. Assist the LAFD in identifying appropriate locations throughout Granada Hills–Knollwood for fire service facilities in order to provide adequate fire and emergency services protection.
Policy CF2.2	Project Review. Coordinate with the LAFD during the review of significant development projects and General Plan amendments affecting land use changes to determine the impacts on service infrastructure.
Policy CF2.3	Emergency Preparedness Coordination. Coordinate with the LAFD in the identification of primary access routes for emergency preparedness.
Policy CF6.2	Policy CF6.2. Protection. Protect significant open space resources and environmentally sensitive areas from environmental hazards and incompatible land uses.
Policy CF6.3	Grading. Minimize the grading of natural terrain to permit development in hillside areas and the foothills correspond to densities designated by this Community Plan, the geological stability of the area, and compatibility with adjoining land uses.
Policy CF6.4	Natural Drainage. Minimize the alteration of natural drainage patterns, canyons, and water courses, except where improvements are necessary to protect life and property.
Policy CF6.5	Development Restrictions. Restrict development on areas of known geologic hazard, unstable soil conditions or landslides.
Policy CF7.1	Oil Drilling Mitigation. Promote safety and protection of surrounding neighborhoods and the environment from potential impacts of oil drilling, such as noise, hazard, spills, and visual blight.

Table 4.7-6 Sylmar Proposed Community Plan Policies

Policy No.	*Policy*
Policy LU6.2	Emergency Access. Design developments to provide for safe, direct, and efficient exit of residents during emergency events. Investigate and consider feasible secondary access connections as part of the hillside subdivisions. Require extensions, completions, and connections of the existing street network, where feasible, to provide secondary access to hillside development.
Policy LU21.5	Job Safety. Ensure that industrial land uses are safe for human health and the environment and that they provide a robust source of employment.
Policy LU23.1	Environmentally Friendly Businesses. Support "green" business growth and encourage the replacement of polluting land use activities with environmentally friendly businesses.
Policy LU23.2	Sustainable Industry. Incentivize development opportunities for businesses that employ "green" or clean technologies, building practices, and processes.
Policy CF1.1	Level of Service. Maintain police facilities and services at a level that is adequate to protect the community of Sylmar.

Table 4.7-6 Sylmar Proposed Community Plan Policies

Policy No.	*Policy*
Policy CF1.2	Project Review. Consult with LAPD to consider public safety and crime prevention as part of the review of new development projects (i.e. lighting, visibility, and security) and proposed land use changes to determine needs and services to ensure an appropriate level of service.
Policy CF2.1	Facility Location. Assist the LAFD to locate fire service facilities in appropriate locations throughout Sylmar to provide adequate fire and emergency services protection.
Policy CF2.2	Project Review. Coordinate with the LAFD during the review of significant development projects and General Plan amendments affecting land use changes to determine the impacts on service infrastructure.
Policy CF2.3	Emergency Preparedness Coordination. Coordinate with the LAFD in the identification of primary access routes for emergency preparedness.
Policy CF6.2	Protection. Protect significant open space resources and environmentally sensitive areas from environmental hazards and incompatible land uses.
Policy CF6.3	CF6.3. Grading. Minimize the grading of natural terrain to permit development in hillside areas and the foothills correspond with densities designated by this Community Plan, the geological stability of the area, and compatibility with adjoining land uses.
Policy CF6.4	CF6.4 Stream Alterations. Minimize the alteration of natural drainage patterns, canyons, and water courses, except where improvements are necessary to protect life and property.
Policy CF6.5	CF6.5. Development Restrictions. Restrict development on areas of known geologic hazard, unstable soil conditions or landslides.

Consistency Analysis

Operations of future development for the proposed plans include residential, commercial, industrial, public facilities and open space uses. Demolition of existing structures is unlikely to result in a release of hazardous materials provided that all applicable regulations regarding removal of asbestos-containing materials and lead-based paint are followed. Implementation of the proposed plans could include the use of hazardous materials or generate quantities of hazardous waste that could create an unsafe or hazardous condition for adjacent uses. However, any hazardous materials would be used and stored in accordance with applicable regulations. In addition, future development under the proposed plans would be required to comply with federal and state laws to eliminate or reduce the consequences of hazardous materials accidents. The proposed plans would not conflict with the applicable goals, objectives, and policies of the City of Los Angeles General Plan Safety Element.

City of Los Angeles Municipal Code

City of Los Angeles Los Angeles Municipal Code (LAMC) Chapter IX, Article 1, Division 71, Section 91.7101, gives Los Angeles Department of Building and Safety (LADBS) the authority to withhold permits on projects located within a Methane Zone or Methane Buffer Zone. All buildings that are constructed within Methane Hazard Zone must comply with LAMC codes and regulations and the construction must be approved by the Los Angeles Department of Building and Safety (LADBS). Section 91.7102 requires compliance with the Methane Mitigation Standards in the LAMC. Section 91.7103 and Section 91.7104 establish requirements for mitigation and other general building requirements to prevent potential environmental and harmful health effects that could be potentially

caused by the construction of buildings located in a defined Methane Hazard Zone within the City of Los Angeles.

In addition, Section 91.7109.2 requires the LAFD to be notified when an abandoned oil well is encountered during construction activities. Any abandoned oil well are not in compliance with existing regulations are required to be re-abandoned in accordance with applicable rules and regulations of the California Division of Oil, Gas and Geothermal Resources.

