

4.8 HAZARDS AND HAZARDOUS MATERIALS

This chapter describes and evaluates the proposed Project's potential impacts associated with certain types of hazards, including hazards relating to the use and handling of hazardous materials, hazards relating to wildland fires, and hazards associated with airport operations. This chapter also evaluates the Project's contribution to cumulative impacts relating to such hazards.

A. Regulatory Framework

The following section identifies relevant federal, state and local laws and regulations relating to hazards and hazardous materials, wildfires, and water quality, and the federal, state and local regulatory authorities that would be responsible for applying and enforcing such laws and regulations in the proposed Specific Plan Area.

1. Federal Laws and Regulations

a. Environmental Protection Agency

The federal Environmental Protection Agency (EPA) is responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (commonly known as "Superfund"), the Superfund amendments and Reauthorization Acts of 1986, and the Resource Conservation and Recovery Act of 1986. The EPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes.

b. United States Department of Transportation

Transportation of chemicals and hazardous materials is governed by the United States Department of Transportation (DOT), which stipulates the types of containers and labeling, and other restrictions to be used in the movement of such material on interstate highways.

c. Other Federal Agencies, Laws, Regulations and Guidelines

The Occupational Safety and Health Administration (OSHA) is responsible for administering and implementing the Occupational Safety and Health Act, which is intended to assure safe and healthful working conditions through standards developed under the Act. The National Institute of Health (NIH) is responsible for conducting and supporting health science research, including research supporting health-based standards used by OSHA and other agencies. The EPA administers the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), which provides federal control of pesticide distribution, sale, and use, including a requirement that all pesticides used in the United States must be registered (licensed) by EPA. The EPA also administers the Toxic Substances Control Act (TSCA), which addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.

2. State Laws and Regulations

a. California Environmental Protection Agency and Department of Toxic Substances Control

The California Environmental Protection Agency (California EPA) regulates the use and handling of hazardous materials and hazardous wastes in California.

Within the California EPA, the California Department of Toxic Substances Control (DTSC) has primary regulatory responsibility for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under California's Hazardous Waste Control Act (HWCA). The DTSC delegates a portion of its enforcement authority to local agencies pursuant to agreements between the DTSC and the local agencies.

b. State Water Resources Control Board

The Central Valley Regional Water Quality Control Board (RWQCB) is authorized by the State Water Resources Control Board (SWRCB) to enforce provisions of the Porter-Cologne Water Quality Control Act of 1969. This act gives the Central Valley RWQCB authority to require investigations

when the quality of groundwater or surface waters of the State is threatened and, if necessary, to require remediation of contaminated groundwater or surface waters.

c. California Department of Forestry and Fire Protection (CAL FIRE)

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire threat potential throughout California.¹ CAL FIRE ranks fire threats based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threats.

d. California Fire Code

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code (CFC), included as Title 24, Part 9. The CFC includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution.

e. California Public Utilities Code

In response to a gas pipeline explosion in San Bruno, Governor Jerry Brown signed three bills into law in September 2012 to improve pipeline safety.² The bills, Assembly Bill (AB) 578, AB 861, and AB 1456, add provisions to the Public Utilities Code calling for the adoption of the National Transportation Safety Board standards, establishment of penalties for gas and electrical corporation executive officer violation of the Public Utilities Act, and development of safety performance metrics.³ Regulations, metrics, and standards relating to these bills are being developed, but are not yet in effect.

¹ CAL FIRE, http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_development.php, accessed on January 8, 2013.

² Koskey, Andrea, 2012, "Gov. Brown signs three bills tightening pipeline safety," *San Francisco Examiner*, <http://www.sfexaminer.com/local/2012/09/gov-brown-signs-3-bills-tightening-pipeline-safety>, accessed on January 11, 2013.

3. Local Authorities, Regulations and Policies

a. San Joaquin County Environmental Health Department

The San Joaquin County Environmental Health Department is the Certified Unified Program Agency (CUPA) for San Joaquin County, including all of its cities.⁴ As the CUPA, the Environmental Health Department administers the Hazardous Waste Generator, Hazardous Waste On-Site Treatment, and Underground Storage Tank programs.

b. San Joaquin County Office of Emergency Services

The San Joaquin County Office of Emergency Services administers the State's Hazardous Material Release Response Plan and Inventories and the Accidental Release Prevention (Cal-ARP) programs. Additionally, the Office of Emergency Services has a Hazardous Material Area Plan designed to protect human health and the environment through hazardous materials emergency planning, response and agency coordination and community right-to-know programs.⁵ The Hazardous Material Area Plan, among other provisions, provides guidance for businesses required to file a hazardous materials business plan. Under Chapter 6.95 of the California Health and Safety Code and the Federal Resource Conservation and Recovery Act, any business storing quantities of hazardous materials greater than 55 gallons of liquid, 500 pounds of solid or 200 cubic feet of some compressed gases must file a hazardous materials business plan annually that establishes incident prevention measures, hazardous material handling protocols and emergency response and evacuation procedures. The City of Tracy Police Department and the South County Fire Authority work with San Joaquin County to implement the Hazardous Material Area Plan.

The Office of Emergency Services also administers the Emergency Planning and Community Right-to-Know program for Tracy. The Office of

⁴ San Joaquin County Environmental Health Department, <http://www.sjgov.org/ehd/programs/Others/unified.htm>, accessed on January 8, 2013.

⁵ San Joaquin County Office of Emergency Services, http://www.sjgov.org/oes/getplan/Haz_Mat_Area_Plan/Area%20Plan.pdf, accessed on January 8, 2013.

Emergency Services has also prepared the Multi-Hazard Plan as the basic emergency plan for San Joaquin County.

c. South County Fire Authority

The South County Fire Authority (SCFA) is tasked with responding to both emergency and non-emergency hazardous materials incidents.⁶ As part of this role, the SCFA employs a Hazardous Materials First Responders team specifically trained in reducing impacts associated with hazardous materials incidents. The First Responders team consists of four Hazardous Materials Technicians/Specialists per shift (12 total); two of those four on-duty personnel and the Haz-Mat equipment are based at SCFA Station 96, located at Grant Line Road and Parker Avenue in Tracy. Hazardous Materials Technicians/Specialists that can participate as first responders are also available at other stations, including at SCFA Station 94/ the California Department of Forestry and Fire Protection Station 26 on Old Schulte road adjacent to the Specific Plan Area, depending on personnel assignments.

d. Airport Plans

The San Joaquin County Airport Land Use Compatibility Plan (2009) and the City's 1998 Airport Master Plan – Tracy Municipal Airport identify future improvements for the airport to meet future aviation needs and compatible land uses for the various safety zones around the airport.⁷ This is because the type of development occurring in the airport environs impacts the safety of aircraft operation and impacts the number of people exposed to aircraft hazards, such as airplane crashes.

⁶ Tracy Fire Department, <http://www.ci.tracy.ca.us/index.cfm?navId=846>, accessed on January 8, 2013.

⁷ City of Tracy, Airport Master Plan, July 8, 1988, pages ES-1 to 1-1; San Joaquin County Airport Land Use Compatibility Plan, http://www.sjcog.org/docs/pdf/Regional%20Planning/ALUC/Chapter%201_ALUCP%20Update.pdf, accessed on January 8, 2013.

e. City of Tracy General Plan

The City of Tracy General Plan contains several goals and policies that relate to hazards, hazardous materials, hydrology, and water quality. Goals and policies relevant to the Specific Plan are listed in Table 4.8-1.

f. Tracy Municipal Code

The City of Tracy's Municipal Code (Code) addresses a variety of hazards and related topics, including hazardous materials and waste and airport safety.

The California Fire Code is adopted as Chapter 9.06 of the Code. Section 5.24.130 of the Code requires notification of the City, EPA Regional Waste Management Division Director, and "state hazardous waste authorities" (i.e., DTSC) of all hazardous waste discharges to the sewer. Section 5.24.260 of the Code requires that waste not permitted to be discharged into the community sewer must be transported to a State-approved disposal site, and the required "Waste Haulers Report" must be completed and a copy kept at the facility and the waste hauling manifest must be made available upon demand by the City, and retained for a minimum of three years. Article 27 of the Code establishes an Airport Overlay zone intended to regulate land uses adjacent to the Tracy Municipal Airport by limiting activities and construction in aircraft approach areas within the City limits. Chapter 3.24 of the Code provides for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency, including from fire or pollution. All officers and employees of this City, together with volunteer and other forces enrolled to aid them during an emergency, shall constitute the Emergency Organization of the City. This chapter provides for the direction of the Emergency Organization, and coordination of the emergency functions of the City and all other public agencies, corporations, organizations, and affected private persons.

