SECTION 4.8
HAZARDS AND HAZARDOUS MATERIALS

4.8.1 INTRODUCTION

This Section identifies and analyzes the potential adverse impacts to human health and the environment due to exposure to hazardous materials or hazardous conditions that could occur as a result of implementation of the proposed Project.

Issues associated with public airports and private airstrips were determined to be "effects not found to be significant" for the proposed Project because the Project is not located within an airport land use plan or within two miles of a public airport or public use airport or in the vicinity of a private airport and is not impacted by airport operations. In addition, potential effects related to EMF (electromagnetic fields) associated with the Project's existing power lines and proposed power line relocations are regulated by the Public Utilities Commission, and are not anticipated to result in significant environmental impact;[1] refer to Section 7, *Effects Found Not to be Significant*. Potential water quality effects from runoff that could contain hazardous or polluted materials during the Project's construction phase or operational activities are discussed in Section 4.9, *Hydrology and Water Quality*. Health risks associated with toxic air contaminants that could be emitted during construction and operation of the Project are discussed in Section 4.3, *Air Quality*. Hazards associated with seismic activity, landslides, subsidence, and debris flows are discussed in Section 4.7, *Geology, Soils and Seismicity*.

Information used to prepare this section was derived from a variety of sources including the Phase 1 Environmental Site Assessment prepared for the Project site in 2002 by Converse Consultants; the Converse Consultants Technical Memorandum – Hazardous Materials Review for the 21-acre Added Parcel (March 2007); the Converse Consultants Technical Memorandum for the Butterfield Specific Plan site, which updated the original Phase I ESA (March 2007); the *Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP*), updated March 2005; the Riverside County Land Use Compatibility Plan – East County Airports: Banning Municipal Airports and Environs (October 2004); the Comprehensive General Plan of the City of Banning (2005); and the General Plan's certified EIR. Full bibliographic

[1] The State of California recommends a 100-foot setback from 66kv lines, which do not affect proposed school sites (http://www.cashnet.org/news/article.esiml?id=340). Although there are no officially adopted EMF exposure limits for residential, various agencies have proposed or are considering EMF regulations. For example, the International Commission on Non-Ionizing Radiation Protection recommends that the general public not be exposed to magnetic field levels above an average of 833 milliGauss (mG). In contrast, the average magnetic field level found in U.S. homes is approximately 1 mG. Field levels within inches of some appliances can range in the 10's or 1000's of mG and diminish to below 1 mG within a few feet. Field levels directly underneath larger transmission line are often below 100 mG under normal operating conditions (http://www.sce.com/Safety/everyone/electric-magnetic-fields.htm). The CPUC has not set specific reduction levels for EMFs, pending a scientific basis for doing so (http://www.cpuc.ca.gov/PUC/energy/Environment/ElectroMagnetic+Fields/).

references can be found in Section 9.0, *Bibliography*. All of the above referenced Converse Consultant reports can be found in Appendix F, *Hazardous Materials Assessment.*

4.8.2 EXISTING CONDITIONS

4.8.2.1 ENVIRONMENTAL SETTING

On-Site Physical Setting

The Project site consists of 20 whole parcels and portions of two others[2], which together contain approximately 1,543 acres of undeveloped land. Portions of the Project site have been used in the past for both dry and irrigated farming and continue to be used for cattle grazing. The site topography ranges from flat to gently rolling foothills, with steeper slopes and more rugged topography in the site's northeastern corner. Site vegetation consists primarily of non-native grasses with mixed chaparral in the higher elevations. Smith Creek, a natural ephemeral watercourse, traverses the central portion of the Project site, is dry during most of year, and supports limited vegetation along its banks. A portion of the northern boundary of the site is formed by the San Bernardino National Forest. Undeveloped properties with similar vegetation and prior/current uses are also located adjacent to the site. The site has frontage on, and can be accessed from, Wilson Street, Highland Springs Avenue and Highland Home Road.

On-Site Utility Easements

A 16.5-foot wide Southern California Gas Company easement, which contains a 30-inch diameter buried high-pressure natural gas line, owned and managed by SCG, traverses the site diagonally through from the west center site boundary to the site's southeast corner at a depth that ranges from 12 feet bgs at the west end of the Project site to 4 feet bgs at its east end. The increased population density along the pipeline route that would result from implementation of the Specific Plan would change the pipeline's "class location designation" as established by the Public Utilities Commission (PUC), which would require that the pipeline be operated at a lower pressure or replaced with residential grade pipe. The Gas Company has replaced approximately 600 feet of on-site pipeline with residential grade pipe on both the east and west sides of the on-site easement in connection with the upgrading of its pipeline through adjacent development; however, the majority of the pipeline through the site is not residential grade and would need to be replaced when the site is developed.

Three sets of power lines traverse the Project site from east to west within a central Southern California Edison corridor that is comprised of two separate easements: a 330-foot wide south easement and an adjacent, north easement that is approximately 100 feet wide. The south easement contains 80-foot high steel frame transmission towers that carry single circuit (three

[2] Prior to the recordation of Subdivision Map 34330 the project site consisted of 8 parcels, which is reflected in the Deutsch Specific Plan EIR. New Assessor's Parcel Numbers have been assigned to the 22 individual parcels.

lines per circuit) lines. The south easement also contains a second set of transmission lines consisting of steel frame towers approximately 120 feet in height carrying double circuit lines. The north easement is occupied by a set of single circuit power lines strung on 65-foot high wood H-frame dual poles. All circuits are 220 kV. A 50-foot wide SCE easement containing 115KV lines strung on wooden poles is located in the northwestern portion of the site. Overhead 12 kV distribution lines are located adjacent to existing residential development on the north side of Wilson Avenue.

An electrical substation is located on the Project site, near its east boundary, at the end of the improved segment of Highland Home Road. The substation was originally a part of the Deutsch Banning Specific Plan project but is not included as a part of the proposed Butterfield Specific Plan as it has already been constructed and is operated by the City of Banning.

Relocation of a portion of the natural gas pipeline and the replacement of the entire line within the Project site with residential-grade pipe, and the relocation of the existing SCE 115kv transmission line alignment are proposed as part of the development; refer to Exhibits 3.0-6A, 3.0-6B, and 3.0-6C (*Utility Relocation)*.

Illegal On-Site Dumping

Field surveys of the Project site conducted by Converse Consultants (2007) as part of the Phase I ESA and ESA Update indicate that some illegal dumping of asphalt, automotive parts, tires, and other related debris has occurred. The updated Phase I ESA (2007) also indicated that none of these debris piles appear to contain toxic materials in any appreciable quantity. The Cultural Resources Assessment (LSA 2006) noted a refuse deposit on the site located at the edge of a ravine that contained a mix of debris containing such things as glass bottles, a clothes washing machine from the 1920's and a spring from a horse-drawn wagon. None of the debris scatter identified by LSA appeared to contain toxic elements.[3]

Physical Setting of Proposed Off-Site Improvement Alignments

Implementation of the proposed Project would require construction of water, wastewater, reclaimed water, and drainage infrastructure improvements in and around the City of Banning. Most of the proposed water, wastewater, and reclaimed water conveyance pipelines are proposed for construction within existing improved public right-of-way; however, a pump station is proposed on a privately owned parcel located at the corner of Omar Street and Ramsey Street; refer to Exhibit 3.0-9, *Off-Site Infrastructure*.

[3] LSA, Cultural Resource Assessment and Historic Evaluations, Deutsch Property Specific Plan, April 12, 2006, LSA-PDH0601-H-2 debris scatter, p13 (EIR Appendix D – Cultural Resources Reports)

Off-site sewer improvements for the Project may include installation of approximately 22,400 linear feet of off-site sewer main if the proposed alternative on-site satellite treatment plant is not constructed. If required, off-site sewer would be installed in portions of Wilson Street, Omar Street, Ramsey Street, Sunset Avenue, Lincoln Street, and San Gorgonio Avenue, all of which are existing paved public streets; refer to Exhibit 3.0-13, *Off-Site Sewer Plan*. In addition, if the on-site satellite treatment plant is not constructed as part of the Project, an off-site recycled water main as much as 29,300 linear feet in length may be constructed in portions of Highland Home Road, Wilson Street, Sunset Avenue, Lincoln Street, Hathaway Street, and Charles Street, all of which are existing paved public streets.

The Project may also propose to construct a water conveyance pipeline from the existing State Water Project (SWP) pipeline turn-out at the Little San Gorgonio Creek Spreading Grounds, which would be extended up to 13,900 linear feet to the northwest corner of the Project site. Possible alignments for this connection could include portions of Noble Street, High Street, Cherry Avenue, Bellflower Avenue, and Brookside Avenue; refer to Exhibit 3.0-12, *Off-Site Recycled Water*. The existing Smith Creek drainage culvert under Wilson Street may also require improvement as part of the Project.

Historic Site Usage

Historically, the Project site has been used intermittently for agricultural purposes that included cultivation of wheat and cattle grazing. Irrigation of agricultural land on the site ceased in 1982 and dry (e.g., non-irrigated) farming ceased in 1989, through cattle grazing continues through the present[4]. In its Phase I ESA, Converse Consultants did not identify any concerns with, or residual effects from, any potential past use of herbicides or pesticides in connection with site cultivation; refer to Section 4.2, *Agricultural Resources*, for a more detailed review of historic agricultural uses.[5]

Aerial photographs of the site dated 1949, 1962, 1974, 1980, 1984, and 1990 were reviewed as part of the Phase I ESA research and indicate that development of the area around the Project site started in the early 1970's and proceeded slowly until 2000. Subsequent development of residential and commercial uses, including a hospital at the southeast corner of Highland Springs Avenue and Wilson Street, intensified between 2000 and 2007; refer to Table 4.8-1, *Historical Land Uses of the Project Area,* and the *Phase I Environmental Site Assessment Report,* located in Appendix F. There is no evidence cited in the Phase 1 Environmental Assessment (Converse Consultants, March 2007) of historic land uses on or in proximity to the site that would suggest potential for hazardous substance/waste contamination. According to the ESA, there is no record of any Underground Storage Tanks (USTs) on-site at any time, or any record of prior storage and/or maintenance of diesel or gasoline powered farm equipment on the site,

[4] 1992 Draft Deutsch Banning Specific Plan EIR, SCH90020698 Agriculture Resources p 49
[5] 1992 Draft Deutsch Banning Specific Plan EIR, SCH90020698 Agriculture Resources p 49

although a diesel engine of unspecified type and use was found on a concrete pad that contains an abandoned well.