As part of the discretionary review of individual projects, the City applies appropriate mitigation measures prior to approval of residential or public facility projects within 1,000 feet of a site known to be releasing substantial hazardous materials or wastes (as defined by the State of California) that could present a hazard to proposed development. These measures address considerations of setbacks and buffers, barriers, risk of upset plans, and safety evacuation plans.

The evaluation of hazards considers all hazards that might be applicable to an individual project/site, including, but not limited to, methane gas, lead-based paint, asbestos, potential presence of hazardous materials associated with past use of a site, potential chemicals proposed to be used on site, and emergency access.

4.7.3 Project Impacts and Mitigation

Analytic Method

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 proposed plans. 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 proposed plans 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 proposed plans would comply with relevant federal and state laws and regulations, as well as the LAMC.

The Los Angeles CEQA Thresholds Guide (2006) sets forth guidance for the determination of significance for impacts from hazards and hazardous materials. The guidance is generally based on the CEQA Guidelines Appendix G, and provides specific criteria to be considered when making a significance determination. For purposes of this analysis, Thresholds Guide criteria are used, supplemented by the thresholds identified in Appendix G, where appropriate.

Thresholds of Significance

Implementation of the proposed plan may have a significant adverse impact if it would cause an increased risk of exposure to hazards and result in any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment or release of hazardous emission or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- Create a significant hazard to the public or the environment from activities at a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5
- Release hazardous emission or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- Create a safety hazard for people residing or working in within an area covered by an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport
- Create a safety hazard for people residing or working within the vicinity of a private airstrip
- 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
- Create hazards to schools adjacent to construction sites, such as noise or construction traffic

The range of potential industrial uses (and associated processes and materials) that could occupy land within the CPAs over the planning horizon is not known. However, individual businesses are subject to intensive regulatory review as part of the permit and approval process as well as being subject myriad regulations regarding hazardous material use, storage, transportation and disposal. This regulatory review and regulatory compliance review ensures that adjacent populations are protected from unusual hazards from such uses. While the proposed plans may encourage greater redevelopment of older potentially contaminated sites, there are also strict regulations in place to control how potentially contaminated materials are to be handled and disposed of. Therefore, Safety/Risk of Upset impacts would be less than significant.

Effects Not Found to Be Significant

The closest airport to both CPAs is Whiteman Airpark located at 12653 Osborne Street in Pacoima. Whiteman Airpark is approximately 3 miles east of Granada Hills–Knollwood CPA and 3.75 miles southeast of Sylmar CPA. The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. The Van Nuys Airport is approximately 5 miles south of the Granada Hills–Knollwood CPA and 7 miles southwest of the central portion of the Sylmar CPA. Neither CPA is within the airport influence areas

for the Van Nuys Airport and the Whiteman Airpark.[80,81] There are no public or private airports within 2 miles of the CPAs, and there would be *no impact*.

Less-Than-Significant Impacts

Impact 4.7-1 **Implementation of the proposed plans could create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. However, compliance with existing local, state, and federal regulations would ensure this impact remains *less than significant*.**

Exposure of the public or the environment to hazardous materials could occur by improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. The severity of potential effects varies with the activity conducted, the concentration of and type of hazardous material or wastes present, and the proximity of sensitive receptors.

The types and amounts of hazardous materials would vary according to the nature of the activity at individual development sites. 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 suffers adverse health effects as a result of that exposure 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 of the hazardous material (e.g., liquid, vapor) and its characteristics (e.g., toxicity); 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 that 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.

Hazardous materials regulations were established at the state level to ensure compliance with federal regulations intended to reduce the risk to human health and the environment from the routine use of hazardous substances.

Hazardous Materials Use and Storage

Hazardous materials associated with the occupancy of future uses within the CPAs would consist mostly of typical household cleaning products and minor industrial related chemicals. The types of hazardous materials that could be present during operation of the commercial, residential and minor industrial uses of the proposed plans could also include other maintenance products (e.g., paints and solvents); oils, lubricants and refrigerants associated with building mechanical and HVAC systems; and grounds and landscape maintenance products formulated with hazardous substances, including fuels, cleaners and

[80] Los Angeles County Airport Land Use Commission, Airport Influence Area Map for Whiteman (2011), http://planning.lacounty.gov/assets/upl/project/aluc_airport-whiteman.pdf.
[81] Los Angeles County Airport Land Use Commission, Airport Influence Area Map for Van Nuys (2011), http://planning.lacounty.gov/assets/upl/project/aluc_airport-van-nuys.pdf.

degreasers, solvents, paints, lubricants, adhesives, sealers, pesticides/herbicides, and industrial related chemicals.

To ensure that workers and others at individual development sites within the CPAs are not exposed to unacceptable levels of risk associated with the use and handling of hazardous materials, employers and businesses are required to implement existing hazardous materials regulations, with compliance monitored by state (e.g., OSHA in the workplace or DTSC for hazardous waste) and local jurisdictions (e.g., the Los Angeles County Fire Department). Compliance with existing safety standards related to the handling, use, and storage of hazardous materials, and compliance with the safety procedures mandated by applicable federal, state, and local laws and regulations (RCRA, California *Hazardous Waste Control Law*, and principles prescribed by the California Department of Health Services, Centers for Disease Control and Prevention, and National Institutes of Health) is mandated.