TABLE 4.8-1 CITY OF TRACY GENERAL PLAN POLICIES RELEVANT TO HAZARDS AND HAZARDOUS MATERIALS

Goal/ Policy No.	Goal/Policy Content
Public Facilities Element	
Goal PF-1	Minimal loss of life and property from fires, medical emergencies and other types of emergencies.
<i>Objective PF-1.1</i>	<i>Strive to continuously improve the performance and efficiency of fire protection services.</i>
Policy P1	The City shall provide fire and emergency response facilities and personnel necessary to meet residential and employment growth in the city.
<i>Objective PF-1.2</i>	<i>Promote coordination between land use planning and fire protection.</i>
Policy P1	Fire hazards shall be identified and mitigated during the project review and approval process.
Policy P6	The City shall use physical site planning as an effective means of preventing wildland fires by requiring the following: <ul style="list-style-type: none"> “ Drought-resistant native plants incorporated into public works projects. “ More than one ingress/egress road to any neighborhood in areas subject to wildland fires. “ Roadways with grades that accommodate emergency vehicles. “ Structures that are constructed of fire-resistant materials.
Safety Element	
Goal SA-3	Protection of lives and property from wildland fire hazards.
<i>Objective SA-3.1</i>	<i>Evaluate the potential for wildland fire hazards when considering new development.</i>
Policy P1	All development in areas of potential wildland fire hazards shall include the following: <ul style="list-style-type: none"> ◆ Clearance around structures. ◆ Fire-resistant ground cover. ◆ Fire-resistant roofing materials.
Policy P2	Development in areas with steep terrain shall be restricted as necessary in order to ensure fire safety.
Policy P3	New developments shall satisfy fire flow and hydrant requirements, street widths and design requirements as established by the City.

TABLE 4.8-1 CITY OF TRACY GENERAL PLAN POLICIES RELEVANT TO HAZARDS AND HAZARDOUS MATERIALS

Goal/ Policy No.	Goal/Policy Content
Policy P4	The City shall incorporate drought-resistant and fire resistant plants in public works projects in areas subject to wildland fires.
Policy P5	The South County Fire Authority shall train regularly for urban and wildland firefighting conditions.
Goal SA-4	Protection from the harmful effects of hazardous materials and waste.
<i>Objective SA-4.1</i>	<i>Minimize exposure to harmful hazardous materials and waste by Tracy residents.</i>
Policy P1	Adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences and public facilities.
Policy P2	When reviewing applications for new development and redevelopment in areas historically used for commercial or industrial uses, developers shall conduct the necessary level of environmental investigation to ensure that soils, groundwater and buildings affected by hazardous material releases from prior land uses and lead or asbestos potentially present in building materials, will not have a negative impact on the natural environment or health and safety of future property owners or users.
Policy P3	The safe transport of hazardous materials through Tracy shall be promoted by implementing the following measures: <ul style="list-style-type: none"> “ Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas. “ Prohibit the parking of vehicles transporting hazardous materials on City streets. “ Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the extent possible.
Policy P4	Emergency response plans shall be submitted as part of use applications for all large generators of hazardous waste.
Policy P5	The City shall continue to encourage the reduction of solid and hazardous wastes generated within the City, in accordance with countywide plans.
Policy P6	The City shall partner with San Joaquin County to implement the Hazardous Materials Area Plan.

TABLE 4.8-1 CITY OF TRACY GENERAL PLAN POLICIES RELEVANT TO HAZARDS AND HAZARDOUS MATERIALS

Goal/ Policy No.	Goal/Policy Content
Goal SA-5	Protection from the risks associated with aircraft operations at the Tracy Municipal Airport.
<i>Objective SA-5.1</i>	<i>Ensure that land uses within the vicinity of the Tracy Municipal Airport are compatible with airport restrictions and operations.</i>
Policy P1	Ensure that new development shall be consistent with setbacks, height and land use restrictions as determined by the Federal Aviation Administration and the San Joaquin County Airport Land Use Commission, as well as the policies of the City's Airport Master Plan.

Source: City of Tracy General Plan, 2011.

4. Hazardous Materials

For purposes of this environmental analysis, the term “hazardous material” means “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 the environment” (see California Health and Safety Code Section 25501).

Once a hazardous material is released, it may move from the source to a point of contact with the community or environment through an exposure pathway. To reach that point of contact, the exposure pathway must have:

- “ A contamination source or point of release.
- “ A transport mechanism from the source to the air, surface water, groundwater, or soil.
- “ A contact point where people are exposed to contaminated air, surface water, groundwater, or soil.
- “ A route of entry into the body. Routes of entry include ingestion (eating or drinking), inhalation (breathing), and absorption (skin contact).

If any of the above requirements for an exposure pathway are not present, the pathway is incomplete and no exposure or risk is possible. In some cases, although a pathway is complete, the likelihood that exposure will occur is very small.

Hazardous materials include a wide variety of substances commonly used in households and businesses. Used motor oil, paint, solvents, lawn care and gardening products, household cleaners, gasoline, and refrigerants are among the diverse range of substances classified as hazardous materials. Nearly all businesses and residences generate some amount of hazardous waste. Certain businesses and industries generate larger amounts of such substances, including gas stations, automotive service and repair shops, printers, dry cleaners, and photo processors. Hospitals, clinics, and laboratories generate medical waste, much of which is also potentially hazardous.

B. Existing Conditions

1. Hazardous Materials

a. Hazardous Materials Transport

There are no major transportation routes within the proposed Specific Plan Area. Major transportation routes in proximity to the Specific Plan Area are I-580 and I-205. Local transportation routes within and adjacent to the proposed Specific Plan Area include Mountain House Parkway, Old Schulte Road, and Hansen Road. All of these transportation routes may be used to transport hazardous materials from suppliers to users. Transportation accidents involving hazardous materials could occur on any of the routes, potentially resulting in explosions, physical contact by emergency response personnel, environmental degradation and exposure to the public.

b. Hazardous Materials Sites

i. Regional Water Quality Control Board (GeoTracker Database)

Seven “hazardous materials sites” were identified on or within ½-mile of the Specific Plan Area, based on review of 1) the RWQCB’s GeoTracker database and 2) the Environmental Data Resources (EDR) report generated for the

Phase I Environmental Site Assessment (ESA) for the Specific Plan Area, included in Appendix H.⁸

GeoTracker is the RWQCB's online database that (1) provides access to statewide environmental data and (2) tracks regulatory data for the following types of sites:

- “ Leaking Underground Fuel Tank (LUFT) cleanup sites;
- “ Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites);
- “ Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]);
- “ Land Disposal sites (Landfills); and
- “ Permitted UST facilities.

The EDR report⁹ includes the results of a database search of federal and state environmental records. Specific databases searched and the search radius for each are identified in the EDR report and are consistent with the requirements of ASTM E1527-05. The EDR database report was reviewed to note reported releases of hazardous materials in the vicinity of the Specific Plan Area that are known to have or are expected to result in an environmental condition that could adversely impact the Specific Plan Area. Reported release sites listed in the regulatory agency database search report were evaluated with respect to the nature and extent of a given release, the distance of the reported release from the Specific Plan Area, and the position of a reported release with respect to known or expected local and/or regional groundwater flow direction. Generally, reported release sites located within

⁸ Phase I Environmental Site Assessment for Cordes Ranch Specific Plan Area, Tracy, California. Prepared for the City of Tracy by The Planning Center | DC&E, March 2013.

⁹ The EDR Radius Atlas, 2013. Cordes Ranch Specific Plan, Tracy, CA, Inquiry Number 3524818.1s, February 20, 2013.