The 21-acre off-site parcel (PA 43B) was also used historically for dry farming of wheat and/or cattle grazing until 1984, when it was developed as a golf course. The *Cultural Resources Report* prepared by LSA notes that the general area of the Project site may have been used for cattle grazing as far back as the California Mission period.

Table 4.8-1
Historical Land Uses of the Project Area

Year	Site Land Use	Surrounding Land Uses
1949	Undeveloped land	Undeveloped land dominates the land uses surrounding the Project site. Dry and irrigated farming and cattle grazing on-site.
1962 and 1974	Undeveloped land	Residential properties and a commercial building to the south, beyond Wilson Street. Otherwise, no significant changes from the 1949 photograph. Dry farming and irrigated farming and cattle grazing occurring on-site.
1980, 1984, 1988, 1990	Undeveloped land	No significant changes from the 1974 photograph with the exception of additional residential uses in the vicinity of the Project site. Irrigated farming ceased in 1982. Dry farming of the site ceased in 1989. Cattle grazing occurring on-site.
Source: Converse Consultants Phase I Environmental Assessments (2002 and 2007).		

4.8.2.2 HAZARDOUS MATERIALS

Definitions

Chapter 6.5 of the *California Health and Safety Code* sets forth definitions and regulations related to hazardous materials management and disposal. The Code defines hazardous materials as:

> "[Any material] that, because of its quantity, concentration or chemical characteristics, poses a significant present or potential hazard to human health or safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing would be injurious to the health

and safety of persons or harmful to the environment if released into the workplace or the environment."

Hazards versus Risk

The health of workers and the general public are potentially at risk whenever hazardous materials have been used, or where exposure to such materials could occur. Inherent in the setting and analysis presented in this section are the concepts of the "hazard" presented by these materials and the "risk" they pose to human health.

The level of ***risk*** to human health in a given environment is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose. Therefore, a determination regarding the degree of risk takes into account the likelihood and means of exposure as well as the inherent toxicity of a material or hazard presented by a specific condition.

Responsible Agencies

Various regulatory agencies, such as the United States and California Environmental Protection Agencies (EPA and Cal EPA), the California Water Resources Control Board (SWRCB), the California Department of Toxic Substances Control (DTSC), and the State and federal Occupational Safety and Health Administrations (OSHA and CalOSHA) are responsible for developing and/or enforcing risk-based standards to protect the public and the environment from hazards posed by hazardous materials. The California Department of Forestry and Fire Protection, Office of the State Fire Marshall, Pipeline Safety Division is responsible for developing and/or enforcing standards for natural gas and petroleum product pipelines. Additional responsible agencies include the Santa Ana and Colorado River Basin Regional Water Quality Control Boards (RWQCB), South Coast Air Quality Management District (SCAQMD), and Riverside County Community Health Agency, Department of Environmental Health (DEH).

Phase I Environmental Site Assessment – Records Search

In preparing its initial (2002) Phase 1 Environmental Site Assessment (ESA) and subsequent update (2007), Converse Consultants conducted a search of available environmental records to identify listed hazardous sites within the Project site boundaries or within a 0.25-2.0 mile radius of the Project site. Converse Consultants also contacted the following government agencies regarding the Project site:

- California Environmental Protection Agency (CalEPA)
- Department of Toxic Substances Control (DTSC)

- Santa Ana and Colorado River Basin Regional water Quality Control Boards (RWQCB)
- California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR)
- California Department of Forestry and Fire Protection (CDFP), Office of State Fire Marshall (OSFM), Pipeline Safety Division
- South Coast Air Quality Management District (SCAQMD)
- Riverside County Community Health Agency, Department of Environmental Health (DEH)

According to the above referenced agencies there is either no information on file for the Project site and/or there are no reasonably ascertainable files due to a lack of property addresses. The Project site was not identified on the Environmental Database Report of Standard Environmental Record Sources (EDR).

The following adjacent properties containing underground storage tanks (USTs) were identified on the EDR:

- Highland Springs Resort, located adjacent to the northwest of the Project site, was identified as a Statewide Environment Evaluation and Planning System (SWEEPS) Underground Storage Tank (UST) site. Although the facility operates a 280-gallon UST containing gasoline, no violations or leaks have been reported for the facility.

- Loma Linda Oil Company was also identified near the Project site, approximately 1/8 miles south of the southwest corner of the property. This facility is identified as a Leaking Underground Storage tank (LUST) site, Historic UST site, and a Facility and Manifest Data (HAZNET) site. According to the report, only soil was impacted by the LUST. No violations have been reported for the facility.

In addition, a records search on ENVIROSTOR identified two school clean up sites located near the Project site. Although the school sites were identified, no further action was required. These two sites are:

- **Community Day School No. 1**, located south of the Project site in the Beaumont Unified School District was historically utilized for agricultural purposes and potential contaminants of concern include Arsenic, Chlordane, DDD, DDE, and DDT. However, DTSC approved the Preliminary Endangerment Assessment Report with a "no further action" determination as of 2/14/2002. (ENVIROSTOR ID 33010034, Site Code 404202).

- **Sundance Elementary School**, located west of the Project site in the Beaumont Unified School District was historically utilized for agricultural purposes, but most likely only dry farming. Potential contaminants of concern include Arsenic, Chlordane, DDD, DDE,

and DDT; however, as of 8/5/2004, no further action was needed (ENVIROSTOR ID 33010093, Site Code 404560).

Several other off-site locations, including unmapped sites or "orphan sites" of environmental concern, were identified by the EDR and included USTs, former hazardous materials release sites, LUSTs, and hazardous materials generators. According to the Converse reports, the potential for environmental impact to the Project site from these off-site locations of concern appears to be low due to one or more of the following factors: type of regulatory listing; distance from the subject property; location with respect to the direction of regional groundwater flow; status of the case; and/or remedial efforts being directed by a regulatory agency.

The EDR report listed twenty-three LUSTs in the region, which were reviewed to determine their potential to impact the Project site. Most were undergoing preliminary evaluation or had been signed off either because they did not require remediation or because remediation had been completed. Accordingly, the potential for environmental impact to the Project site from these off-site locations of concern appears to be low.

Overall, the potential for adverse impacts to the Project site from hazardous materials or uses located on adjacent or nearby properties would be considered low either because of the type of regulatory listing and/or because there have been no reported violations or spills at any location of potential concern, with the noted exceptions of the previously identified on-site SCG natural gas pipeline and the SCE easement transmission lines.

Phase I Environmental Site Assessment – Interviews

Interviews of the property owner's representatives revealed the past use of the property was primarily cattle grazing. No information or knowledge was known about the following items:

- Previous environmental site assessment or audit reports;
- Environmental permits or hazardous waste generator notices/reports;
- Above- and underground storage tanks;
- Septic systems, oil wells, or water wells;
- Material Safety Data Sheets; Community Right to Know Plans; Safety, Preparedness and Prevention Plans; and Spill Protection Countermeasures and Control Plans;
- Knowledge of pending, threatened or past proceedings or notices from governmental entities regarding violation, liens, and hazardous substances, or petroleum products; and
- Environmental problems with adjacent or vicinity locations.

Converse did not identify any issues of environmental concern to the City's Community Development Department. The Deutsch Banning Specific Plan EIR (1992) indicates that the

majority of the project site was at one time under Williamson Act contract and that the southern portion of the site had been cultivated for wheat production prior to 1988; however, there is no record in the documents examined by Converse to indicate whether herbicides or pesticides were used.[6] Based on its records search and field investigation Converse Consultants concluded that prior agricultural uses did not result in adverse environmental conditions on the Project site.

Phase I Environmental Site Assessment – Site Reconnaissance

A site reconnaissance was conducted as part of both the 2002 and 2007 Phase I Environmental Site Assessments and included a visual observation of the site and surrounding properties. The objective of the site reconnaissance was to identify recognized environmental conditions (RECs), including hazardous substances and petroleum products, that might be visibly discerned on the property and that could impact soils, surface waters, and/or groundwater, and to identify any hazardous condition that might not be identified in a records search. Reports documenting both the 2002 and 2007 site reconnaissance confirmed that there are no structures on the property and that most of the property is vegetated with low-growing shrubs and non-native grasses on fairly flat terrain. Both reports identify barbed wire fencing on all sides of the Project site and indicated that the property was being used for cattle grazing; however, the updated 2007 Technical Memorandum listed a number of facilities and conditions that had not been identified in the original 2002 ESA. These included the following:

- A water well in the southern portion of the Project site, which appeared to be abandoned and in poor condition. ***Potential Environmental Concern:*** *Unless the well is properly capped it could provide a route for the migration of surface contaminants, including nitrates and bacteria from cattle waste, into the ground water.*

- Five damaged automotive batteries and a diesel engine used to power the well pump, located on a concrete pad that was also occupied by a well pump. No fuel sources were observed near the tank, nor were any stains observed on the ground surrounding the well. ***Potential Environmental Concern:*** *Potential ground contamination by battery acid, petrochemicals, etc.*

- A 12-inch steel pipe, approximately 100 feet in length, on the ground surface running to the northeast from the above cited well. In addition, several metal pipelines are observed across the property. The pipes in two locations were capped at the surface and ran beneath the ground. ***Potential Environmental Concern:*** *Unless properly abandoned, pipelines may provide a transmission route for nitrates and bacteria into groundwater.*

[6] Technical Memorandum – Hazardous Materials Review, Converse Consultants, March 12, 2007.