Should the use and/or storage of hazardous materials at individual development sites rise to a level subject to regulation, those uses would be required to comply with federal and state laws to eliminate or reduce the risk of hazardous materials accidents resulting from routine use, disposal, or storage of hazardous materials during both the construction and operation phases of a project. Therefore, with compliance to applicable regulations this impact is ***less than significant*** for future uses that could be developed under the proposed plans.

Transportation of Hazardous Materials

The U.S. DOT Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in CFR Titles 40, 42, 45, and 49 and implemented by CCR Titles 17, 19, and 27.

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. The types of hazardous materials that could be present during operation of the commercial, residential, industrial and public facilities uses under the proposed plans are expected to include household cleaning and maintenance products, pesticides and herbicides, paints, solvents, degreasers and industrial use related chemicals. I-5 and I-405 are major transportation corridors, and are used to the transport of hazardous material generated from various areas in and outside of the City of Los Angeles. Implementation of future development under the proposed plans could increase the amount of hazardous materials and/or waste brought to, or generated by, the CPAs.

During construction of future development projects, hazardous materials in the form of paints, solvents, glues, roofing materials, and other common construction materials containing toxic substances may be transported to individual sites, and construction waste that possibly contains hazardous materials could be transported off site for purposes of disposal. Appropriate documentation for all hazardous waste that is transported off site in connection with activities at individual sites would be provided as required to ensure compliance with the existing hazardous materials regulations described above. Adherence to these regulations, which requires compliance with all applicable federal and state laws related to the transportation of hazardous materials, would reduce the likelihood and severity of accidents which might occur during transit. As such impacts associated with the transport of hazardous waste are ***less than significant***.

Disposal of Hazardous Waste

Operation of future development under the proposed plans includes residential, commercial, industrial, public facilities and open space uses. Implementation of the proposed plans could include the use of hazardous materials or generate quantities of hazardous waste that could create an unsafe or hazardous condition for adjacent uses. During the construction of new development, future projects within the CPAs may generate hazardous and/or toxic waste depending on the age of structures to be redeveloped or other potential soil or groundwater contamination based on previous uses. Federal, state, and local regulations govern the disposal of wastes identified as hazardous which could be produced in the course of demolition and construction. Asbestos, lead, or other hazardous materials encountered during demolition or construction activities would be disposed of in compliance with all applicable regulations for the handling of such waste, reducing the potential impacts of disposal of site-generated hazardous wastes to a level that is *less than significant*.

Impact 4.7-2 **Implementation of the proposed plans could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. However, compliance with existing regulations this impact remains *less than significant*.**

Construction

Development within the CPAs could result in demolition of existing structures, which could result in exposure of construction personnel and the public to hazardous substances such as asbestos or lead-based paints, depending on the age of the structure. In addition, the disturbance of soils could result in the exposure of construction workers or nearby employees to health or safety risks if contaminated soils are encountered during construction. Exposure to contaminated structures or soil could occur from asbestos or lead in older buildings, unknown contaminants that have not been previously identified, or existing contamination present at locations identified in the site records search.

Exposure to hazardous materials during construction activities could occur as a result of 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

An overall development schedule of specific future projects is not associated with the proposed plans. However, implementation of the proposed plans assumes that older buildings could be demolished as uses are redeveloped according to the land uses and densities that are permitted in the proposed plan. With that activity, construction workers and nearby workers and/or future residents could potentially be exposed to airborne lead-based paint, dust, asbestos fibers, mold, and/or other building contaminants. In addition, there is the possibility that future development may uncover previously undiscovered soil contamination.

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, CFR Title 40, Part 61, Subpart M (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. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Adherence to existing regulations would require appropriate testing and abatement actions for hazardous materials.

Soil and Groundwater Contamination

Unknown Contaminated Sites

Aside from the potential release of hazardous materials from demolition of existing structures on individual sites, implementation of the proposed plans may result in grading and excavation of sites for future development. In some cases, construction activities could 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, removal activities could pose health and safety risks from exposure to hazardous materials or vapors. Such contamination could cause various short-term or long-term adverse health effects in exposed persons. In addition, exposure to contaminants could occur if the contaminants migrate from the contaminated zone to surrounding areas either before or after the surrounding areas are developed, or if contaminated zones are disturbed by future development at the contaminated location.

The Sunshine Canyon Landfill is located at 14747 San Fernando Road within the Granada Hills–Knollwood CPA and could pose a risk, if any, by landfill methane or future projects near the landfill location. It is also possible that old underground storage tanks (USTs) that were in use prior to permitting and record-keeping requirements may be present in the Granada Hills–Knollwood CPA. If an unidentified UST were uncovered or disturbed during construction activities, it would be closed in place or removed pursuant to existing regulations. Removal activities could pose both health and safety risks, such as exposure to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing Los Angeles County 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 any new construction activities.

Existing Contaminated Sites

Another potential hazard could involve exposure to known potential sources of various forms of chemical contamination sources, waste, cleaners, auto-repair facilities, and gas stations. However, any new development occurring on these documented hazardous materials sites would have to be preceded by remediation and cleanup under the supervision of the DTSC before construction activities could begin, if such actions have not already occurred. Compliance with existing regulations and implementation of standard City mitigation measures would reduce any impact and 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***.

Operational Effects

The precise potential future increase in the amount of hazardous materials utilized in the CPAs cannot be predicted because specific development projects are not identified. The following discussion focuses on the potential nature and magnitude of risks associated with the accidental release of hazardous materials often used during operation of typical residential, commercial, and industrial development projects.