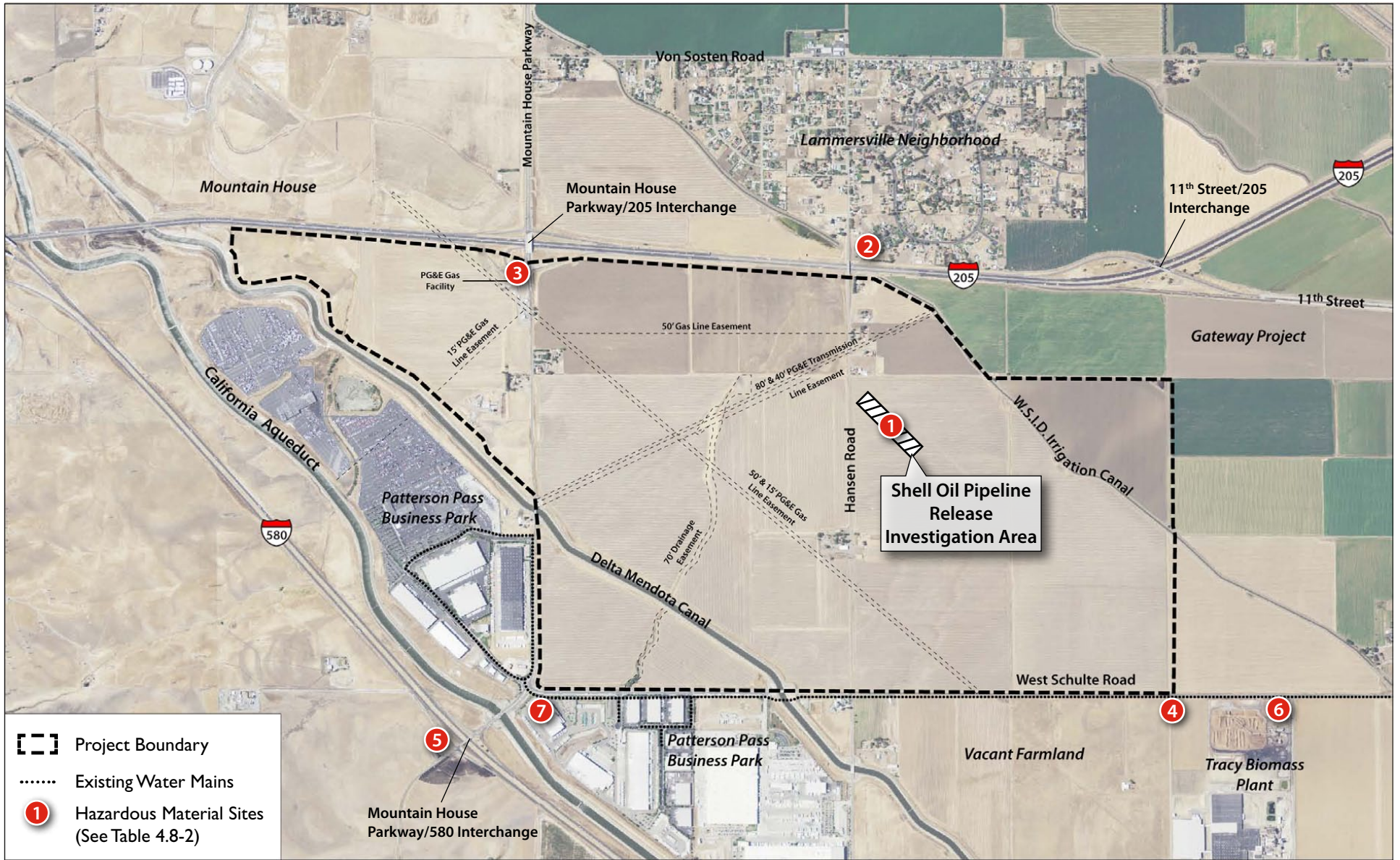
½-mile up-gradient, ¼-mile cross-gradient, or adjacent down-gradient were considered to have a potential to impact the Specific Plan Area, and are discussed below. Properties that were listed in the EDR database search report, but were not identified as a release site (for example, a site listed as a hazardous waste generator but not as having had a release) were not considered to have a potential to impact the Specific Plan Area. Non-release sites identified adjacent to the Specific Plan Area generally are not discussed.

A GeoTracker database search, conducted on February 25, 2013, revealed six sites on or within ½-mile of the Specific Plan Area. A seventh site within ½-mile of the Specific Plan Area, not identified on GeoTracker, was identified on the RWQCB's SLIC (Spills, Leaks, Investigation and Cleanup) list during review of the EDR report.

The seven sites on or within ½-mile of the Specific Plan Area are listed on Table 4.8-2 and their locations with respect to the Specific Plan Area are depicted in Figure 4.8-1. The seven sites also are discussed below:

- “ **Site 1: Other Cleanup Site, Shell Oil**, located along Hansen Road, within the Specific Plan Area. This site is the location of a crude oil release from a former pipeline, which release was subject to a subsequent investigation and on-going cleanup. Historically, Shell operated two pipelines (8-inch and 10-inch diameter) running in a northwest-southeast orientation east of Hansen Road and north of Schulte Road. In 2001 Shell abandoned the pipelines and removed portions of the pipelines in advance of anticipated development. The pipelines were buried at a depth of approximately 4 feet below ground surface (bgs). During pipeline removal, six areas referred to as Trenches 1 through 6 were observed to be impacted by petroleum hydrocarbons. Shell over excavated two trenches to depths ranging from 6 to 20 feet bgs and excavated to 4 feet bgs at 4 additional trenches.

Since the discovery of soil contamination, numerous soil borings have been installed and soil samples analyzed. The site currently contains approximately 19 groundwater monitoring wells and three nested vapor



Source: The Planning Center | DC&E, 2013; USGS, 2011.

FIGURE 4.8-1
 HAZARD MATERIAL SITES

TABLE 4.8-2 HAZARDOUS MATERIAL SITES WITHIN ½-MILE OF SPECIFIC PLAN AREA

ID*	Site Name	Cleanup Status	Address
1	Other Cleanup Site – Shell Oil Company, Hansen Rd	Open-Remediation	Hansen Rd
2	Permitted UST – Merhing, Robert	N/A	16343 Diablo CT
3	Permitted UST – PG&E Company	N/A	24081 Patterson Pass
4	Other Cleanup Site – Tracy Youth Sports Park	Open – Inactive	15178 Old Schulte Rd
5	Leaking UST Cleanup Site – Former Arco #6100	Open – Assessment & Interim Remedial Action	25775 Patterson Pass Rd
6	Other Cleanup Site – Owens-Brockway Glass Container Facility	Open – Inactive	14700 Old Schulte Rd
7	Other Cleanup Site – Tri-State Motor Transit Co	Open – Inactive	25501 Patterson Pass Rd

* See Figure 4.8-1 for location with respect to Specific Plan Area.

monitoring wells. Quarterly groundwater monitoring reports are submitted to the RWQCB.

Groundwater has been impacted by dissolved phase petroleum contamination from the Shell pipeline release. In addition, free phase product (crude oil) has been detected floating on the ground water in several of the monitoring wells in the investigation area.

Given that the pipelines were located 4 feet bgs, and over-excavation was performed to a minimum depth of 4 feet bgs, a release from the pipelines would not be expected to impact soils above 4 feet bgs, which is generally confirmed by the soil data. The soil impact, which exists variably in the area, extends to first encountered groundwater, which occurs between 30 and 35 feet bgs. Soil impact has been identified at select locations at depths greater than 130 feet bgs; however, the impact is suspected to be cross-contamination from direct push drilling techniques. Shell's

consultants originally speculated that total petroleum hydrocarbon (TPHc) monitoring results observed below 171 feet bgs reflected naturally occurring TPHc or were related to regional oil production, but have subsequently concluded the observed TPHc is related to cross-contamination from direct-push sampling techniques. To date, Shell (as the responsible party of record) continues to work with the RWQCB to determine whether RWQCB can confirm the above conclusions, although no such determination has yet been made by RWQCB.

The latest site investigation report on GeoTracker¹⁰ indicates a complete Conceptual Site Model (CSM) and human health risk assessment (HRA) is being prepared for the site by Shell's consultant. After publication of these documents, and following the RWQCB's review and concurrence, the RWQCB should be able to define with some certainty future remedial action requirements and cleanup standards for the contamination at this site. Completion of the CSM and HRA are anticipated to occur in March 2013.¹¹

Limited soil remedial actions have been performed to date, and additional soil remedial actions may be required by the regulatory agency. Shell's remediation progress will be monitored and the nature and schedule for any future remediation will be considered during redevelopment planning. In the absence of proposed and approved remedial actions, a timeline for completion of remedial actions cannot be estimated at this time. Residual soil impact following completion of remedial actions will likely exist at depths greater than 4 feet bgs. In the event grading or soil excavation activities will be required at depths greater than 4 feet bgs, appropriate precautions would be imposed by the regulatory agency (e.g. on-site air monitoring, soil sampling and analysis, personal protective equipment for workers). Depending upon the success of the remedial

¹⁰ CRA, 2012. *Site Investigation and Third Quarter 2011 Groundwater Monitoring Report, Former Shell Central Valley Crude Oil Pipelines, Cordes Ranch*, January 4.

¹¹ Telephone communication with Ms. Patricia Vellines, RWQCB case worker for the Shell pipeline investigation, February 20, 2013.

actions with respect to the development timeline, vapor intrusion concerns could exist at the time of development. In such a case, implementation of engineering controls on building placement or designs, particularly for below grade structures, may be required.