- Several small piles of asphalt debris, automotive tires, and automotive parts were identified near the northwest corner, center, and south center portions of the Project site. No stains were observed around the debris piles. ***Potential Environmental Concern***: *It is possible that asphalt debris, automotive tires, parts and other potential, unidentified debris could result in soil contamination at the debris pile location.*

- Markers indicating the presence of a high-pressure natural gas pipeline, managed by the Southern California Gas Company, traversing the Project site diagonally from the west center to its southeast corner. The presence of the pipeline is also noted in the Deutsch Banning Specific Plan Draft EIR. No leaks were evidenced by the presence dead plant material nor were odors indicating potential leaks detected in the course of the field survey. ***Potential Environmental Concern:*** *Natural gas transmission lines transport flammable and explosive material under pressure. Escaping gases due to rupture, punctures, or leaks could accumulate in enclosed spaces; a source of ignition could cause an explosion.*

- High-tension power lines, managed by Southern California Edison (SCE), traverse the central portion of site from east to west. No stains were observed beneath the power lines towers. ***Potential Environmental Concern:*** *Electro-magnetic fields, leakage of transformer oil from pole mounted transformers resulting in ground contamination.*

- One SCE-owned pad-mounted transformer was observed near the south-center portion of the Project site. The transformer appeared to be in good condition and no leaks or stains were observed on the ground. ***Potential Environmental Concern:*** *Leakage of transformer oil resulting in ground contamination.*

No suspect asbestos-containing materials or lead-based painted components were observed in the course of field work.

4.8.2.3 WILDFIRE

Urban-Wildland Interface (UWI) Fire Areas

A wildfire is defined by statute in California as any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources. Wildfires are a significant hazard throughout the western United States and many areas of southern California are susceptible to wildfire due to the region's weather, topography, and native vegetation. Though wildland fire is a natural process and a necessary part of the natural ecosystem of southern California, it becomes an issue when development extends into previously vacant lands where wildland fire hazard may exist, creating an interface area between wildlands and urban development. Wildfires in these areas, referred to as the urban-wildland interface areas or UWI areas, can present hazards to life and property. *Chapter 49, Section 4901, Definitions, of the 2010 California Fire Code* defines Urban-Wildland Interface Fire Areas as a "geographical area

identified by the State as a "Fire Hazard Severity Zone" or other area designated by the enforcing agency to be at significant risk from wildfires." The State Fire Marshal and State Board of Forestry (BOF) and the California Building Standards Commission develop and enforce Codes and regulations related to fire prevention and response, including those related to wildfire and urban/wildland interfaces, and assist local jurisdictions in implementing those standards and practices. Chapter 49 of the *2010 California Fire Code* contains the State's requirements for Urban-Wildland Interface Fire Areas. *The 2010 California Residential Code and 2010 California Building Code* also contains fire safety requirements for structures, including those located within defined UWI areas.

Historic Impacts of Wildfire

According to records maintained by the California Department of Forestry and Fire Protection, a large portion of the Banning area has burned, often repeatedly, since the early 1900's, including the area adjacent to the north and east of the Project site and the northern and eastern portions of the Project site itself. Many of the historical fires that have been recorded in this area burned thousands to hundreds of thousands of acres and these same areas are at risk of burning again. Portions of the Banning region and surrounding areas to the north, south and east include grass- and brush-covered hillsides with significant topographic relief that facilitate the spread of fire, especially if fanned by winds that are accelerated through the San Gorgonio Pass. Alternating periods of heavy El Nino rains followed by lengthy droughts frequently result in both significant grass crops and heavy dry season die-off, providing a condition of elevated risk of wildland fire in this area.

Fire Protection Services

The City of Banning contracts with the Riverside County Fire Department for fire protection services. In general, when dealing with wildland fires, the Banning Fire Services Unit of the County Fire Department coordinates its operations with the California Department of Forestry and Fire Protection; however, a number of different agencies have jurisdiction over all or portions of the Banning's wildfire-prone areas. These include the State Department of Forestry and Fire Protection, the County of Riverside Fire Department, and the City of Banning. Each agency designates fire-prone areas in or near the municipal boundaries; each defines the degree of hazard in any given area somewhat differently; and each imposes specific requirements and enforces sometimes varying regulations regarding development in UWI areas.

Riverside Unit Pre-Fire Management Plan

In 2005, the California Department of Forestry and Fire Protection prepared the *Riverside Unit Pre-Fire Management Plan*. The overall goal of the Plan is to reduce total government costs and citizen losses from wildland fire in the Riverside Unit by protecting assets at risk. The City of

Banning is one of the government stakeholders that participated in the assessment and planning process precedent to the preparation of the Pre-Fire Management Plan.

UWI Fuels and Local Assets at Risk

UWI fuels are broken down into two types: structural and vegetative. According to the 2005 Riverside Unit Fire Management Plan,[7] the City of Banning is served by Riverside Battalion 3. The vegetative fuels listed for Riverside Battalion 3, which serves the City of Banning, are widely varied, and include grass, coastal sage scrub, chamise, Russian Thistle, and scrub oaks. The assets at risk (i.e., structural fuels) within the Battalion 3 area are predominately residential and recreational.

Requirements for the Mitigation of UWI Hazards

Requirements for the mitigation of hazards created by wildfire are contained in numerous Codes and regulations adopted and enforced by State, regional, and local agencies. These include:

- 2010 California Building Code Chapter 7A (*Materials and Construction Methods for Exterior Wildfire Exposure)* and associated CBC Ch7A Compliance Policies issued from time to time by the Office of the State Fire Marshall;
- 2010 California Residential Code, Section R327
- 2010 California Fire Code Chapter 49 (*Requirements for Urban-Wildland Interface Fire Areas)*;
- The California Reference Standards Code Chapter 12-7A
- Title 14 (*Natural Resources)* California Department of Forestry & Fire Prevention Subchapter 2 (*SRA Fire Safe Regulations*) adopted by the California Board of Forestry; ;
- Public Resource Code 4291
- 2006 State Board of Forestry and Fire Protection *General Guidelines for Creating Defensible Space ("the Guidelines")*;
- Riverside County Fire Department (Banning Services Unit) *Standard Fire Department Requirements for "Fuel Modification Zones" and Construction Improvements for Projects in or Adjacent to Wildland Areas;*
- *Safety Element* of the City of Banning Comprehensive General Plan;
- 2005 *Riverside Unit Pre-Fire Management Plan* (BOF); and

[7] California Department of Forestry and Fire Protection, Riverside Unit, *Riverside Unit Fire Management Plan 2005,* Assets at Risk Assessment – Battalion 3 (Beaumont) pp 14.

- City of Banning Municipal Code Title 8.16 (*Fire Prevention Code*) as amended by Ordinance No. 1421 (adopted December 14, 2010)

All of these are discussed in greater detail below in Section 4.8.2.2, *Regulatory Framework*.

Fire Hazard Areas – Definitions by Jurisdiction

The California Fire Plan (e.g., *Fire and Resource Assessment Program*) was established in 1996 and uses four main criteria to rank the fire hazard potential of the wildland areas of the State. The criteria are fuels, weather, assets at risk, and level of service. Fire hazard areas in the Banning Study Area were mapped by the California Department of Forestry and Fire Protection as part its Fire Hazard Severity Zones (FHSZ) mapping program, and this mapping provided a key source for Exhibit V-10 in the City's General Plan Environmental Hazards Section. The Assessment Program's designations are graduated and include: (1) very high; (2) high; (3) moderate; (4) urban/non-zoned; and (4) no fuel or non-burnable open space.

The State's FHSZ mapping project specifies the criteria used to determine the various levels of fire hazard in urban/developed areas as follows:

- ***Moderate fire hazard severity zones*** are developed/urbanized areas with a very high density of non-burnable surfaces including roadways, irrigated lawn/parks, and low total vegetation cover (less than 30 percent) that is highly fragmented and low in flammability where wildland areas are removed by at least 0.5 mile or, if closer, only present modest fire hazards.

- ***High fire hazard severity zones*** include developed/urbanized areas with moderate vegetation cover and more limited non-burnable cover. Vegetation cover typically ranges from 30-50 percent and is only partially fragmented so that short-range lateral fire spotting by firebrands could breech fuel breaks and allow for some areas to spread as flame fronts. These areas lie midway between classic urbanized areas dominated by homes, roadways, and low flammability vegetation cover and those developed areas where fuels are dense and continuous.

- ***Very high fire hazard fire severity zones*** are defined as developed/urban areas with high vegetation density (at least 70 percent cover) and associated high fuel continuity that would allow for flame spread over much of the ear with little impediment. Developed areas may have less vegetation cover and still be in this class when located within a quarter mile of wildland areas zoned as very high fire hazard areas.

- ***No fuel/non burnable open space*** is defined as areas associated with nonflammable conditions including agricultural lands (excluding rangelands) and barren rocky areas. [8]

Exhibit 4.8-1, *Wildfire Susceptibility Map* shows the State Assessment Program designations for various portions of the proposed Project site and includes areas designated as no fuel, high, and very high fire hazard severity zones. The "no fuel" designation covers those portions of the site previously in agricultural production, which included irrigated fields until irrigation stopped in 1982, and areas adjacent to fully improved streets with access to water and limited vegetation coverage. Areas of the site designated as "High" fire hazard severity zones include portions of the site used for cattle grazing, vegetated by grasses with a better than 50 percent coverage, located within ¼ mile of areas designated as "Very High" fire hazard severity zones, and lacking in on-site roads or water infrastructure. Also included are grassland areas adjacent to existing occupied structures located on Wilson Street and Highland Home Road, as these areas are also located within ¼ mile of "Very High" fire hazard severity zones. Those portions of the site designed as "Very High" fire hazard severity zones include moderate to steep hillside areas with heavy vegetative coverage, including grassland and chaparral in the higher elevations. The most northerly and easterly portions of the site within the "Very High" fire hazard severity zone include rugged, heavily brushed terrain extending from the Banning Bench area into the site.

In addition to its FHSZ mapping program, Cal Fire annually publishes a map depicting its "recommended" Very High Fire Hazard Severity Zone" (VHFHSZ) locations. These include lands which are State responsibility areas (SRA) and local responsibility areas (LRA). The map differentiates between VHFHSZ and Non-VHFHSZ. It does not identify fire hazard zones that are less than *very severe* based upon the Cal Fire analysis described above. A small portion of the most northerly quarter of the Project site has a 2010 Cal Fire VHFHSZ designation. In addition, adjacent properties located north and northeast of the site, which consist of undeveloped, chaparral covered wildlands, also have VHFHSZ threat designations due to the presence of surface fuel, steep and mixed topography, and climate/weather patterns that include the high winds characteristic of the Banning area and dry fuel moistures. In these areas "burn frequency" has been historically high.