Development under the proposed plan involving residential, commercial public facilities and open space would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Additionally, building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers, and pesticides/herbicides. The properties and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the relatively small quantities of these materials that would be stored and used on individual project sites throughout the CPAs. As common maintenance products and chemicals would be consumed by use, and adherence to warning labels and storage recommendations from the individual manufacturers, these hazardous materials would not pose any greater risk compared to other similar development or to existing conditions.

Hazardous materials would be used and stored in accordance with applicable regulations and such uses would be required to comply with federal and state laws to eliminate or reduce the consequences of hazardous materials accidents. Therefore, the probability of a hazardous materials incident would be remote and the impact would be ***less than significant***.

Impact 4.7-3 **Implementation of the proposed plans could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment related to Chlorine Gas or Methane Gas . However, compliance with existing regulations, this impact would be considered *less than significant*.**

Chlorine Gas

Department of Water and Power's (DWP) Los Angeles Aqueduct Filtration Plant in Sylmar and the Metropolitan Water District's Joseph Jensen Filtration Plant in Granada Hills both use chlorine gas for disinfection purposes and this completes the water purification process. Metropolitan and DWP must adhere to applicable federal RCRA and HSWA regulations contained in Titles 10, 29, and 40 of the CFR and California requirements within the Hazardous Waste Control Act for safe handling of hazardous materials in this case, chlorine gas. In addition, 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 also applicable to hazardous materials.

The six program elements of the Certified 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 Certified Unified Program Agency (CUPA) that has jurisdiction in the City of Los Angeles is the Los Angeles County CUPA. As such, as required under the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program these water agencies are regulated by Los Angeles County CUPA program and must work with the City of Los Angeles Fire Department to address storage and handling of hazardous chemicals, including chlorine gas and any associated emergency situations.

The release of a hazardous material to the environment can result in adverse impacts to the environment, property, and/or human health. The significance of those impacts is dependent on the type, location, and quantity of the material released. Therefore, any potential hazard in the CPAs resulting from a manmade or natural disaster may result in the need for evacuation. The City has established a multi-agency EOO under the direction of the Mayor and administration of an EOB.[82] The Master Plan and individual agency Emergency Response Plans set forth procedures for City personnel to follow in the event of an emergency. In the event of a disaster or emergency, the Mayor assumes emergency powers, as defined by law. City agencies follow procedures contained in their emergency plans, under the discretion of the Mayor and Chief of Police, pursuant to EOO protocols set for in the EOO ordinance and plans

Impacts associated with chlorine gas would be required to comply with existing rules and regulations required by the Los Angeles Fire Department and the Los Angeles County CUPA program. In the event of an accidental release an evacuation could be necessary; therefore, under the direction of EOO and adherence to the Master Plan and Emergency Response Plan, the CPAs would be evacuated accordingly. As such, the potential impacts associated with release of methane gas and/or the accidental release of chlorine gas would be *less than significant*.

[82] City of Los Angeles, City of Los Angeles *General Plan*, Safety Element (November 26, 1996), p. 1-1.

Methane Gas

Granada Hills–Knollwood

The Sunshine Canyon Landfill is located at 14747 San Fernando Road within the Granada Hills–Knollwood CPA. As a result, large concentrations of methane are found in the Granada Hills–Knollwood CPA. Granada Hills–Knollwood CPA is designated as a Methane and Methane Buffer Zone.

LAMC Chapter IX, Article 1, Division 71, Section 91.7101, gives LADBS the authority to withhold permits on projects located within a Methane Zone or Methane Buffer Zone. All buildings that are constructed within Methane Hazard Zone must comply with LAMC codes and regulations and the construction must be approved by the LADBS. Section 91.7102 requires compliance with the Methane Mitigation Standards in the LAMC. Section 91.7103 and Section 91.7104 establish requirements for mitigation and other general building requirements to prevent potential environmental and harmful health effects that could be potentially caused by the construction of buildings located in a defined Methane Hazard Zone within the City of Los Angeles. Therefore compliance with Sections 91.7101, 91.7102, 91.7103, and 91.7104 would ensure that any impacts associated with methane gas would be ***less than significant*** by ensuring compliance with Methane Mitigation Standards, as required by the City of Los Angeles.

Sylmar

As discussed above, the largest concentration of methane would be found underlying the Sunshine Canyon Landfill in the Granada Hills–Knollwood CPA at the northeastern and northwestern interface of the CPAs. The Granada Hills–Knollwood CPA is located in a designated Methane Zone or Methane Buffer Zone; but the Sylmar CPA is not been given this same designation. However, to characterize this correctly, it is conceivable that methane gas could leak away through subsurface pores around the Sunshine Canyon Landfill and migrate into several smaller pockets in the hillsides and along the northwestern portions of the Sylmar CPA. For conservative planning purposes, in the event that quantities of methane are discovered in portions of the Sylmar CPA during pre-construction soil and geotechnical investigations associated with implementation of the Sylmar CPA. The City has already set minimum requirements for construction within the Methane Zone or Methane Buffer Zone in order to reduce the hazards presented from methane gas. As such, for consistency purposes, this analysis assumes compliance with the City's Methane Mitigation Standards and the construction must be approved by the Los Angeles Department of Building and Safety (LADBS).