In addition, monitoring wells on the subject property will require abandonment following remediation, or replacement if remedial actions are not completed before development of the impacted portion of the Specific Plan Area.

- “ **Site 2: Permitted UST, Robert Mehring**, located at 16343 Diablo Court, approximately 550 feet to the north of the Specific Plan Area. This is a permitted UST site; no release has been reported.
- “ **Site 3: Permitted UST, PG&E**, located at 24081 Mountain House Parkway (Patterson Pass Road), within the northwest portion of the Specific Plan Area. This is a permitted UST site; no release has been reported.
- “ **Site 4: Other Cleanup Site, Tracy Youth Sports Park**, located at 15178 Old Schulte Road. This property is located adjacent to the southeast of the Specific Plan Area (across Old Schulte Road) and is relatively cross-gradient with respect to groundwater flow direction. This property is listed as an open, inactive, and unspecified soil release. The case was opened September 1, 2006 and inactive as of May 20, 2009. No other information was provided on GeoTracker. This release is unlikely to affect the Specific Plan Area based on soil only reported impact, absence of regulatory follow up action, and location and orientation relative to the Specific Plan Area.
- “ **Site 5: Leaking UST Cleanup Site, Former ARCO #6100**, located at 25775 Patterson Pass Road, approximately 2000 feet to the southwest of the Specific Plan Area. This site is relatively up gradient from the Specific Plan Area with respect to groundwater flow direction. The property is the site of a gasoline release with free product migrating to the southeast/east with impact primarily isolated to the subject property. Perched thin lenses of groundwater are impacted; high contaminant mass

poses potential migration hazard and hazard to regional groundwater. Initial contamination was detected in 1986. Soil vapor extraction was initiated in 2004. A new remedial action work plan was submitted and approved in 2012. Cleanup via soil vapor extraction is ongoing. GeoTracker indicates impediments to case closure include inadequate site characterization, and potential risks from vapor intrusion, worker direct exposure hazards and risks not assessed. However, these concerns generally apply only to the immediate vicinity of this site. As a result, this release is unlikely to affect the Specific Plan Area based on distance and existing groundwater data. Nevertheless, given that GeoTracker describes the site as inadequately characterized, it is possible that future characterization of the site and vicinity may yield unexpected results that indicate a potential threat to groundwater (and soil vapor) beneath the Specific Plan Area.

- “ **Site 6: Other Cleanup Site, Owens Brockway Glass Container Facility**, located at 14700 Old Schulte Road, approximately 700 feet from the southeast corner of the Specific Plan Area. The facility is listed in the EDR report as industrial (glass manufacture). Historically, the facility included waste oil USTs and was identified as a hazardous waste generator. This site is listed as an unspecified release site with a case status on GeoTracker of Open – Inactive in 2002. This site is unlikely to affect the Specific Plan Area based on inactive case status since 2002 and orientation with respect to the Specific Plan Area.
- “ **Site 7. Other Cleanup Site, Tri-State Motor Transit Co**, located at 25501 Patterson Pass Road, adjacent to the southwest corner of the Specific Plan Area, across Patterson Pass Road (Mountain House Parkway) and Schulte Road. This site is up gradient of the Specific Plan Area with respect to groundwater flow. No information was provided on GeoTracker. However, the EDR report includes a listing from a historical database suggesting a possible historical release of petroleum product at the site more than 20 years ago. The site was identified on the EDR report under the RWQCB’s SLIC (Spills, Leaks, Investigation and Cleanup) list, which identifies this property for diesel, gasoline, oil and grease, and solvent releases, with a status of open-inactive as of 1991. The

EDR report, under the SWEEPS UST database (a historical statewide database previously maintained for the SWRCB by a private contractor, dated 06/01/1994), also indicates seven (7) USTs at the site on or before 1994, ranging in size from 10,000 to 500 gallons and storing diesel, gasoline, oil and waste oil. However, the EDR report does not list this site as a leaking UST under the current LUST database (the SWRCB's Leaking Underground Storage Tank [LUST] Incident Reports and Tank Information System database list, dated 12/17/2012). In addition, the San Joaquin County Environmental Health Department, Site Mitigation Program, which oversees UST release investigations in the county, reported no file records for this site following a telephone request for information.¹² As follow up to the telephone request, a formal written request for site information (e.g. UST monitoring/removal, UST site cleanup, other site cleanup, etc.) was submitted to the San Joaquin County Environmental Health Department¹³ on March 15, 2013. If any such records exist they may be made available for review in the county offices approximately 10 days after the written request.

Because of the orientation and close proximity of this property to the Specific Plan Area, the potential exists for a release from this site to have impacted groundwater beneath the Specific Plan Area. However, given: 1) that the reported release was identified on a historical database more than 20 years ago, 2) was not identified on a current leaking UST database, 3) the inactive status and the absence of regulatory follow up actions to the historical reported release, and 4) the absence of any hardcopy files with the county Environmental Health Department for a release or on-going assessment or mitigation at this site, it is reasonable to conclude the historical release is/was likely a low priority case and any potential impact is unlikely to adversely affect commercial development in the Specific Plan Area.

¹² Telephone communication with Ms. Adrienne Ellsaesser, Lead Senior REHS, SJCEHD, March 15, 2013.

¹³ Public Records Release Application submitted via facsimile to Ms. Cheryl Field, Sr. Office Assistant Environmental Health Department San Joaquin County, March 15, 2013.

ii. Department of Toxic Substances Control

The DTSC's EnviroStor database is an online search tool for identifying sites which were contaminated or are potentially contaminated and in need of further investigation. The EnviroStor database also identifies facilities that are authorized to treat, store, dispose of and/or transfer hazardous waste. The EnviroStor database includes lists of the following site types: federal Superfund sites; State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides the site name, site type, status, address, any restricted use and/or recorded deed restrictions, past use(s) that caused contamination, potential contaminants of concern, site history and planned and completed activities.

As of January 8, 2013, the EnviroStor database search reported there were no regulatory properties on or adjacent to the Specific Plan Area. There were four regulatory properties within approximately 1 to 2 miles of the Specific Plan Area; one of which requires further DTSC action and three which require no further action. Due to their distance and orientation from the Specific Plan Area, none of these sites is likely to affect the Specific Plan Area:

- “ **School Cleanup Site**, Kimball High School, is located at 24606 South Lammers Road, approximately 1 mile to the east of the Specific Plan Area. Metals and organochlorine pesticides are potential contaminants of concern in the soil, resulting from the prior use of the property for agriculture. The site is undergoing investigation. Due to its distance and orientation down-gradient from the Specific Plan Area, this site is unlikely to affect the Specific Plan Area.
- “ **School Investigation Site**, Addition to Kimball High School, is located at 24606 South Lammers Road, approximately 1 mile to the east of the Specific Plan Area.
- “ **School Investigation Site**, George Kelly School, is located at Veneto Drive/Mabel Josephine Drive, approximately 1.7 miles to the east of the Specific Plan Area.

- “ **Voluntary Cleanup Site**, Old Valley Pipeline—Mansfield Site, is located at 13880 West Grant Line Road, approximately 1.4 miles to the northeast of the Specific Plan Area.

iii. Residual Pesticides in Soil

Much of the Specific Plan Area has historically been used for agricultural purposes. A Pesticide Use Report (PUR) public records request was made to the San Joaquin County Agricultural Commissioner’s office for the Specific Plan Area, by APN numbers. The requested PUR records¹⁴ received from the county cover the past five years and include data for the following growers: Stephen Alegre, Holdener Ranches, Albert Lafrancis, and Mark Gouvaia. Crops grown were mostly barely, wheat, oats, and alfalfa, as well as lesser amounts of forage hay, corn, ryegrass and dry beans. The PUR records indicate periodic routine use of herbicides, insecticides, and rodenticides on the agricultural land encompassing most of the Specific Plan Area over most of the five year period reviewed. Categories of pesticides applied include organophosphate insecticides (e.g. methyl parathion), carbamate insecticides (e.g. Methomyl), chloro-phenoxy herbicides (e.g. MCPA dimethylamine). The PUR records do not indicate any routine use of organochlorine insecticides (e.g. DDT, Dieldrin, etc.) the category of pesticide that is most persistent in the environment.