The Riverside County Fire Department also defines wildfire hazard zones. The County's moderate hazard zone includes areas that exhibit moderate relief at the interface with the more developed areas of the City, and/or undeveloped or partially developed areas where grasses predominate. Areas covered by this standard could include the southern and western portions of the site including areas designated as "high" fire hazard severity zones by CalFire, as well as portions of the area designed as "no fuel," since agricultural production has ceased and a grassland vegetation cover is currently present. The Riverside County Fire Department Banning Services Unit, which serves the City of Banning, applies its UWI Standards to any property that

[8] Definitions are taken from the Cal Fire Guidelines for Fire Hazard Zoning Review and Validation, http://www.frap.fire.ca.gov/projects/hazard/FHSZ_review_instructionsv1_3b.pdf, accessed 12/9/2010.

abuts open space or a grass-covered vacant lot and has indicated that those standards will be applied to development within the Specific Plan as individual subdivisions are implemented, where Department UWI criteria are met in the interim as well as built-out conditions.

The City's definition of "Hazardous Fire Area" is the broadest of all of the applicable designations. Pursuant to the *City Municipal Code, Title 8, Chapter 8.16* (*Fire Prevention Code*), a Hazardous Fire Area is defined as:

> "Land other than a State designated fire hazard severity zone (FHSZ) or local designation of FHSZ, which is covered with grass, grain, brush, or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion."

While the City updated its Fire Prevention Code in December 2010, by adopting the 2010 *California Fire Code*, this local definition of a Hazardous Fire Area remains a part of the updated Municipal Code Chapter. Since the City-defined Hazardous Fire Area includes vacant, grass covered properties located at the interface between the extreme, moderate and no-fuel fire threat zones, substantial portions of Project site could constitute a locally-designated "Hazardous Fire Area" in the existing condition and portions of the site could continue to be so designated following mass grading, subsequent to re-vegetation and/or hydroseeding for erosion and dust control.

4.8.2.4 HAZARDS IDENTIFICATION AND EMERGENCY PLANNING

Multi-Jurisdictional Local Hazard Mitigation Plan:

In 2005 the County of Riverside prepared and adopted an updated *Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP)*. The LHMP[9] is intended to help reduce risks from natural and other hazards by providing information that can be used to guide decision-makers as they commit resources to reducing the effects of natural and other hazards. The LHMP analyzes the risks associated with an expansive set of hazards, including wildland fire, flooding, earthquakes, extreme weather, landslides, hazardous materials incidences, toxic pollution, among others, and outlines the plans and programs to mitigate potential impacts. The LHMP also establishes the roles of various government agencies in a coordinated response to natural or man-made disasters. The LHMP also recommends specific actions, including pre-planning, zoning, and mitigation measures that have potential to prevent or minimize disaster-related losses. The LHMP includes a hazard assessment (e.g., "Hazards Inventory") for each of the participating jurisdictions, including the City of Banning. It also identifies areas where specific

[9] County of Riverside, *Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) Part 1 and II, Updated March, 2005,* City of Banning Inventory (Part II).

types of hazards, such as earthquakes, landslides, floods, wildfires, and related would be most likely to occur.

The City participated in the County LHMP and uses the LHMP hazard assessment as a basis for its own risk assessment and management strategies. Such strategies may periodic monitoring of facilities and operations that produce, utilize, or store hazardous materials in the City.

CUPA Hazardous Response Area Plan

In 1994 SB 1082 was enacted in a statewide effort to consolidate the 6 hazardous materials related programs. These programs include: Business Emergency Plan/Hazardous Materials Handler, Hazardous Waste Generators, Underground Storage Tanks, California Accidental Release Prevention Plans, Aboveground Storage Tanks and Uniform Fire Code Hazardous Materials Management Plans. The result of this effort evolved into what is now called the *Certified Uniform Program Administration* (CUPA) program. The City of Banning has a *Hazardous Response Area Plan* that was developed as part of its requirements as a participating agency in the statewide CUPA. The City is responsible for ensuring that its Hazardous Response Plan addresses hazardous and toxic materials identified by the County's Department of Environmental Health Hazardous Materials Division and/or the Regional Water Quality Control Board.

Under the Hazardous Response Area Plan, during emergency circumstances where hazardous and toxic materials are determined unsafe by the County Department of Environmental Health, the City can require property owners to test, temporarily close, and/or remove all hazardous liquids, solids or sludge located on the site. When soil contamination is detected, the cleanup procedure to be followed, the degree or level of cleanliness required by the regulator, and the method of treatment (if permitted) are determined by the County Fire Department's Hazardous Materials Division and/or the Regional Water Quality Control Board. The City of Banning coordinates with appropriate County, State and federal agencies in the identification of hazardous material sites, and the active regulation of their timely cleanup. The City currently lists five hazardous materials storage locations under its jurisdiction: all are well sites, one of which is located adjacent to the Project site (Well #4).[10]

Multi-Hazard Functional Plan

The City adopted a Multi-Hazard Functional Planning document in 1996. The document is organized into three parts, which include: 1) the Banning Emergency Plan; 2) twelve functional annexes that describe the emergency response organization; and 3) a listing of operational data such as resources, key personnel, and essential facilities and contacts. The Emergency Plan addresses the City's planned response to extraordinary emergency situations associated with natural and man-made disasters and emergencies. The Plan's operations concepts focus on

[10] Ibid. Specific Hazards Summary – City of Banning LHMP Inventory.

coping with potential large-scale disasters that could pose major threats to life and property and potentially impact the well being of large numbers of people.

The City is also involved in multi-agency monitoring of illegal dumping in its jurisdiction, participates in the regulation of underground storage tanks and septic systems, and also participates in the regulation of hazardous materials transport throughout the community.

Hazardous Materials Emergency Response Team

The County of Riverside Hazardous Materials Emergency Response (HAZMAT) Team is a joint agency effort with personnel from the Department of Environmental Health, Hazardous Materials Management Division and Riverside County Fire/California Department of Forestry. This team responds to incidents involving hazardous materials, throughout the County, 24 hours per day, 7 days per week. The closest County Hazardous Materials Team office, which would coordinate response, is located at 4065 County Circle Drive in the City of Riverside. Locally, the Riverside County Fire Department's Hazardous Materials Unit, housed at Station 20 in Beaumont, would be the first responder in the event of a hazardous materials incident on the Project site.

4.8.3 REGULATORY FRAMEWORK

4.8.3.1 HAZARDOUS MATERIALS REGULATIONS

Federal Regulations

Comprehensive Environmental Response, Compensation and Liability Act

Discovery of environmental health damage from disposal sites prompted the U.S. Congress to pass the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA or Superfund). The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

U.S. Superfund Amendments and Reauthorization Act

The *Superfund Amendments and Reauthorization Act* (SARA) pertains primarily to emergency management of accidental releases. It requires formation of State and local emergency planning committees, which are responsible for collecting material handling and transportation data for use as a basis for planning. Chemical inventory data is made available to the community at large under the "right-to-know" provision of the law. In addition, SARA also requires annual

reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory.

Hazardous Materials Transportation

The *Hazardous Materials Transportation Act* is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, through air, or in pipelines. It includes provisions for material classification, packaging, marking, labeling, and shipping documentation.

Resource Conservation and Recovery Act (RCRA)

The *RCRA Subtitle C* addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and containment systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

State Regulations

The California Hazardous Waste Control Law

The California *Hazardous Waste Control Law* (HWCL) is the primary hazardous waste statute in the State of California. The HWCL implements RCRA as a "cradle-to-grave" waste management system. HWCL specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning, and has a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of wastes and waste management activities that are not covered by federal law with RCRA.

California Code of Regulations – Title 26 (Toxics)

Most State and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the *California Code of Regulations (CCR), Title 22, Division 4.5.* Title 22

contains the detailed compliance requirements for hazardous waste generators, transporters, and treatment, storage, and disposal facilities. Because California is a fully authorized state according to RCRA, most RCRA regulations (those contained in *40 Code of Federal Regulations* [CFR] 260 *et. seq.*) have been duplicated and integrated into Title 22 and are now a part of **Title 26**). However, because the Department of Toxic Substance Control (DTSC) regulates hazardous waste more stringently than the U.S. EPA, the integration of State and federal hazardous waste regulations that make up Title 26 do not contain as many exemptions or exclusions as does *40 CFR 260*. As with the *California Health and Safety Code, Title 26* also regulates a wider range of waste types and waste management activities than does the RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste and toxics-related regulations contained in *CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27* into one consolidated *CCR Title 26 'Toxics.'* However, the California hazardous waste regulations are still commonly referred to as Title 22.

Certified Uniform Program Administration

Administration of the *Unified Program* is authorized by the *California Health and Safety Code, Chapter 6.11, Sections 25404-25404* and *the CCR Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100–1562*. The Unified Program is implemented at the local level by government agencies certified by the secretary of California Environmental Protection Agency (Cal/EPA). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the environmental and emergency response programs summarized below. The Riverside County Hazardous Materials Management Division (HMMD), a division of the Riverside County Department of Environmental Health (DEH), is the Certified Unified Program Agency (CUPA) for Riverside County. The Unified Program includes the following:

California Accidental Release Prevention (CalARP) Program

The *CalARP Program* was established to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment (*California Health and Safety Code, Chapter 6.95, Article 2, Sections 25531–25543.3; CCR, Title 19, Division 2, Chapter 4.5, Sections 2735–2785*). The CalARP Program is intended to mitigate the effects of an accidental release, should one occur, by requiring an emergency response program. The OES adopted the regulations that outline the CalARP Program requirements for all regulated businesses and the agencies that implement the CalARP Program in California. The CalARP Program incorporates federal requirements. The CalARP Program affects businesses that store or use certain hazardous materials in excess of threshold quantities that might seriously affect the community if released. The CalARP Program requires preparation of a risk management plan, an assessment of the off-site hazard potential, and the implementation of a program to minimize the risk of release.