Implementation of mitigation measures and compliance with LAMC Chapter IX, Article 1, Division 71, would ensure that any impacts associated with methane gas are in compliance with Methane Mitigation Standards, as required by the City of Los Angeles. As such, the potential impacts associated with methane gas are ***less than significant***.

Impact 4.7-4 **Development under the proposed plans could be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Compliance with existing regulations would ensure this impact remains *less than significant*.**

As identified in Table 4.7-1 and Table 4.7-2, the Granada Hills–Knollwood and Sylmar CPAs and/or the immediate surroundings contain sites that have been identified on various regulatory databases as being contaminated from the release of hazardous substances in the soil or groundwater. Implementation of the proposed plans could lead to development of these sites. As discussed under Impact 4.7-2, development of these sites would be required to undergo remediation and cleanup before construction activities could begin. If contamination at any specific project site were to exceed regulatory action levels, the individual project Applicant would be required to undertake remediation procedures prior to grading and development under the supervision of appropriate regulatory oversight agencies (e.g., LAFD, Los Angeles County Environmental Health Division, DTSC, or RWQCB), depending on the nature of any identified contamination. Consequently, if future development under the proposed plans is located on a site that is included on a list of hazardous materials sites, remediation would ensure that this impact would be *less than significant*.

Impact 4.7-5 **Implementation of the proposed plans could result in the handling of acutely hazardous materials, substances, or waste within 0.25 mile of a proposed school, but would not create a risk to human health from such activities. Compliance with existing regulations would ensure this impact remains *less than significant*.**

Granada Hills–Knollwood

Table 4.7-7 (Schools in the Granada Hills–Knollwood CPA) identifies the location of the schools located within the CPA and within 0.25 mile of the Granada Hills–Knollwood CPA boundaries. (Refer to Figure 4.12-2a [Public School Locations (Granada Hills–Knollwood CPA)] in Section 4.12 [Public Services and Recreation] for a map of these locations.)

Similar to existing conditions in the Granada Hills–Knollwood CPA, hazardous materials could be used in the construction and operation of new developments, including the use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products, diesel and other fuels (used in construction and maintenance equipment and vehicles), and the limited application of pesticides associated with landscaping around new developments. Industrial uses could include the use of hazardous materials or generate quantities of hazardous waste that could create an unsafe or hazardous condition for adjacent uses involving industrial use related chemicals. However, industrial uses would be limited and hazardous materials would be used and stored in accordance with applicable regulations and such uses would be required to comply with federal and state laws to eliminate or reduce the consequences of hazardous materials accidents.

Table 4.7-7 Schools in the Granada Hills–Knollwood CPA

School	*Location*
Andasol Elementary	10126 Encino Avenue
Castlebay Lane Elementary	19010 Castlebay Lane
Danube Elementary	11220 Danube Avenue
Darby Elementary	10818 Darby Avenue
El Dorado Elementary	12749 El Dorado Avenue
El Oro Elementary	12230 El Oro Way
Gledhill Elementary	16030 Gledhill Street
Granada Elementary	17170 Tribune Street
Haskell Elementary	15850 Tulsa Street
Knollwood Elementary	11822 Gerald Avenue
Mayall Elementary	16701 Mayall Street
Tulsa Elementary	10900 Hayvenhurst Avenue
Van Gogh Elementary	17160 Van Gogh Street
Vintage Math/Science Magnet (K only)	15848 Stare Street
Frost Middle School	12314 Bradford Place
Henry Middle School	17340 San Jose Street
Holmes Middle School	9351 Paso Robles Avenue
Porter Middle School	15960 Kingsbury Street
Kennedy High School	11254 Gothic Avenue
Granada Hills High School	10535 Zelzah Avenue
Monroe High School	9229 Haskell Avenue
Northridge Academy High School	9601 Zelzah Avenue

SOURCE: Rena Perez, written correspondence with Director, Master Planning and Demographics, Los Angeles Unified School District (September 22, 2009).

Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, all businesses that handle or transport hazardous materials would be required to comply with provisions of local, state, and federal regulations for hazardous wastes. In particular, California Health and Safety Code Chapter 6.95 requires businesses that handle more than a specified amount of hazardous materials on-site to submit a Hazardous Materials Business Plan. Such businesses are required to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site.

The intent of the hazardous materials disclosure is to assist in mitigating a release or threatened release of a hazardous material and to minimize any potential harm or damage to human health or the environment. Emergency responders use the information provided in planning for and handling emergencies involving hazardous materials.

The routine use, transport, and disposal of hazardous materials in the Granada Hills–Knollwood CPA would be subject to a wide range of laws and regulations intended to minimize potential health risks associated with their use or the accidental release of such substances. Compliance with existing regulations and implementation of mitigation measures would minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials. Therefore, future development under the proposed plans would result in a *less-than-significant* impact related to the emissions or handling of hazardous materials within the vicinity of schools.

Sylmar

Table 4.7-8 (Schools in the Sylmar CPA) identifies the location of the schools located within 0.25 mile of the Sylmar CPA boundaries. (Refer to Figure 4.12-2b [Public School Locations (Sylmar CPA)] in Section 4.12 [Public Services and Recreation] for a map of these locations.)