Previous Environmental Site Assessments (ESAs) for portions of the Specific Plan Area have included Phase I assessments of potential past use of pesticides, as well as limited Phase II soil sampling programs to screen for residual pesticide contamination, as summarized below:

¹⁴ San Joaquin County Agricultural Commissioner’s Office, 2013, Public Records Request – Last 5 Years; File No. 2233; requestor, Karl Rodenbaugh, The Planning Center/DC&E; date completed, March 18, 2013.

- “ **Bob-A-Lou Farms Property; Phase I ESA¹⁵ (1997).** This property represents the northwest portion of the Specific Plan Area, west of Mountain House Parkway. The Phase I ESA noted that chemical farming methods were used on the property, including from the 1960s through the 1980s. Row crops farmed included alfalfa, corn, wheat and oats. Specific pesticides reportedly used historically included Ambush, Lorsban, and Lomate, as well as herbicides Roundup, Gowan, Direx, and Velpar. The report concluded that the on-site farming business had properly handled agricultural chemicals and petroleum products and there was “No evidence of significant volumes of spillage (other than minor surface spills) was observed in areas used for the storage of agricultural chemicals and petroleum products.”
- “ **24007 Hansen Road Property; Phase I ESA¹⁶ (2007).** This 106-acre property, identified as APN 209-460-31, is a rectangular parcel located along the northern boundary of the Specific Plan Area and at the southwest corner of Hansen Road and Interstate 205. The site was used for dry hay farming prior to 1940; used for growing barley, oats, and wheat from the 1940s through the 1960s; and used for growing alfalfa since the 1970s. No pesticide/herbicide mixing activities, pesticide/herbicide storage, or farm equipment fueling/maintenance were reported to have been conducted at the site. A limited Phase II subsurface investigation conducted by Tetra Tech¹⁷ on August 15, 2007, included collecting a total of 20 soil samples at depths of approximately 0.5 and 2

¹⁵ Construction Testing and Engineering, Incorporated (“CTE”), 1997, *Phase I Environmental Site Assessment (ESA)* for the Bob-A-Lou Farms Property, Tracy, California. Prepared for Commercial Real Estate Services, Walnut Creek, California.

¹⁶ Tetra Tech, Inc., 2007. *Phase I Environmental Site Assessment, Agricultural Land, 24007 South Hansen Road, San Joaquin County, California 95377*. Unpublished professional report prepared for TC No. Cal. Development, Inc. c/o EASI, June 14.

¹⁷ Tetra Tech, Inc., 2007. *Limited Phase II Subsurface Investigation for Agricultural Chemicals in Near-Surface Soils, Agricultural Land, 24007 South Hansen Road, San Joaquin County, California 95377*. Unpublished professional report prepared for TC No. Cal. Development, Inc. c/o EASI, September 19.

feet below ground surface (bgs) from soil borings drilled using hand auger equipment at 20 locations. The soil samples were collected at locations distributed across the site on a grid to provide relatively uniform areal coverage. No evidence of elevated concentrations of organo-chlorine pesticides, organophosphate pesticides, chlorinated herbicides, or California Title 22 metals was found based on the soil sampling and analysis conducted during this assessment.

Residual agricultural chemicals could exist in Specific Plan Area soils from historic use of the area for agricultural purposes. If there are localized spills of pesticides and farming chemicals, there could be localized hot spots in soil present. However, based on the available data, the potential presence and related risks of these constituents generally is considered de minimis across the Specific Plan Area as a whole, particularly under a planned commercial/industrial setting.

The most recent guidance from DTSC¹⁸ states "...the only pesticide class requiring analyses at agricultural properties are OCPs [organochlorine pesticides], such as DDT, toxaphene, dieldrin, etc.," due to the persistence of OCPs in the environment. As noted above, records reviewed for the past five years do not indicate the use of these OCPs at the agricultural lands on the Specific Plan Area. In addition, available records do not indicate the area has routinely had intensive management for orchard, nursery, or other high-value crops, which would be associated with significant use of pesticides and irrigation. Nevertheless, given the long agricultural history of the Specific Plan Area, and the possibility that pesticides, including possibly OCPs, were or are likely to have been stored, mixed, or disposed of on the property, or pesticide equipment was cleaned there – activities which potentially could lead to isolated hot spots – it is possible that OCPs may be present in soil at these isolated locations. In order to address this possibility, a limited soil sampling program is recommended for the land around existing structures or

¹⁸ DTSC, 2008, Interim Guidance for Sampling Agricultural Properties (Third Revision), California DTSC, Cal-EPA, April 7, 2008.

other areas where pesticides may have been stored or mixed on the Specific Plan Area, prior to development of these areas.

iv. Asbestos Containing Building Materials and Lead Based Paint

Existing buildings and structures within the Specific Plan Area include: 12 existing residences and associated structures; a PG&E gas facility; two public roadways (Mountain House Parkway and Hansen Road); and a cell tower installation and related equipment building. The remainder of the Specific Plan Area consists primarily of agricultural land, currently utilized for irrigated crop production, dry farming, and periodic cattle grazing.

Asbestos-containing building materials (ACBM) and lead-based paint (LBP) potentially may be present in building materials used in several existing structures at the site, based on the age of the structures. The Phase I ESA conducted for the Specific Plan Area, as well as prior Phase I ESA's for portions of the site, document several existing structures at the site that pre-date the period (approximately 1980) when ACBM and LBP were phased out of the construction industry. If any structures or building materials potentially containing ACBM and LBP are to be demolished as part of the Project, those structures and building materials shall be inspected and tested for the potential presence of ACBM and LBP.

c. Natural Gas and Crude Oil Pipelines

There are four natural gas pipelines and one crude oil pipeline within Cordes Ranch Specific Plan Area. No other pipelines were identified.¹⁹ The locations of the pipelines are shown on Figure 3-4.

Several utility easements traverse the Specific Plan Area, as shown in Figure 3-4. These easements include three gas line easements. An approximate 50-foot gas line easement extends from the southeast at the southern property boundary, up to and through the PG&E natural gas facility maintenance

¹⁹ National Pipeline Mapping System (NPMS), 2013. Interactive mapping website that shows the location of natural gas transmission pipelines and hazardous liquid pipelines throughout the US. Website: <http://www.npms.phmsa.dot.gov/>.

yard, and exits near the northwest property boundary. Two PG&E natural gas pipelines (26-inch diameter and 36-inch diameter) and a Chevron crude oil pipeline (18-inch) are located within this 50-foot easement that traverses the Specific Plan Area from the northwest to the southeast.

A second approximate 15-foot gas line easement extends from the southwest near the Delta-Mendota Canal, and terminates at the PG&E natural gas facility maintenance yard. There is a 3-inch PG&E natural gas transmission pipeline (designated as Line 222), inside a former 22-inch pipeline that was abandoned, within this easement that enters the Specific Plan Area from the southwest at a 45 degree angle and terminates at the PG&E facility maintenance yard.

There also is a PG&E natural gas pipeline easement that enters the property from the north along Mountain House Parkway and then turns east crossing the 50-foot easement and eventually trending northeast paralleling the PG&E electrical transmission line easement near Hansen Road. There is a 12-inch PG&E natural gas pipeline (designated as Line 304) within this easement that extends from the PG&E maintenance yard paralleling the 50-foot PG&E easement for about 700 feet and then turning east and continuing for approximately 1 mile before turning to the northeast for alignment within the PG&E electrical transmission line easement.

A Pipeline Safety Assessment (PSA)²⁰ was prepared by The Planning Center | DC&E for the Project (Appendix H). The purpose of this safety assessment is to identify potential hazards associated with the existing natural gas and crude oil pipelines and to evaluate any risks associated with development within the Specific Plan Area in close proximity to the pipelines. Recommendations for development setbacks based on land uses planned along the pipeline alignments are also provided.

²⁰ The Planning Center | DC&E, 2013, *Pipeline Safety Assessment for Cordes Ranch Specific Plan*, prepared for the City of Tracy, March 2013.

The PSA concluded that the pipelines do not impose hazards to persons occupying the Specific Plan Area above and beyond those which are commonly present and associated with the same pipelines already in place in adjacent communities.

A summary of the PSA findings is presented below:

- “ The pipelines are similar to a large number of pipelines making up the pipeline transportation infrastructure in California and throughout the US and have been evaluated by others for proposed development projects to the north (Mountain House) and south (Ellis Development). The gas pipelines are relatively new, ranging in age from 1962 to 2001, and are in sound condition, based on the results of recent integrity assessments and in-line inspections.
- “ The crude oil pipeline was constructed in 1945 but is regularly inspected and assessed for its integrity in accordance with Federal regulations. No incidents have been reported along this pipeline in the vicinity of the site except for third party excavation damage.
- “ The pipelines are expected to continue to operate reliably and safely as the pipeline operators conduct periodic inspections and integrity assessments in accordance with federal and State regulatory requirements.
- “ The pipelines are exposed to a limited range of potential integrity threats which are mitigated by pipeline operating practices, such as regular inspections and corrosion controls, and the location of the pipelines within easements that limits the potential for third party excavation damage.
- “ The pipelines would not impose hazards to persons occupying the Project above and beyond those which are commonly present and associated with the same pipelines already in place in adjacent communities. The pipelines present lower risk compared to many other societal risks, such as motor vehicle accidents, household accidents, disease, or crime.