Hazardous Waster Generator and On-Site Hazardous Waste Treatment (Tiered Permitting) Program

The *Hazardous Waste Generator and On-Site Hazardous Waste Treatment* (tiered permitting) *Program* was established to comply with *California Health and Safety Code, Chapter 6.5, Sections 25100–25250 and CCR, Title 22.* The DTSC is responsible for ensuring that the hazardous waste generator program is implemented consistently throughout the State. The DTSC implements the hazardous waste generator program through the State's hazardous waste program and the *Unified Program*. The hazardous waste generator program applies to facilities that generate, treat, store, accumulate, handle, recycle, and dispose of hazardous waste. Riverside County implements a permit and inspection program designed to handle hazardous waste according to applicable federal, state, and local laws, regulations, and ordinances through education and enforcement.

California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Materials Inventory Statement

The Office of the State Fire Marshal is responsible for ensuring the implementation of the Hazardous Materials Management Plans and Hazardous Materials Inventory Statement Programs (*California Health and Safety Code, Chapter 6.11, Sections 25404.3(b) and 25404(c)(6) and CCR, Title 27, Division Chapter 4.5, Sections 15160(b)(1), 15100(g)(1), 15100(b)(2), 15100(g)(3), 15330(a)*); additionally, the *California Fire Code* (CFC) requirement for a business plan is included in the Unified Program (*CFC Sections 2701.5.1 and 2701.5.2*).

California Public Utilities Commission – General Order No. 131-D

The *California Public Utilities Commission* (PUC) regulates investor-owned telecommunications, electric, natural gas, and water utilities operating in the State of California. The PUC must comply with the requirements of CEQA when it approves any requested utility action that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment. The PUC oversees almost all large utility construction projects, and also considers approval of other types of utility activity that might have a significant impact on the environment. When a utility plans to construct a power line (defined as a line designed to operate between 50 and 200 kilovolts (kV)) it must comply *with Section IX.B, X and XI.B of the PUC General Order* in order to receive a Permit to Construct. Compliance with Section IX.B is not required for power lines to be relocated or constructed which have undergone environmental review pursuant to CEQA as part of a larger project, and for which the final CEQA document finds not significant unavoidable environmental impacts caused by the proposed line (Section III.B.1f).

The PUC stated in D.06-01-042 that, "At this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health

consequences." The Commission's EMF policy is one of prudent avoidance, with application of low-cost/no-cost mitigation measures to reduce EMF exposure for new and upgraded utility transmission and substation projects. The Commission has adopted a benchmark of 4% of total project cost for low-cost EMF mitigation measures, with flexibility to allow expenditures above the 4% benchmark if justified by a project's unique circumstances. As a guideline, the Commission stated that low-cost EMF mitigation measures should reduce EMF levels by at least 15% at the utility right-of-way.

Local Regulations

Riverside County Ordinance No. 6153

This ordinance implements a monitoring program for establishments where hazardous waste is generated, stored, handled, disposed, treated, or recycled and to regulate the issuance of permits and the activities of establishments where hazardous waste is generated. This ordinance designates the Riverside County Department of Environmental Health to enforce the provisions of the *California Health and Safety Code, Chapter 6.5, Division 20, Sections 25100 et seq.*, and the Environmental Health Standards for the Management of Hazardous Waste as specified in *Title 22 of the California Code of Regulations*, *Division 4.5* pertaining to the generation, storage, handling, disposal, treatment, and recycling of hazardous waste.

City of Banning Comprehensive General Plan – Hazardous and Toxic Materials Element (2006)

The *Hazardous and Toxic Materials Element* presents methods for the safe management of hazardous and toxic materials in the City of Banning. The reduction or elimination of these hazards can occur through the City's establishment of policies and programs that identify hazard areas and reviews and regulate development where hazards occur. The primary goal is to maintain and promote measures to protect life and property from hazards resulting from human activities and development.

- **Hazardous Materials – GP Policy 3** – The City shall thoroughly evaluate development proposals for lands directly adjacent to sites known to be contaminated with hazardous or toxic materials, traversed by natural gas transmission lines or fuel lines, or sites that use potentially hazardous or toxic materials.

City of Banning Municipal Code

The City's Municipal Code includes sections which regulate the transport of hazardous materials (Chapter 10.20, *Transportation of Hazardous Materials*), underground storage tanks and septic systems (Chapter 8.04, *Abandoned Gas Stations*, and Chapter 8.16, *Fire Prevention Code*), abandonment of water wells (Chapter 13.12, *Water Wells),* weed abatement and reduction of fire

hazards (Chapter 8.48, *Nuisances*, and Chapter 8.16, *Fire Prevention Code),* relocation and undergrounding of utilities (Chapter 12.12, *Street Excavations*), and protection of utilities during excavations (Chapter 18.09.160 (*Protection of Utilities*).

4.8.3.2 URBAN-WILDLAND INTERFACE REGULATIONS

California Urban-Wildland Interface Building Code, Title 24, Part 2, Section 701A.2.2

On September 20, 2005, the California Building Standards Commission approved the Office of the State Fire Marshall's emergency regulations amending the *California Building Code (CBC) Title 24, Part 2, Section 701.A.2.2* to include *Urban-Wildland Interface Fire Area Building Standards* (the "Standards"). The broad objective of the amendment is to establish minimum standards for materials and material assemblies and provide a reasonable level of exterior wildfire exposure protection for building located in Urban-Wildland Interface Fire Areas. In January 2009 a supplement to section 701.A was issued, titled *Materials and Construction Methods for Exterior Wildfire Exposure.*

SRA Fire Safe Regulations, Title 13, Division 1.5, Chapter 7, Subchapter 2

The SRA Fire Safe Regulations contained in *CBC Title 13, Division 1.5, Chapter 7, Subchapter 2* constitute the basic wildland fire protection standards of the California Board of Forestry and establish minimum wildfire protection standards in conjunction with building construction and development in State Responsibility Areas (SRA) and implement the provisions of *PRC Sections 4290 and 4291*.

California Public Resources Code Sections 4201-4204 and Government Code Sections 51175- 51189

The Government Code chapter defines responsibilities for the California Department of Forestry and Fire Protection to identify very high fire hazard severity zones and requires the Department to transmit this information to local agencies, which must make the recommendation available for public review.

California Public Resources Code Sections 4291-4299

These sections of the California PRC deal with fire hazard mitigation in or on properties abutting mountainous areas, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable materials. It sets out regulations that define and implement defensible space requirements, including fuel modification. *PRC Section 4291* requires that the defensible space extend 100 feet from those sides of a structure that abut wildlands. While defensible space zones are generally confined to the lot itself, they can be

extended beyond the boundary of an exposed property under certain circumstances outlined in the PRC.

2010 California Fire Code - Chapter 49

CFC Chapter 49 contains the State requirements for urban-wildland interface fire areas. It provides minimum standards to increase the ability of a building to resist the intrusion of flame or burning embers being projected by a vegetation fire so as to reduce conflagration losses through the use of performance and prescriptive requirements. Section 4905 of the CFC requires use of materials and construction methods for exterior wildfire exposure within geographic areas where a wildfire burning in vegetative fuels may readily transmit fire to buildings and threaten to destroy life, overwhelm fire suppression capabilities, or result in large property losses (*Section 4905.1, General*) and specifically references the requirements of the *2010 CBC Chapter 7A*, the *CRC Section R327*, and the *California Reference Standards Code Chapter 12-7A*, in addition to the requirements contained in Chapter 49 of the CFC.

Section 4906, *Hazardous Vegetation and Fuel Management*, mandates the management of hazardous vegetation and fuels to reduce the severity of potential exterior wildfire exposure to buildings and reduce the risk of fire spreading. Fuel management is mandated in all unincorporated land designated by the State Board of Forestry and Fire Protection as State Responsibility Areas including (1) Moderate Fire Hazard Severity Zones; (2) High Fire Hazard Severity Zones; and (3) Very High Fire Hazard Severity Zones, and in all lands designated as Very High Fire Hazard Severity Zones by cities or other local agencies.

California Board of Forestry 2006 General Guidelines for Creating Defensible Space

Adopted by the BOF in February 2006 and approved by the Office of Administrative Law on May 8, 2006, these guidelines provide guidance on fuel modification measures that meet the requirements of 2005 amendments to *PRC §4291*, which expanded the defensible space clearance requirement from 30 feet to 100 feet. The guidelines apply to any person or entity that owns, leases, controls, operates or maintains a building or structure in, upon, or adjoining wildlands, grasslands or other land that is covered with flammable materials. The California Board of Forestry (BOF) *Guidelines* define *defensible space* as the area within the perimeter of a parcel where basic wildfire protection practices are implemented, providing the key point of defense from an approaching wildfire or escaping structure fire. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, street names and building identification, and fuel modification measures.[11]

In general, fire hazard reduction in the defensible space zone includes requirements for the thinning and maintenance of existing trees, shrubs, and ground cover within the minimum 100-

[11] State Board of Forestry and Fire Protections (BOF), *General Guidelines for Creating Defensible Space,* 2006, p 3.

foot wide setback zone so as to reduce the amount of fuel on those sides of any structure that face the UWI, also known as *fuel modification or fuel modification zone*. These measures are cited and described in detail in the *Technical Background Report to the Safety Element of the City's General Plan* (Appendix D of the General Plan) as well as in the BOF *Guidelines*.

California Environmental Requirements Affecting UWI Areas

As noted in the BOF *Guidelines*, fuel modification activities that remove or dispose of vegetation are required to also comply with all federal, State or local environmental protection laws. Statutory environmental protections that could impact fuel modification activities include threatened and endangered species, water quality, air quality, and cultural/archaeological resources in as much as vegetation removal contemplated as part of fuel modification activities can also cause soil disturbance, soil erosion, regrowth of new vegetation, modification of habitat, and the introduction of non-native invasive plants. Areas of particular sensitivity include riparian areas, streams, or ponds and the BOF *Guidelines* recommends avoiding removing vegetation associated with water. In Riverside County, properties that support or are developed adjacent to properties containing Riversidian Sage Scrub (gnatcatcher habitat) frequently require special treatment, as do areas with sensitive riparian/riverine habitat.

City of Banning Comprehensive General Plan – Wildland and Fire Hazards Element (2006)

The *Wildland and Fire Hazards Element* of the City's Comprehensive General Plan sets forth goals, policies and programs to address the potential for wildland fires in the community and to reduce the risk to life and property associated with them.

- **Wildfire – GP Policy 3** – Continue to identify wildfire hazard areas, and to enforce special standards for construction in wildland fire hazard areas.