Table 4.7-8 Schools in the Sylmar CPA

School	*Location*
Broadous Elementary	12561 Filmore Street
Dyer Street Elementary	14500 Dyer Street
El Dorado Avenue Elementary	12749 El Dorado Avenue
Fenton Avenue Elementary	11828 Gain Street
Fenton Primary Center	11828 Gain Street
Gridley Elementary	1907 Eighth Street
Harding Elementary	13060 Harding Street
Herrick Elementary	13350 Herrick Avenue
Hubbard Elementary	13325 Hubbard Street
Osceola Elementary	14940 Osceola Street
San Fernando Elementary	1130 Mott Street
Sylmar Elementary	13291 Phillippi Avenue
Maclay Middle School	12540 Pierce Avenue
Olive Vista Middle School	14600 Tyler Street
San Fernando Middle School	130 North Brand Boulevard
Evergreen Continuation	13101 Dronfield Avenue
San Fernando High School	11133 O'Melveny Avenue
Sylmar High School	13050 Borden Avenue
Verdugo Hills High School	10625 Plainview Avenue

SOURCE: Rena Perez, written correspondence with Director, Master Planning and Demographics, Los Angeles Unified School District (September 18, 2009).

Similar to existing conditions in the Sylmar CPA, hazardous materials could be used in the construction and operation of new developments, including the use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products, diesel and other fuels (used in

construction and maintenance equipment and vehicles), and the limited application of pesticides associated with landscaping around new developments. Industrial uses could include the use of hazardous materials or generate quantities of hazardous waste that could create an unsafe or hazardous condition for adjacent uses involving industrial use related chemicals. However, industrial uses would be limited and hazardous materials would be used and stored in accordance with applicable regulations and such uses would be required to comply with federal and state laws to eliminate or reduce the consequences of hazardous materials accidents.

Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, all businesses that handle or transport hazardous materials would be required to comply with provisions of local, state, and federal regulations for hazardous wastes. In particular, California Health and Safety Code Chapter 6.95 requires businesses that handle more than a specified amount of hazardous materials on-site to submit a Hazardous Materials Business Plan. Such businesses are required to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site.

The intent of the hazardous materials disclosure is to assist in mitigating a release or threatened release of a hazardous material and to minimize any potential harm or damage to human health or the environment. Emergency responders use the information provided in planning for and handling emergencies involving hazardous materials.

The routine use, transport, and disposal of hazardous materials in the Sylmar CPA would be subject to a wide range of laws and regulations intended to minimize potential health risks associated with their use or the accidental release of such substances. Compliance with existing regulations and implementation of mitigation measures would minimize the risks associated with the exposure of sensitive receptors, including schools, to hazardous materials. Therefore, future development under the proposed plans would result in a *less-than-significant* impact related to the emissions or handling of hazardous materials within the vicinity of schools.

Impact 4.7-6 **Implementation of the proposed plans would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Compliance with existing local, state, and federal regulations would ensure that this impact remains *less than significant*.**

The City Emergency Operations Organization (EOO) implements the goals and policies of Safety Element. The Safety Element outlines the scope of the EOO's on-going efforts to use experiences and new information to improve the City's hazard program. The EOO Master Plan (Master Plan) and individual agency Emergency Response Plans set forth procedures for City personnel to follow in the event of an emergency. Annexes to the Master Plan include hazards-specific plans (e.g., flood), situational contingency plans for known or anticipated events and pre-and post events plan (e.g., Recovery and Reconstruction Plan). In the event of a disaster or emergency, the Mayor assumes emergency powers, as defined by law. City agencies follow procedures contained in their emergency plans, under the discretion of the Mayor and Chief of Police, pursuant to EOO protocols set for in the EOO ordinance and plans.

The EOO ordinance and plans provides direction for City response to emergency situation stemming from natural disasters, technological incidents and nuclear defense operations. The plan focuses on agency coordination and response procedures for large-scale disasters. The plan addresses procedures for large-scale emergency situations, such as natural disasters and technological incidents and not normal day-to-day emergencies. This is an emergency preparedness document for large-scale emergencies situations such an earthquakes or a major air crash that would be applicable to the entire City, including the CPAs. Because the City has prepared for such emergencies and as part of standard development procedures plans would be submitted to the City for review and approval to ensure that all new development has adequate emergency access, including turning radius in compliance with existing City regulations.

Construction and operation activities within the CPAs with respect to emergency response or evacuation plans due to temporary construction barricades or other obstructions that could impede emergency access would be subject to the City's permitting process, which coordinates with the Police and Fire Departments to ensure that emergency access is maintained at all times. Furthermore, the potential for any increased delays along evacuation routes from the incremental increase in new workers and patrons resulting from implementation of the proposed plans would be considered less than significant. Construction and operation associated with the related projects and other future development in the City and surrounding area would not interfere with adopted emergency response or evacuation plans. The existing Safety Element of the City of Los Angeles General Plan identifies goals and Policies 1.1.4, 2.1.2, 3.1.1, 3.1.2, 3.1.4, and 3.1.5, the Granada Hills–Knollwood Community Plan includes Policies CF1.2, CF1.2, CF2.1, CF2.3, and CF7.1, and the Sylmar Community Plan includes Policies CF1.1, CF1.2, CF2.1, CF2.2, and CF2.3 that help reduce impacts with respect to adopted emergency response plans or emergency evacuation plans to *less than significant*.