“ Building setbacks from pipelines are not required by Federal or State regulations nor are they incorporated in the City of Tracy zoning standards.

d. Electrical Transmission Lines

An approximate 40- and 80-foot PG&E electrical transmission line easement enters the mid-portion of the Specific Plan Area from the southwest, extends diagonally across the Specific Plan Area, and exits to the northeast. PG&E operates a 230kV electric power transmission line within the easement.

2. Wildland Fire Hazards

Most of the Specific Plan Area has been identified as having a moderate fire threat by CAL FIRE; however there are portions of the Specific Plan Area which remain un-zoned for fire threat.²¹ Areas with moderate fire threats are defined as either “wildland areas supporting areas of typically low fire frequency and relatively modest fire behavior” or “developed/urbanized areas with a very high density of non-burnable surfaces.”²² Un-zoned areas are defined as, “developed areas spatially removed from proximity to wildland fire areas.”²³ The South County Fire Authority (SCFA) provides fire protection services to Tracy and surrounding unincorporated areas of San Joaquin County including areas of potential wildland fire hazard.²⁴ The SCFA also works with CAL FIRE in addressing wildland fire hazards.

3. Airport Hazards

No public airports or private airstrips are located within the immediate vicinity of the Specific Plan Area; however, the Tracy Municipal Airport is

²¹ CAL FIRE, http://frap.cdf.ca.gov/webdata/maps/san_joaquin/fhszl06_1_map.39.pdf, accessed on January 8, 2013.

²² CAL FIRE, http://frap.fire.ca.gov/projects/hazard/FHSZ_review_instructionsv1_3b.pdf, accessed on January 9, 2013.

²³ CAL FIRE, http://frap.fire.ca.gov/projects/hazard/FHSZ_review_instructionsv1_3b.pdf, accessed on January 9, 2013.

²⁴ City of Tracy, <http://www.ci.tracy.ca.us/?navId=870>, accessed on January 9, 2013.

located approximately 3 miles to the southeast of the Specific Plan Area. The nearest private airstrip, 33 Strip Airport, is located 5 miles to the southeast of Tracy. The Specific Plan Area is not within the Tracy Airport zone, nor is it within any area identified as impacted by the Tracy Municipal Airport in the San Joaquin County Airport Land Use Compatibility Plan (i.e. it is not within the Airport Influence Area).²⁵

C. Standards of Significance

The Project would have a significant impact with regard to hazards and hazardous materials and soils if it would:

- “ Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- “ Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- “ Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school.
- “ Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.
- “ For a project within 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, result in a safety hazard for people residing or working in the project area.
- “ For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

²⁵ City of Tracy General Plan, 2011. *San Joaquin County Airport Land Use Compatibility Plan*, page 2-3, http://www.sjcog.org/docs/pdf/Regional%20Planning/ALUC/Chapter%202_ALUCP%20Update.pdf, accessed on January 8, 2013.

- “ Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- “ Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

D. Impact Discussion

This section evaluates potential Project impacts associated with hazards, including hazards relating to the use, handling and transport of hazardous materials, hazards relating to wildfires, and hazards relating to airport operations. The discussion is organized by and responds to each of the Standards of Significance described above in Section C.

1. Project Impacts

a. Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials

Full implementation of the Project would result in development of approximately 45 acres of General Commercial uses, 126 acres of General Office uses, 1,292 acres of Business Park Industrial uses, and 89 acres of Parks uses. Therefore, implementation of the Project would include land uses that would likely require the routine use, transport, and disposal of hazardous material and waste within the Specific Plan Area. Additionally, implementation of the Project would result in an intensification of land use throughout the Specific Plan Area and a corresponding increase in the amount of hazardous materials stored, transported, and disposed of in the Specific Plan Area.

As previously note and summarized in Table 4.8-1, the City has numerous goals, objectives and policies addressing the transport and use of hazardous materials, including Policy P6, which calls for the City to partner with San Joaquin County to implement the Hazardous Materials Area Plan. Hazardous materials emergency planning and response is also regulated at the

county level by the San Joaquin County Office of Emergency Services through the Hazardous Material Area Release Response Plan and Inventories, Cal-ARP, and the Hazardous Materials Area Plan (including the hazardous materials business plan requirements of the Health and Safety Code). In addition, as mentioned previously, transportation of hazardous materials is regulated by the US DOT.

The routine use, transportation, and disposal of hazardous material and waste within and through the Specific Plan Area would increase with implementation of the Specific Plan. Although the associated risk of death, injury, and/or property loss is lessened through the implementation of and compliance with federal, State, and local regulations and policies, the impact of the routine use, transport, and disposal of hazardous materials associated with the Project would be *significant* without mitigation.

b. Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment

There are four natural gas pipelines and one crude oil pipeline that traverse the Specific Plan Area. There is a danger of upset or accident, such as pipeline explosion or rupture, associated with natural gas and oil transmission lines. However, there are easements for all such pipelines in the Specific Plan Area where structures would not be built. Additionally, PG&E has an inspection and monitoring program to ensure the safety of its natural gas transmission lines, and Chevron implements protection, testing and monitoring procedures to minimize potential corrosion or damage and maintain integrity of its oil pipeline. In addition, the operation and maintenance of these pipelines are heavily regulated under federal, state and local laws. Implementation of industry monitoring and safety programs, and compliance with federal, state and local laws and regulations, would minimize the risks associated with upset or accident conditions affecting these pipelines.

Potential short-term hazards include construction activities that involve the transport of fuels, lubricating fluids, solvents, and other potentially hazardous

material. Additionally, construction equipment could spill oil, gas, or fluids during normal usage or during refueling, resulting in potential health and safety impacts on construction personnel and others. Although construction-related spills of hazardous materials are not uncommon, the potential consequences of such accidents are generally small due to the localized, short-term nature of the releases. The volume of the spills would be limited due to the fact that the volume in any single vehicle is generally less than 50 gallons, and fuel trucks are limited to 10,000 gallons or less. Additionally, quantities of hazardous materials that exceed the thresholds provided in Chapter 6.95 of the California Health and Safety Code would be subject to a Release Response Plan 1 (RRP) and a Hazardous Materials Inventory (HMI). Federal and State regulations that govern the storage of hazardous materials in containers (i.e. the types of materials and the size of packages containing hazardous materials) and the separation of containers holding hazardous materials would limit the potential adverse impacts of contamination to a relatively small area. Also, it is reasonable to assume that all hazardous materials used during construction of the Project would be used and stored in compliance with applicable State and federal requirements. Therefore, the risks from potential releases of hazardous materials into the environment as a result of upset or accident conditions relating to construction activity would be minimized.

Standard BMPs would also be used during construction and demolition activities to minimize runoff of contaminants, in compliance with the NPDES Construction General Permit and the Specific Plan's Stormwater Pollution Prevention Plan (SWPPP). Therefore, compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would minimize the potential for significant accidental spills, releases, or explosions of hazardous materials to occur and affect public health and safety during construction of the proposed Street Conversions/Community Corridors.

Post-construction, it is possible that personal injury, property damage, environmental degradation, or death could result from the release of

hazardous materials caused by upset or accident conditions relating to the routine use, transportation or disposal of hazardous materials. Although the risk of upset and accident conditions involving the release of hazardous materials into the environment cannot be completely eliminated, it can be reduced to a manageable level.

There is potential for electrocution or exposure to electric and magnetic fields (EMFs) with electrical transmission lines. However, there are easements for all such transmission lines in the Specific Plan Area where structures would not be built. Additionally, PG&E has a policy intended to minimize EMF exposure.²⁶ PG&E's EMF policy is to "establish procedures to explicitly consider electric and magnetic field, EMF, exposure in the design of, planning for, and communications about new and upgraded facilities; take reasonable steps to reduce EMF exposure in the design of new and upgraded facilities; encourage a multi-industry effort to share responsibility for effectively addressing public concern about EMF exposure, while increasing overall energy efficiency; work closely with employees and union leadership to continue review and implementation of EMF policies and procedures and provide employees with up-to-date information; provide customers with up-to-date information on EMF and conduct measurements on request; [and] fund and actively participate in EMF research and work closely with government officials to resolve EMF issues."²⁷ These policies and activities by PG&E minimize the risks associated with potential exposure to EMFs.