  Program 3.A – New and substantially remodeled structures or developments shall incorporate wildfire prevention design techniques, such as the use of "defensible space," fire retardant sidings, optimal site planning and building orientation, landscaping orientation, and other design approaches to reduce wildfire hazards.

  Program 3.B – Require that adequate emergency vehicle access and evacuation routes be available with approval of any new development.

Also see the *Technical Background Report to the Safety Element of the City's General Plan* (Appendix D of the General Plan).

Riverside County Fire Department Urban-Wildland Interface Standards

County Fire Department's UWI Standards, as well as those contained in Chapter 7A of the 2007 CBD, require submission of a *Fire Management Plan or Fuel Modification Plan (FMP)*, prepared pursuant to the requirements of the 2007 CBC and the California Fire Code, Chapter 47. The FMP is required to describe ways to minimize and mitigate potential for loss from wildfire exposure and should provide for adequate buffering, building construction standards, and fuel modification zones that are consistent with Fire Department standards. In the City of Banning, preparation of a FMP and its approval by the Fire Department is required prior to the approval of any Tentative Tract Map or Land Use Permit for property adjacent to natural open space. The Riverside County Fire Department (Banning Fire Services) also requires UWI setbacks and fuel modification for lots that are located within areas, "adjacent to open space."[12]

City of Banning Municipal Code Title 8, Chapter 8.16 (Fire Prevention Code)

Chapter 8.16 of the *City of Banning Municipal Code* contains the City's *Fire Prevention Code.* Pursuant to *Ordinance No. 1421*, approved on December 14, 2010, the City has adopted the 2010 California Fire Code in its entirety while retaining specific provisions of earlier versions of the Chapter 8.16 of the Municipal Code.

City of Banning Municipal Code Chapter 15.08 (Building Code)

On January 11, 2011, the City adopted *Ordinance No. 1433* that deleted the existing Chapter 15.08 in its entirety and adopted a new Chapter 15.08 including the *California Building Code, 2010 Edition*, including Chapter 1, Division II, based on the 2009 IBC; the *California Residential Code, 2010 Edition*, based on the 2009 IRC; the *California Green Building Standards Code*, 2010 Edition. These codes contain specific provisions regarding fire-safe building requirement including those referenced in Chapter 49 of the *2010 California Fire Code*.

4.8.4 SIGNIFICANCE THRESHOLD CRITERIA

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form used to determine the significance criteria for this analysis. Accordingly, a project may create a significant environmental impact if it would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

[12] Riverside County Fire Department (Banning Fire Services), *Standard Fire Department Requirements for "Fuel Modification Zones" and Construction Improvements for projects in or adjacent to Wildland Areas.*

b) 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;

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school;

d) Be located on a site that is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;

e) For a project located within an airport land use plan or, where such a plan has not be adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project site. Refer to Section 7.0, *Effects Found Not to be Significant.*

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project site. Refer to Section 7.0, *Effects Found Not to be Significant.*

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized study areas or where residences are intermixed with wildlands.

CEQA Guideline thresholds pertaining to impacts associated with public and private airports are not considered in this analysis. An Airport Land Use Compatibility Plan (ALUCP) for the Banning Airport was adopted in October 2004 by the County of Riverside Airport Land Use Commission. [13] The proposed Project site is located approximately 6.5 miles northwest of the airport and is outside any of the compatibility zones established in the ALUCP. There are no private airports or air fields near the project site. Accordingly, airport operations have no impact on the Project site and impacts related to airport operations are effects found not to be significant.

4.8.5 IMPACT ANALYSIS AND MITIGATION MEASURES

ANALYTIC METHOD

The qualitative analysis in this section focuses on potential public safety and hazards impacts, including the use, disposal, transport, or management of hazardous or potentially hazardous materials resulting from the construction and operation of the proposed Project, as well as the

[13] Riverside County ALUCP – East County Airports Background Data (October 2004), *Banning Municipal Airport,* Chapter EI – Background Data pp E1-8 (Exhibit BN-7).

potential for the accidental release of hazardous materials during the construction and operation of the Project. In addition, this section analyses the potential hazards associated with urban-wildland interface areas relative to wildfire. The information in this section is based upon reviews of previously prepared reports documenting environmental investigations at the Project site, as well as other similar environmental documentation prepared for similar projects. In determining the level of significance, the analysis assumes that the construction and operation of the proposed Project would comply with all applicable federal, state, and local laws and regulations. The EIR analysis is based on review of available documents, including the proposed Specific Plan and associated tract maps, as well as Project-specific technical studies contained in Appendix F, *Hazardous Materials Assessment.*

PROJECT DESIGN FEATURES AND EXISTING REGULATIONS, RULES, AND REQUIREMENTS

Existing local, State, and federal regulations noted in Section 4.8.2.2 will avoid or mitigate potential impacts related to hazards and hazardous materials. The following Project Design Features will also reduce, avoid or offset potentially adverse impacts:

1) The Project proposes a reduced residential density with larger lots in the northern portion of the site to allow incorporation of fuel modification zones into lots abutting wildland areas and to allow preservation of natural open space. Maintenance of fuel modification/management zones will be the responsibility of individual homeowners on private property; however a maintenance easement will be recorded over fuel modification zones located within these private lots that will permit either the Master Homeowners Association, LLMD, or other appropriate maintenance agency/entity approved by the City of Banning, to enter into the property to ensure adequate and uniform maintenance. Portions of fuel modification zones on private lots located outside of the lot fence line will be maintained directly by the HOA or LLMD while those portions fuel modification zones on private lots located inside the fence line will be maintained by the homeowner but will be inspected by the LLMD or HOA and the LLMD or HOA will have the ability to enter into the private lot if necessary to ensure appropriate maintenance of the fuel modification zone if the homeowner fails to provide that maintenance.

2) School sites have been relocated in consultation with the local school districts, in part to ensure adequate separation from existing SCE power lines and the SCGC 30-inch high pressure gas line. To the extent that these locations may change as the project develops, other potential school sites would observe the same required setbacks from the SCE transmission lines and SCGC high pressure gas line.

3) Portions of the Southern California Gas Pipeline will be relocated to ensure that the entirety of the pipeline is located within paved streets or within the golf course. No homes will have frontage on the streets where the pipeline will be located and

proposed homes will be further buffered by parkway setbacks, block walls, rear yard setbacks and the golf course to reduce risk in the event of a leak or other upset. Existing pipeline will be replaced with residential grade pipeline by Southern California Gas Co. per PUC requirements.

4) The Alternative On-Site Satellite Waste Treatment Plant will store all potentially hazardous materials (primarily chlorine) in a separate building with appropriate safeguards as required by law and will provide appropriate signage and inventory control as required by the Fire Department so as to reduce any potential risk of upset.

5) The Project will include the construction of two 5-million gallon water storage reservoirs, one 1.6-million gallon water storage reservoir, one 1-million gallon recycled water storage reservoir and a multi-use basin which can store water for groundwater recharge. Three of the water storage reservoirs would be located in the north/northeastern portion of the site, and the multi-use basin would be located in the northern portion of the site where Smith Creek enters the property. These reservoirs will provide sources of water available for both structure and wildfire response.

IMPACT ANALYSIS AND MITIGATION MEASURES

Impact 4.8- 1: Use and Transport of Hazardous Materials

Threshold: *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

The routine transport, use, and disposal of hazardous materials can result in hazards to people and the environment, due to the potential for accidental release. Such hazards are typically associated with certain types of land uses, such as chemical manufacturing facilities, industrial processes, waste disposal, and storage and distribution facilities. At full buildout, the proposed Project would consist of single family and multi-family residences, commercial development (e.g. retail and office development), two schools, a golf course, parks and open space, and a possible satellite wastewater treatment plant. With the exception of the wastewater treatment plant, none of these land uses is expected to use significant quantities of hazardous materials or to generate significant quantities of hazardous wastes requiring transport.

Impact Analysis – Wastewater Treatment and Electrical Substation Facilities – Long-Term Operational Impacts

Determination: Less than Significant

As an alternative to connecting to the City's wastewater system, the Project proposes possible construction of a satellite wastewater treatment plant within approximately a 2.5 acre site

located at the southern end of PA 11; refer to Section 3, *Project Description*, for details. The satellite wastewater treatment plant would operate 24-hours per day with approximately 16 hours of operational staffing per week. All activities would take place within fully enclosed buildings. The solids removed during the treatment process would be pumped directly into the existing sewer line in Wilson Street and would not be retained in on-site holding ponds. These residual solids would flow to the City's existing wastewater treatment plant for further treatment and disposal. Since there would be no further handling of solids at the satellite wastewater treatment plant, there would be no significant truck traffic accessing the site during its operation. After treatment and prior to distribution, recycled water would be stored on-site in a 1-million gallon above ground water storage tank. Any excess recycled water would be discharged into the sewer system.

As noted in the Regulatory section, the wastewater treatment process and the use of recycled water is regulated by the State of California pursuant to the *California Code of Regulations, Title 22, Division 4, Chapter 3, Water Recycling Criteria*. According to these regulations, recycled water used for irrigation of public areas such as golf courses, commercial planting areas, parks, playgrounds and schoolyards must be filtered and disinfected to a tertiary standard to allow for full body contact. To comply with these regulations, disinfection of treated water with chlorine would be required. Since chlorine is a potentially hazardous chemical, operation of an on-site wastewater treatment facility may require the routine transport, use, and disposal of hazardous materials.

To ensure safe handling, storage, use, and transport of hazardous materials associated with wastewater treatment, the facility would comply with Standard Guidelines adopted by the federal Occupational Safety and Health Administration (*Hazardous Waste Operations and Emergency Response Standard, Title 29 Code of Federal Regulations (CFR) Part 1910.120*), as well as the California Department of Toxic Substances Control (DTSC). In addition, operational transportation, storage, use, and disposal of hazardous materials and wastes would comply with all regulations, guidelines, and standards contained within the County's Hazardous Waste Management Plan and applicable permitting procedures required by all Federal, State, and local agencies associated with hazardous materials and waste issues. In California both the Department of Health Services (DHS) and the State Water Resources Control Board (SWRCB) have authority to regulate activities of water recycling plants. The *California Fire Code* requires conformance to the proper storage and use of hazardous materials and containment of storage areas and secondary containment of chemical lines to contain spills. Conformance with these standards would be monitored by the appropriate regulatory agency through facility inspections and annual reporting mechanisms throughout the operational life of the facility. Compliance with these existing regulations and on-going monitoring of the plant's operations would reduce potential impacts associated with the routine use, handling, transport, and storage of hazardous materials in connection with the operation of the Alternative Satellite Wastewater Treatment Plant to a less than significant level.