Impact 4.7-7 **Implementation of the proposed plans would not 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. This would be a *less-than-significant* impact.**

Implementation of the proposed plans could result in the development of residential, commercial, industrial and public facilities uses. Areas designated as Very High Fire Hazard Severity Zone are located in the hilly northern and western portions of the Granada Hills–Knollwood CPA. Much of this area are designated as Open Space and surrounded by areas of low density residential and the proposed plans do not propose any changes to these areas. However, some construction could occur in some areas near the Very High Fire Hazard Severity Zone or Fire Buffer Zone.

New construction in the Very High Fire Hazard Severity Zone must comply with a variety of strict requirements including provisions for emergency vehicle access, use of approved building materials and design, brush clearance and so forth. Susceptible areas have land development that 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. State, county, and City fire safe building code requirements would be incorporated into new development, as appropriate.

With implementation of the hazard reduction standards, the impact resulting in the risk of loss, injury, or death involving wildland fires would be *less than significant*.

Impact 4.7-8 **Construction of future development under the proposed plans could occur adjacent to existing or proposed school sites, but would not result in increased hazards for schools. Compliance with existing regulations would ensure this impact remains *less than significant*.**

Development or redevelopment under the proposed plans could occur adjacent to existing or proposed schools and could result in increased noise or traffic from construction vehicles. This could result in increased noise and a safety hazard for pedestrians from construction traffic. However, with compliance to existing regulations this impact is *less than significant*.

Significant and Unavoidable Impacts

There are no significant and unavoidable impacts of the proposed plans with regard to hazards or hazardous materials.

Mitigation Measures

Development under the proposed plan would comply with all local, state, and federal regulations pertaining to hazards and hazardous materials. As such, no mitigation is required.

Level of Significance After Mitigation

Compliance with all local, State and federal regulations and conditions of approval for all discretionary review projects in the CPAs, would ensure that all impacts related to hazards and hazardous materials remain *less than significant*.

Cumulative Impacts

A cumulative impact analysis is only provided for those thresholds that result in a less-than-significant or significant and unavoidable impacts. A cumulative impact analysis is not provided for Effects Found Not to Be Significant, which result in no project-related impacts.

The geographic context for the cumulative analysis of hazards and hazardous materials is Los Angeles County, based on the geographic area that could be affected by accidental release into the environment. The cumulative context for the hazards analysis includes future development under the proposed plans in combination with the development projects listed in Table 4-1 (Cumulative Projects) in Section 4.0 (Introduction to the Analysis) of this EIR and full build-out of the County of Los Angeles General Plan and the 33 other community plans in the City of Los Angeles.

Cumulative development within City of Los Angeles and Los Angeles County would include land uses that could involve the use of greater quantities and variety of hazardous products. Residential, commercial, industrial, public facilities development and adjacent uses would increase the use of hazardous materials within the area. Hazardous materials use, storage, disposal, and transport could result in a foreseeable number of spills and accidents. New development in the County would be subject to

hazardous materials regulations codified in Titles 8, 22, and 26 of the CCR. Furthermore, all construction and demolition activities in the County would be subject to Cal OSHA, SCAQMD, and Cal EPA regulations concerning the release of hazardous materials. Compliance with all state, federal and local regulations during the construction and operation of new developments in the County would ensure that cumulative impacts from the routine transportation, use, disposal, or release of hazardous materials would be less than significant. Additionally, because the proposed plans would also be required to comply with applicable statutes and regulations, which would ensure that future development under the proposed plans would not result in significant public hazards through the routine transport, use, or disposal of hazardous materials, the cumulative impact of the project would be ***less than significant***.

Implementation of cumulative development could expose schools to hazardous emissions, depending on the specific location and type of use proposed. Various regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos and lead have been adopted for demolition activities and would apply to all new development in the County. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. In addition, all businesses that handle or transport hazardous materials would be required to comply with the provisions of the local, state, and federal regulations for hazardous wastes. Businesses that handle more than a specified amount of hazardous materials onsite are required to submit a Hazardous Materials Business Plan. Compliance with existing regulations would ensure that schools and the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction and operational activities. Therefore, the cumulative impacts associated with the exposure of schools to hazardous emissions would be less than significant. Compliance with existing regulations would similarly ensure that future development within the CPAs would have a less-than-significant impact associated with the handling of hazardous materials within proximity to school sites. Therefore, the proposed plans would not make a cumulatively considerable contribution to this effect and cumulative impacts would be ***less than significant***.

Construction and operation associated with cumulative development could result in activities that could interfere with adopted emergency response or evacuation plans, primarily by temporary construction barricades or other obstructions that could impede emergency access. Future discretionary development projects shall undergo CEQA review of potential impacts on adopted emergency response or evacuation plans. Compliance with all local, State and federal regulations would ensure that cumulative impacts related to interference with adopted emergency plans, including temporary street closures, remain ***less than significant***.

New construction in fire susceptible areas in the City and County of Los Angeles must comply with a variety of strict requirements including provisions for emergency vehicle access, use of approved building materials and design, brush clearance and so forth. Areas designated as Very High Fire Hazard Severity Zone are susceptible areas that have land development that 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. State, county, and City fire safe building code requirements would be incorporated into new development, as appropriate. As the proposed plans similarly require adherence to applicable federal, state, and local regulations governing to wildland fires, the cumulative impact would be ***less than significant***.