Finally, as discussed in Section A.3.a the San Joaquin County Environmental Health Department is the designated CUPA. With proper implementation of CUPA programs, in conjunction with the aforementioned industry monitoring and safety programs and compliance with applicable State and federal regulations and the proposed General Plan policies discussed in

²⁶ PG&E, http://www.pge.com/myhome/edusafety/systemworks/gas/pipe_linesafety/, accessed on January 9, 2013; PG&E, <http://www.pge.com/myhome/edusafety/systemworks/electric/emf/>, accessed on January 9, 2013.

²⁷ PG&E, <http://www.pge.com/myhome/edusafety/systemworks/electric/emf/>, accessed on January 11, 2013.

Section D.1.a, the potential environmental impacts relating to reasonably foreseeable accidents and/or upset conditions involving the release of hazardous materials would be *less than significant*.

c. Emission of Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within 1-Quarter Mile of an Existing or Proposed School

The nearest existing school to the Specific Plan Area are all located more than ¼-mile away and consist of:

- “ Kelly Elementary, 535 Mabel Josephine Drive, 1 mile to the east of the Specific Plan Area,
- “ Kimball High School, 3200 Jaguar Run, 1 mile to the east of the Specific Plan Area, and
- “ Lammersville Elementary, 16555 West Von Sosten Road, 3,421 feet to the north of the Specific Plan Area.²⁸

The only proposed schools in or around Tracy are Altamont Elementary and Mountain House High, both of which would be located more than 1 mile to the north of the Specific Plan Area. Therefore, the project would not emit or handle hazardous emissions, materials, substances, or waste within ¼-mile of the Specific Plan Area and there would be *no impact*.

²⁸ Google Maps, 2013, <https://maps.google.com/maps?oe=utf-8&client=firefox-a&q=tracy,+ca&ie=UTF-8&hq=&hnear=0x809014590a55994d:0xe8466f79e0af1499,Tracy,+CA&gl=us&ei=huLtUP7LBeip0AGWYyYDoAg&ved=0CLIBELYD>, accessed on January 9, 2013; Rizzo, Denise Ellen, “Altamont Elementary project adds preschool,” *Tracy Press*, January 4, 2013; Rizzo, Denise Ellen, “Mountain House High on its way,” *Tracy Press*, July 17, 2012; Tracy Unified School District, <https://www.tracy.k12.ca.us/sites/khs/Pages/default.aspx>, accessed on January 9, 2012; Lammersville Unified School District, <http://www.lammersvilleschooldistrict.net/vnews/display.v/SEC/Lammersville%20Elementary%3E%3EContact%20Us>, accessed January 9, 2013.

d. Location on a Site which is Included on a List of Hazardous Material Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment

i. Agency Cleanup Sites

As listed on Table 4.8-2 and shown on Figure 4.8-1, there are seven hazardous materials sites in the Specific Plan Area and immediate vicinity (within ½-mile):

- 1 active former oil pipeline cleanup site
- 2 permitted USTs, no release reported
- 1 inactive unspecified soil cleanup site
- 1 active gasoline UST cleanup site
- 1 inactive glass container facility unspecified soil cleanup site
- 1 inactive motor transit petroleum and solvent cleanup site

Five of the cases listed above either (1) involved permitted USTs with no reports of release, or (2) inactive sites that have been determined to not likely affect the Project based on distance, existing groundwater data and soils information, and the proposed non-residential uses. Therefore, the risks associated with these sites are considered minimal.

The two remaining cases are active cleanup sites and are currently under review by the appropriate regulatory agencies.

One of the active sites is the Shell Oil Pipeline Cleanup Site, which is located within the Specific Plan Area east of Hansen Road. Limited soil remedial actions have been performed to date at the Shell cleanup site, and additional assessment and remedial actions may be required by the regulatory agency. Residual soil impact following completion of any future remedial actions will likely exist at depths greater than 4 feet bgs. In the event grading or soil excavation activities will be required at depths greater than 4 feet bgs, appropriate precautions would be imposed by the regulatory agency (e.g. on-site air monitoring, soil sampling and analysis, personal protective equipment for workers). Depending upon the success of the remedial actions with respect to the development timeline, vapor intrusion concerns could exist at

the time of development. In such a case, implementation of engineering controls on building placement or designs, particularly for below grade structures, may be required.

The other active site is the leaking UST cleanup site known as ARCO #6100, located at 25775 Patterson Pass Road, approximately 2000 feet to the southwest of the Specific Plan Area. This site is relatively up gradient from the Specific Plan Area with respect to groundwater flow direction. The property is the site of a gasoline release with free product migrating to the southeast/east with impact primarily isolated to the subject property. Cleanup via soil vapor extraction is ongoing. However, GeoTracker indicates impediments to case closure include inadequate site characterization, and potential risks from vapor intrusion, worker direct exposure hazards and risks not assessed. These concerns generally apply only to the immediate vicinity of this site, and it is unlikely this release would affect the Specific Plan Area based on distance and existing groundwater data. Nevertheless, given that the site is described as inadequately characterized, it is possible that future characterization of the site and vicinity may yield results that indicate a potential threat to groundwater (and soil vapor) beneath the Specific Plan Area.

Both of these active cleanup sites, like all of the hazardous materials sites in the area, are subject to various State and federal laws and regulations, as described in Section A. Nevertheless, when site characterization and remediation are not yet completed to the satisfaction of the regulatory authorities with jurisdiction, it is possible that development of a hazardous material site with existing contamination, such as the Shell Oil Cleanup Site and the ARCO #6610 UST cleanup site, could potentially pose a significant hazard to the public or the environment through releases of hazardous materials into the environment.

a) Pesticides

Available records (2008 – 2013) do not indicate use of persistent organochlorine pesticides (OCPs) of concern on field crops in the Specific

Plan Area. However, if such OCPs were used historically and spills occurred in areas where the chemicals were mixed or stored hot spots of contamination may exist. Development of any such hot spot areas could potentially pose a significant hazard to the public or the environment through releases into the environment.

b) ACBM and Lead Based Paint

If structures older than approximately 1980 are demolished during implementation of the Project, potentially hazardous building materials (i.e. ACBM, lead-based paint) may be encountered. With mitigation, these impacts would be less than significant. Inspection and testing, followed by removal of these materials (if present) by contractors licensed to inspect, test, remove and handle these materials in accordance with existing federal, State, and local regulations would insure that risks associated with the transport, storage, use, and disposal of such materials would be reduced to the maximum extent practical. Without mitigation, potential impacts from demolition of ACBM or lead based paint material during implementation of the Project would be significant.

The General Plan contains policies designed to lessen the risks of development of sites contaminated with hazardous materials, as described in Section D.1.a. Additionally, sites currently known to contain hazardous materials are monitored by the appropriate government agencies. In addition, through its Hazardous Waste Management Program, the DTSC within Cal/EPA works to enforce and implement regulations pertaining to hazardous wastes. Also, the federal EPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes. Despite these measures, and the aforementioned General Plan policies, potential environmental impacts associated with development of contaminated sites subject to future unknown investigation and cleanup requirements, to the extent that such sites extend into the Specific Plan Area, would be *significant* without mitigation.

- e. For a Project within an Airport Land Use Plan or, Where Such a Plan Has Not Been Adopted, within Two Miles of a Public Airport or Public Use Airport, Safety Hazard for People Residing or Working in the Project Area

As mentioned in Section B.3, the Specific Plan Area is not located within an Airport Land Use Plan (i.e. it is not within the Airport Influence Area of the Airport Land Use Plan) nor is it within 2 miles of a public airport. Therefore, there would be *no impact* on public airport safety hazards resulting from the Project.

- f. For a Project within the Vicinity of a Private Airstrip, Safety Hazard for People Residing or Working in the Project Area

The nearest private airstrip to the Specific Plan Area, as mentioned in Section B.3, is located 5 miles to the southeast of Tracy. Therefore, there would be *no impact* on private airstrip safety hazards resulting from the Project.

- g. Impairment of Implementation of or Physical Interference with an Adopted Emergency Response Plan or Emergency Evacuation Plan

Implementation of the Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Project implementation would result in new development, resulting in an increase in demand for emergency services during disasters, which could affect the implementation of adopted emergency response and evacuation plans during disasters (e.g. San Joaquin County Multi-Hazard Plan). However, the General Plan Public Facilities Element contains Objective PF-1.1 and related Policy P1 which directs the City to provide fire and emergency response facilities and personnel necessary to meet residential and employment growth in the city.