Utility Substation

An existing utility substation is shown within PA 70 of the proposed Project. The City of Banning has completed the transfer/ conveyance of this property, and construction of this facility under a separate environmental process, which assumed to ultimate development of the project site as generally proposed by this Specific Plan. Accordingly, the environmental impacts of hazardous materials associated with the operation of the substation within the Project site have already been addressed and are not considered in this document.

Impact Analysis – Project Construction Phase Impacts

Determination: Less than Significant with Mitigation Incorporated

Clearing, grubbing and grading of the site would involve the use of heavy equipment that would require maintenance and fueling on-site and that would be parked on the property when not in use during the grading phase(s). Maintenance and fueling activities would involve the use and transport of petrochemicals that could be hazardous if stored or used improperly. These chemicals would need to be transported to the site, and potentially hazardous waste such as oil, transmission fluid, brake fluid, coolant, etc. would need to be transported from the site and appropriately disposed of. Fuel spills and leaks could result in soil contamination In addition, clearing, grubbing and grading could uncover soils contaminated by prior agricultural activity, although the ESA prepared for the project does not include a finding that pesticides or herbicides were used to support prior agricultural uses.

Construction on the Project site would involve the use of various products that could contain materials classified as hazardous. In California used oil , solids contaminated with used oil, parts cleaning solvent, paint-related wastes including paints, thinners, fillers, and sludges are considered hazardous waste in addition to solvents, adhesives and cements, cleaning agents and degreasers. Exposure of construction workers or others to hazardous materials could occur through improper handling or use of hazardous materials or hazardous waste during construction or operation of the proposed Project, through transportation accident, environmentally unsound disposal methods, or fire, explosion or other emergencies, all of which could result in adverse health effects.

Hazardous waste management on construction sites is regulated by the Department of Toxic Substances Control, pursuant to the *California Hazardous Waste Control* Act while the disposal of inert construction debris is regulated by CalRecycle. As part of the implementation of the Butterfield Specific Plan Project, the developer and its contractors/subcontractors would be required to comply with existing hazardous materials regulations, which are codified in *Titles 8, 22, and 26 of the California Code of Regulations*, and their enabling legislation set forth in *Chapter 6.95 of the California Health and Safety Code* as well as with the applicable provisions of *Title 14 of*

the Natural Resources Code[14] as regards the disposal of inert construction debris. In addition, the Project would be required to comply with applicable federal, State, and local laws and regulations pertaining to the transport, use, and disposal of hazardous waste, including, but not limited to, *Title 49 of the Code of Federal Regulation* and as implemented by *Title 13 of the CCR*. In addition, mitigation measures HAZ-1, which requires preparation and implementation of a construction contingency plan, HAZ-2, which requires specific standards for the maintenance and fueling of construction equipment on-site, shall be implemented during the construction phase(s) of the proposed Project.

Mitigation Measures

Mitigation measure HAZ 1 requires development of a plan to deal with contaminated soils if encountered during the course of construction; Mitigation Measure HAZ 2 requires a 500-foot separation between heavy equipment maintenance & fueling areas and adjacent residential uses; Mitigation HAZ 3 requires implementation of specific BMPs to contain, manage, and dispose of construction phase hazardous materials and hazardous wastes. These mitigation measures, together with implementation and compliance with existing regulations, all ensured by regular inspection by of the construction site by City inspectors and inspectors from the Regional Water Quality Control Board, would reduce potentially significant construction phase impacts related to the routine use, transport or disposal of hazardous materials and hazardous wastes to less than significant levels:

HAZ-1: The grading plans shall indicate methods to address potential contamination discovered during construction, as well as safety considerations for on-site construction personnel and the general public. Details of the plan shall include, but not be limited, to the following:

- Procedures for identification of contaminated soil during earthmoving operations;
- Immediate measures to protect workers and the public from exposure to contaminated areas (e.g., fencing or hazard flagging, covering of contaminated soils with plastic, etc.) and prevent migration of the contaminants to the surrounding environment; and
- Steps to be taken following initial discovery of contaminated soils. Notification shall be made to the local environmental health officials and the City's construction inspector(s) immediately following identification of previously unknown contamination within the construction area. In the event hazardous substances are encountered during site grading, work shall immediately cease in the area and the property owner/developer shall retain

[14] Cal Recycle, Regulations: Title 14, Natural Resources – Division 7, CIWMB, Chapter 3, Article 5.95, http://www.calrecycle.ca.gov/Laws/Regulations/Title14/ch3a595a.htm, accessed 12/10/2010.

a qualified hazardous materials engineer to assess the impacts and prepare a response plan using risk-based cleanup standards applicable to residential land use. Upon approval of the response plan by the Fire Department or other agency, as applicable, the engineer shall obtain any required permits, oversee the removal of such features and/or conduct the response work to the satisfaction of the Fire Department or other agency, as applicable, until closure status is attained.

HAZ-2: As part of construction specifications, procedures for the fueling and maintenance of construction vehicles shall be required to minimize the potential for accidental release of hazardous materials. This shall include locating refueling and maintenance areas minimum of 500 feet from occupied residential uses. Drip plans shall be placed under motorized equipment when parked on the site to prevent soil contamination from dripping oil or other fluids.

HAZ-3 Hazardous construction waste management practices are to be implemented pursuant to the Best Management Practices contained in the California Stormwater BMP Handbook (2009)[15] and shall include the following:

1. All hazardous construction wastes as defined by Title 22 Division 4.5, or listed in 40 CFR Pars 110, 117, 261, or 302, including but not limited to petroleum products, concrete curing compounds, palliatives, septic wastes, stains, wood preservatives, asphalt products, pesticides, acids, paints, solvents, roofing tar, sandblasting grid mixed with lead-, cadmium-, or chromium based paints, asbestos, or PCBs, that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.
2. Wastes shall be stored in sealed containers constructed of suitable material and shall be labeled as required by Title 22 CCR, Division 4.5 and 49 CFR Parts 172, 173, 178, and 179.
3. Waste containers shall be stored in temporary containment facilities that should comply with the following requirements:
    a. Temporary containment facility shall provide for a spill containment volume equal to 1.5 times the volume of all containers able to contain precipitation from a 25 year storm event plus the greater of 10 percent of the aggregate volume of all containers or 100 percent of the largest tank within its boundary, whichever is greater.

[15] California Stormwater Quality Association, 2009 Construction BMP Handbook, 2010, accessed from *https://www.casqa.org/casqastore/entitiy/tabid/169/c-4-best-management-practice-bmp-handbooks.aspx* 3.10.11

b. Temporary containment facility shall be impervious to the materials stored there for a minimum contact time of 72 hours.

c. Temporary containment facilities shall be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills should be placed into drums after each rainfall. These liquids shall be handled as a hazardous waste unless testing determines them to be non-hazardous.

d. Sufficient separation shall be provided between stored containers to allow for spill cleanup and emergency response access.

e. Incompatible materials such as chlorine and ammonia shall not be stored in the same temporary containment facility.

d. Throughout the rainy season, temporary containment facilities shall be covered during non-working days and prior to rain events.

4. Storage drums shall not be overfilled and wastes should not be mixed.

5. Unless watertight, containers of dry waste shall be stored on pallets.

6. Herbicides and pesticides shall not be over used. Only the amount needed shall be prepared. Apply surface dressings in several small applications as opposed to one large application. Allow time for infiltration and avoid excess material being carried off-site by runoff. Do not apply such chemicals immediately prior to rain events. All persons applying pesticides must be certified in accordance with federal and State regulations.

7. Paint brushes and equipment for water and oil based pants should be cleaned within a contained area and shall not be allowed to contaminate soil, watercourses or drainage systems. Waste paints, thinners, solvents, residues, and sludges that cannot be recycled or reused shall be disposed of as hazardous waste by a licensed hazardous waste hauler.

8. Hazardous waste storage areas on-site shall be located away from storm drains or water courses and way from moving vehicles and equipment to prevent accidental spills.

9. Containment berms shall be used in fueling and maintenance areas and where the potential for spills is high.

10. Potentially hazardous waste shall be segregated from non-hazardous construction site debris.

11. Liquid or semi-liquid hazardous materials shall be stored in appropriate containers and under cover.

12. Hazardous waste collection sites shall be designated on-site away from watercourses and drainage systems, and shall be clearly labeled.

13. Hazardous materials shall be stored in containers and protected from vandalism.
14. All employees and subcontractors shall receive on-site training in hazardous waste storage and disposal procedures.
15. Areas treated with chemicals shall be identified with appropriate warning signage
16. Place a stockpile of spill clean-up materials where it will be readily accessible
17. Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are underway, BMPs shall be inspected on a weekly basis.
18. A copy of hazardous waste manifests shall be maintained on-site for access by City inspectors.

Impact Analysis – Project Operational Phase Impacts

Determination: Less than Significant

Landscape maintenance activities typically include the storage and periodic application of pesticides, herbicides, and fertilizers, as well as the storage and use of toxic fuels and solvents. Properly removing and disposing of on-site hazardous materials in accordance with State and federal regulations before they are accidentally disturbed can reduce impacts associated with these hazards.

Nearly all Riverside County residents have some type of hazardous material in their homes. Examples include motor oil, paints, cleaners, aerosols, and pesticides. Household hazardous materials pose serious health or environmental contamination issues for people who improperly use or dispose of these materials. Adverse environmental impacts can also occur when household hazardous materials are disposed of in unlined sanitary landfills, where these materials may leach through the soil and contaminate groundwater. The level of risk associated with routine transport or disposal of hazardous substances generated by residential uses is not considered significant because of the small volume and low concentration of hazardous materials utilized in residential areas. In Riverside County there are three regional permanent Household Hazardous Waste (HHW) collections facilities. In addition, electronic wastes can been accepted at active landfills, HHW collection facilities, temporary collection events that are held throughout the County, including in the City of Banning, or a waste transfer stations serving the City.