Cumulative projects in the City and County could result in construction and operational activities that could potentially involve the release of hazardous materials into the environment. In particular, cumulative development could occur on properties listed on hazardous materials sites or that were previously used for oil production activities, and/or the demolition of existing structures, which may contain hazardous materials. However, the individual workers potentially affected would vary from project to project. For example, if demolition of existing buildings is required, short-term increases in hazardous materials generation due to the potential presence of lead-based paints and asbestos-containing materials could occur. However, projects would be required to comply with applicable federal, state, and local regulations. Adherence to applicable regulations and guidelines pertaining to abatement of, and protection from, exposure to oil, pesticides, asbestos, lead, and other hazardous materials would ensure that cumulative impacts from those activities would be less than significant. Site-specific investigations would be conducted at sites where contaminated soils could occur to minimize the exposure of workers to hazardous substances. Compliance with existing regulations would ensure that construction workers and the general public would not be exposed to any unusual or excessive risks related to hazardous materials. Additionally, because the proposed plans would also be required to comply with applicable statutes and regulations, which would ensure that the project would not result in significant public hazards as a result of the accidental release of hazardous materials, the project's contribution would not be cumulatively considerable and the cumulative impact of the project would be ***less than significant***.

Future projects in the City and County would be regulated to ensure that either new development would not occur on hazardous materials sites, or for project sites that are listed, impacts would be required to be mitigated by appropriate remediation prior to development. As all contaminated sites are required to be remediated prior to development, this cumulative impact would be less than significant. Compliance with all local, State and federal regulations and conditions of approval for all discretionary review projects in the CPAs would ensure that contaminated sites undergo remediation activities prior to development activities. As the proposed plans similarly require appropriate site investigation and remediation activities prior to development, the cumulative impact would be ***less than significant***.

4.7.4 References

Los Angeles, City of. *City of Los Angeles General Plan*. Safety Element, November 26, 1996.

———. *City of Los Angeles Municipal Code*. Chapter IX, Article 1, Division 71, 2010. http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid=amlegal:lamc_ca (accessed January 24, 2011).

Los Angeles City Planning Department, Geographic Information Systems.

Los Angeles County Airport Land Use Commission. Airport Influence Area Map for Whiteman, 2011. http://planning.lacounty.gov/assets/upl/project/aluc_airport-whiteman.pdf.

———. Airport Influence Area Map for Van Nuys, 2011. http://planning.lacounty.gov/assets/upl/project/aluc_airport-van-nuys.pdf.

Los Angeles Fire Department Brush Clearance Unit. Brush Clearance Zones Map, December 2003. http://lafd.org/brush/lafd_bcz8x11.pdf.

Sheppard, Harrison. *Valley Water Plants at Risk Study: Rail Cars Easy Terror Target*, April 10, 2007. http://www.thefreelibrary.com/_/print/PrintArticle.aspx?id=161831118 (accessed January 17, 2012).

State Water Resources Control Board. Geotracker. http://geotracker.waterboards.ca.gov/map.

U.S. Environmental Protection Agency. RCRA Info Search Result: Granada Hills LQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=granada+hills&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=LQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

———. RCRA Info Search Result: Granada Hills SQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=granada+hills&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=SQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

———. RCRA Info Search Result: Sylmar LQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=Sylmar&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=LQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

———. RCRA Info Search Result: Sylmar SQG. http://iaspub.epa.gov/enviro/efsystemquery.rcrainfo?fac_search=primary_name&fac_value=&fac_search_type=Beginning+With&postal_code=&location_address=&add_search_type=Beginning+With&city_name=sylmar&county_name=&state_code=&naics_type=Equal+to&naics_to=&univA=FULL_ENFORCEMENT&univ_search=2&univB=SQG&LIBS=&proc_group=0&procname=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO (accessed March 30, 2011).

———. Superfund—Search Superfund Site Information City Granada Hills. http://cumulis.epa.gov/supercpad/cursites/srchrslt.cfm?start=1&CFID=5049713&CFTOKEN=24409386&jsessionid=e0301295bd1f21f06c8d5b44686d285b761d (accessed March 29, 2011).

———. Superfund—Search Superfund Site Information Sylmar. http://cumulis.epa.gov/supercpad/cursites/srchrslt.cfm?start=1&CFID=5049713&CFTOKEN=24409386&jsessionid=e0301295bd1f21f06c8d5b44686d285b761d (accessed March 29, 2011).

———. Toxic Release Inventory Program (TRI) Database. http://www.epa.gov/cgi-bin/broker?zipcode=91342&submit2=Go&view=ZPFA&trilib=TRIQ0&sort=_VIEW_&sort_fmt=1&state=&city=&spc=&zipcode=12345&zipsrch=yes&chemical=_ALL_&industry=ALL&year=2009&tab_rpt=1&fld=TRIID&fld=RELLBY&fld=TSFDSP&_service=oiaa&_program=xp_tri.sasmacr.tristart.macro (accessed March 29, 2011).

———. Toxic Release Inventory Program (TRI) Database. http://www.epa.gov/cgi-bin/broker?zipcode=+91344&submit2=Go&view=ZPFA&trilib=TRIQ0&sort=_VIEW_&sort_fmt=1&state=&city=&spc=&zipcode=12345&zipsrch=yes&chemical=_ALL_&industry=ALL&year=2009&tab_rpt=1&fld=TRIID&fld=RELLBY&fld=TSFDSP&_service=oiaa&_program=xp_tri.sasmacr.tristart.macro (accessed March 29, 2011).