Additionally, development of the Specific Plan Area would include adding industrial streets consisting of two lanes with shoulders on each side to provide for emergency vehicle parking, thereby increasing emergency access in the Specific Plan Area. There are no physical components proposed in the Specific Plan that would interfere with the ability to implement emergency

response. Also, all phases of construction would be required to comply with CFC. By providing increased emergency access and through complying with the General Plan and the CFC, implementation of the Project would result in a *less-than-significant* impact with respect to interference with an adopted emergency response plan or emergency evacuation plan.

h. Exposure of 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

The Specific Plan Area consists of areas of moderate wildland fire risk and areas which are unzoned. The moderate wildland fire risk is primarily due to the terrain consisting largely of crop land with few trees or areas of natural undergrowth that could catch fire. The unzoned areas are somewhat developed areas considered to be physically distant from wildland fire areas and primarily extending along the north central and northeast corner of the Specific Plan Area. Since there is only a limited fire threat to the Specific Plan Area, the Project would not increase the risk of wildland fires. Therefore, the impact would be *less than significant*.

2. Cumulative Impacts

This section analyzes potential impacts related to hazards and hazardous materials that could occur from a combination of the proposed Project with other past, present, and reasonably foreseeable projects in the near vicinity. The cumulative assumptions considered in this section are discussed in Chapter 4, Environmental Evaluation, of this Draft EIR, and the geographic scope of this analysis considers the Specific Plan in the context of the General Plan as well as other past, present and foreseeable projects in the vicinity of the Cordes Ranch Specific Plan Area.

Through the implementation of the Project along with other past, present, and reasonably foreseeable projects in the near vicinity there will likely be an increase in the use of hazardous materials. However, all new use, storage, and transport activities and all existing activities, are subject to local, State, and federal regulation. In addition, any hazards or risks associated with past,

present or future projects that use hazardous materials and/or result in contaminated sites are evaluated and mitigated on a site-specific basis by appropriate regulatory authorities. There would therefore be a *less-than-significant cumulative* impact due to hazardous materials and contaminated sites.

No public airports or private airstrips are located within the immediate vicinity of the Specific Plan Area and the Tracy Municipal Airport is located approximately 3 miles to the southeast of the Specific Plan Area. The nearest private airstrip, 33 Strip Airport, is located 5 miles to the southeast of Tracy. The Specific Plan Area is not within the Tracy Airport zone, nor is it within any area identified as impacted by the Tracy Municipal Airport in the San Joaquin County Airport Land Use Compatibility Plan (i.e. it is not within the Airport Influence Area). Given the distance of the nearest airport from the vicinity of the Project site, the increased average daily population that would result from development of cumulative projects would not adversely affect airport hazards. There would therefore be a *less-than-significant cumulative* impact due to airport hazards.

Most of the Specific Plan Area and vicinity has been identified by CAL FIRE as having either a moderate fire threat or un-zoned for fire threat. Areas with moderate fire threats are defined as either “wildland areas supporting areas of typically low fire frequency and relatively modest fire behavior” or “developed/urbanized areas with a very high density of non-burnable surfaces.” Un-zoned areas are defined as, “developed areas spatially removed from proximity to wildland fire areas.” The South County Fire Authority (SCFA) provides fire protection services to Tracy and surrounding unincorporated areas of San Joaquin County including areas of potential wildland fire hazard. The SCFA also works with CAL FIRE in addressing wildland fire hazards. Given that development of cumulative projects would tend to increase developed/urbanized areas with a high density of non-burnable surfaces and thus reduce wildland fire threat, and that SCFA and CAL FIRE would continue to provide wildland fire protection services, development of cumulative projects would not adversely affect wildland fire

hazards. There would therefore be a *less-than-significant cumulative* impact due to wildland fire hazards.

E. Impacts and Mitigation Measures

With implementation of federal, State, and local regulations governing hazards and hazardous materials, together with Mitigation Measures HAZ-1 and HAZ-2, the Specific Plan would not result in any significant impacts with respect to hazards and hazardous materials.

Impact HAZ-1: The routine use, transport, and disposal of hazardous materials associated with implementation of the Specific Plan could result in a *significant* impact.

Mitigation Measure HAZ-1: The project applicant shall fully implement the provisions of the San Joaquin County Hazardous Material Area Plan and the Tracy General Plan, including but not limited to:

- “ Ensuring that any business locating in the Specific Plan Area which stores particular quantities of hazardous materials (e.g. larger than 55 gallons of liquid, 500 pounds of solid or 200 cubic feet of some compressed gases) as stipulated under Chapter 6.95 of the California Health and Safety Code annually files a hazardous materials business plan establishing incident prevention measures, hazardous material protocols, and emergency response and evacuation procedures;
- “ Providing adequate separation between areas where hazardous materials are present and sensitive uses; and
- “ Submitting an emergency response plan for any large generators of hazardous waste located or proposed to be located in the Specific Plan Area.

Significance After Mitigation: Implementation of Mitigation Measure HAZ-1, described above, will ensure that potential impacts relating to the

routine use, transport, and disposal of hazardous material are reduced to a *less than significant* level.

Impact HAZ-2: One hazardous material site located within the Specific Plan Area (Shell pipeline cleanup site) is undergoing active investigation of soil, soil vapor and groundwater contamination, and is subject to future remedial actions. One hazardous material site located up gradient from the Specific Plan Area (ARCO #6610 UST cleanup site) is undergoing active investigation and is subject to future remedial action, with potential for the contamination to extend to groundwater and soil vapor beneath the Specific Plan Area. In addition, historical agricultural activities and associated pesticide use and storage potentially may have resulted in localized contamination areas. The Specific Plan Area also includes structures that, because of their age, potentially may contain ACBM and lead-based paint. Without mitigation, exposure to contamination associated with these hazardous material sites, potential pesticide hot spot areas, and demolition of older structures that contain ACBM or lead based paint, would be result in potential impacts that are considered *significant*.

Mitigation Measure HAZ-2a: A Soil Management Plan and companion Sampling and Analysis Plan, as well as a Health and Safety Plan (HASp), shall be prepared and implemented during and following any soil excavation and compaction associated with implementation of the Project where such activities may encounter residual soil, soil vapor, or groundwater contamination that exceeds risk-based levels established by the RWQCB or Cal-EPA. As part of the Soil Management Plan, the applicant shall retain an experienced, independent environmental monitor to observe all significant earth-moving activities. The monitor shall observe the operations, remaining watchful for stained or discolored soil that could represent residual contamination. The monitor shall also be empowered to alert the City and regulatory agencies, when appropriate, and provide direction to the grading contractor.

Mitigation Measure HAZ-2b: A plan shall be developed for installation a vapor barrier and venting system beneath buildings to be constructed at the site in those areas where residual petroleum hydrocarbons in soil vapor exceed risk-based levels established by the RWQCB or Cal-EPA. The system shall be designed to eliminate potentially significant indoor air quality health risks associated with subsurface contaminant vapor intrusion. The Plan shall be prepared by a California professional engineer experienced in vapor intrusion mitigation and who shall certify the installation.

Mitigation Measure HAZ-2c: Soil sampling shall occur within the portions of the Specific Plan Area that have historically been utilized for mixing or storing pesticides and that may contain pesticide residues in the soil, prior to issuance of grading permits in such areas. The sampling will be performed in accordance with a Sampling and Analysis Plan and Soil Management Plan prepared by a qualified Environmental Professional and/or California professional engineer experienced in Phase II site characterization. The sampling shall be conducted in accordance with applicable guidance from DTSC and San Joaquin County Environmental Health Department, and shall determine if pesticide concentrations exceed established regulatory thresholds. Should pesticide contaminated soil be identified as a result of the evaluation, further site characterization and remedial activities, if necessary, will be implemented in accordance with the Soil Management Plan.

Mitigation Measure HAZ-2d: Existing structures shall be evaluated for the presence of ACBM and lead-based paints prior to their renovation or demolition. The evaluation shall be conducted by a Cal-OSHA certified ACBM and lead-based paint contractor. Any ACBM or lead identified as a result of the evaluation shall be removed by a Cal-OSHA certified ACBM and lead-based paint contractor and be transported and disposed off-site in accordance with regulatory requirements.

Significance After Mitigation: With the implementation of Mitigation Measure HAZ-1 in addition to Measures HAZ-2a through HAZ-2d implementation of the proposed Project would not create a significant hazard to the public or the environment by virtue of location in proximity to a known hazardous materials site. Impacts would be *less than significant*