The proposed Project includes a commercial component. Commercial uses permitted on the site may include businesses, such as dry cleaning establishments, gas stations, auto repair

facilities, doctor's offices, etc, which routinely use and/or dispense hazardous agents. In California, persons and businesses that generate, transport or offer for transport, treat, store, or dispose of hazardous waste generally must have an Identification (ID) Number, which is used to identify the hazardous waste handler and to track the waste from its point of origin to its final disposal ("From Cradle to Grave").

Most hazardous waste falls into two types in California: waste regulated by the federal government under the *Resource Conservation and Recovery Act* is known as "RCRA waste"; waste regulated by California law alone is known as "non-RCRA" or "California-only" waste. All hazardous waste in (RCRA and non-RCRA) California is regulated under state statutes and regulations. If a business generates more than 1 kilogram of RCRA acutely hazardous waste per month or more than 100 kilograms of other RCRA waste per month, they must have a federal ID number. If the business generates 100 kilograms or less of RCRA waste or one kilogram or less per month of acutely hazardous waste, and meet certain other requirements, they are exempt from having a federal ID number. These businesses are called conditionally exempt small-quantity generators or CESQGs.

Hazardous waste that is generated by commercial entities and businesses are not accepted at any Riverside County landfill. Hazardous wastes disposal must be handled by licensed hazardous waste haulers. Commercial facilities that routinely handle and dispose of hazardous materials are subject to both permitting and inspection by the California Department of Toxic Substances Control. The permitting procedure includes requirements for the installation and maintenance of facilities and systems that treat and control hazardous materials and govern its disposal. Failure to comply with the conditions of the permit and/or the facility's operating plan can result in permit suspension, fines, and permit revocation. Permit requirements also include the training of employees in the proper handling and disposal of hazardous materials, maintenance of inspection records and the maintenance of inspections logs, and the maintenance of hazardous waste manifests. All businesses operating within the Project site that would regularly receive, store, handle, generate, or dispose of regulated types and quantities of hazardous materials and waste products would be regulated pursuant to appropriate permits and inspected annually to ensure compliance with permit conditions. Accordingly, compliance with existing regulations would be sufficient to reduce potential impacts to a less than significant level and no additional, project specific mitigation measures would be required.

The proposed golf course would be heavily landscaped with turf, shrubs, and trees. Typically golf courses utilize pesticides and herbicides as well as fertilizers to maintain greens. Reduction of potential water quality impacts to Smith Creek, a natural drainage course that traverses the Project through the golf course area, due to run-off of nutrient-carrying irrigation and storm flows will be addressed in Section 4.9, *Hydrology and Water Quality* and will not be discussed in this Section. Routine transport and storage of chemicals used for landscape maintenance, maintenance of perimeter walls, and maintenance of Project-maintained recreational facilities would occur during the Project's operational phase. To the extent that the golf course handles, stores, or disposes of hazardous materials and wastes subject to regulation by the State

Department of Toxic Substances Control, its impacts would be reduced to a less than significant level through implementation of existing regulations described for other Project-based commercial uses.

Impact 4.8-2: Risk of Upset

Threshold: *Would the Project 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*?

The construction and operation of new developments could result in hazards to the public or the environment through the accidental upset or release of hazardous materials caused by accidental spillage of hazardous materials used during the construction and/or operational phases of the Project, or as a result of the exposure of contaminated soil during grading and trenching activities. In addition, a high pressure natural gas pipeline traverses the site and would be expected continue to do so through the anticipated life of the Project, posing a risk of explosion and soil contamination in the event of leaks or other pipeline failure. The Phase I ESA for the Project site evaluated the potential for hazardous materials, based upon readily discernible and/or documented present and historic uses of the properties and uses adjoining the sites and generally characterized the expected nature of hazardous materials that may be present as a result of such uses.

Impact Analysis - Prior Agricultural Use of the Site

Determination: Less than Significant

The Phase I ESA determined that the Project site has historically been used for cattle grazing and dry farming. Typically, agricultural activities rely on chemical fertilizers, herbicides, and pesticides to produce food. However, the Phase I ESA prepared by Converse Consultants in 2002 and updated in 2007 did not find evidence of the use of herbicides or pesticides in connection with the historic cultivation of the site prior to 1988.[16] The site has been used for the grazing of cattle intermittently since the California Mission period. Accordingly, nitrates and other chemicals associated with cattle manure could have leached deeply enough into the soil to have resulted in soil and/or groundwater contamination. However, given the depth to groundwater over the site, contact with potentially contaminated, untreated groundwater during site excavation, grading, and trenching activities is considered highly unlikely. Accordingly, risk of upset associated with past agricultural use of the site is considered to be less than significant.

[16] *Technical Memorandum – Hazardous Materials Review,* Converse Consultants, March 12, 2007.

Impact Analysis – Existing Abandoned Well

Determination: Less than Significant with Mitigation Incorporated

The Phase I ESA identified a water well on the project site that appeared to have been abandoned and is described as being in poor condition. Unless properly abandoned and capped, the well could provide a route for the migration of surface contaminants, including nitrates and bacteria from cattle waste and hazardous wastes associated with construction, into the groundwater. The capping of an existing abandoned well and removal of existing pipeline associated either with the well or with site irrigation associated with prior agricultural uses would be required prior to the start of grading and should be accomplished as part of the clearing and grubbing of the site to ensure that subsequent grading and construction activity does not result in contamination of groundwater or soil conducted through the well casing and associated pipelines. Implementation of Mitigation Measure HAZ-4 would require the proper abandonment and capping of the on-site well prior to the start of grading on the Project site. With this mitigation, risk of upset associated with potential contamination conducted by the well casing would be reduced to a less than significant level.

Impact Analysis - Debris Removal, Illegal Dumping, and Abandoned Equipment

Determination: Less than Significant with Mitigation Incorporated

The Phase I ESA identified a diesel engine, an associated water well pump, and five damaged automotive batteries on a concrete pad, along with the apparently abandoned water well in the southern portion of the Project site. In addition, debris piles containing asphalt debris, tires, automotive parts, and other potentially hazardous materials were identified in various locations on the site. Residues from these materials may be present in the soil within the Project site, potentially requiring not only removal of the solid debris but also removal and/or treatment of contaminated soils in the vicinity of the debris piles. Because the water table is located over 300 feet bgs, it is unlikely that residues have leached into the groundwater or that groundwater will be encountered during grading and excavation of the site; however, it is possible that contaminant, if any, generated by the existing debris, trash, and soils to have been washed into the Smith Creek channel as a result of the surface flows to which the site is subject or as a result of wind erosion. These potential impacts, to the extent that they may have occurred, would not be the result of the proposed Project and would have been occurring for many years. Mitigation Measure HAZ-5 would require the removal and appropriate disposal of debris; including potentially hazardous waste and any soil that may have been contaminated by this debris, and would result is a significant improvement over the existing condition. Implementation of Mitigation Measure HAZ-5 would also ensure that removal of the debris, including any potentially hazardous or toxic components, would be handed by appropriately licensed and trained contractors and waste haulers.

Removal and disposal of potentially hazardous trash and debris or contaminated soils could require special handling pursuant to applicable regulations. For example, automotive tires must be removed and disposed of by specialized waste tire haulers who are registered with the State Department of Resources Recycling and Recovery (CalRecycle) and bonded pursuant to the Department's regulations. Other agencies, including the Regional Water Quality Control Board, Department of Toxic Substances Control, SCAQMD, County Fire Department and the City could also impose permitting requirements or other limitations on handling and disposal of specific materials that could be present in debris piles located on the site.

Further environmental assessment could be required to ensure that all debris and potentially contaminated soils associated with the debris are properly identified and appropriately handled and disposed of. Accordingly, Mitigation Measure HAZ-5 also requires additional assessment of all debris piles located on the site prior to grading and clearing with additional testing and implementation of appropriate methods of handling and disposal as may be required to ensure full compliance with applicable State and federal regulations. Also refer to Section 4.9, *Hydrology and Water Quality* for a discussion of mitigations measures and regulations that would be implemented to ensure protection of the Smith Creek channel during the construction phase of the Project.

Mitigation Measures

HAZ-4 The abandoned well identified in the 2007 Converse Consultant's Technical Memorandum for the Butterfield Specific Plan shall be properly capped and any associated pipeline abandoned and/or removed from the site pursuant to applicable State and federal Guidelines.

HAZ-5 Prior to issuance of grading permits, the following remediation efforts shall occur:

- The batteries, auto parts, tires and the diesel engine observed on the concrete pad next to the well and any associated fuel sources shall be removed and disposed of in compliance with all applicable regulations by waste haulers certified by the State for the handling and disposal of such wastes;

- Piles of asphalt debris and inert trash observed in various locations throughout the property shall be removed following their inspection by a hazardous waste consultant and, if required, by a cultural resource consultant and the material removed and disposed of pursuant to all applicable laws and regulations.

- Prior to the removal of any potentially hazardous debris, additional environmental assessment and testing shall be completed pursuant to the recommendations of a certified environmental consultant and appropriate

methods of handling and disposal shall be identified and implemented pursuant to existing (or then current) regulations and procedures for any particular hazardous waste or toxic material identified.

Impact Analysis - High Pressure Gas Line

Determination: Less than Significant with Mitigation Incorporated

The Phase I ESA update (2007) identified the presence of a high-pressure natural gas pipeline traversing the Project site Accidental or intentional rupture of the underground natural gas pipeline during grading, trenching or other construction-related activities could result in environmental contamination, fire, or explosion. The risk of an accidental rupture would be greatest during the site clearing and excavation phases, when earthmoving and utility trenching equipment are adjacent to a pipeline. Relocation of a portion of the pipeline is anticipated as part of the proposed development; refer to Exhibit 3.0-6C, *High Pressure Gas Line Location*. In the developed condition the top of the pipeline would generally be between four to six feet below the top of pavement within the public right-of-way and approximately three to four feet bgs where it traverses the golf course. The gas line may need to be lowered further in limited areas of the golf course, such as under the realigned Smith Creek, in order to accommodate surface features.

California Government Code 4216 regulates excavation in the vicinity of subsurface installations. CGC 4216 classifies natural gas pipelines as "high priority subsurface installations" that would be potentially hazardous to workers and the public if damaged and requires: (1) verification of all excavation areas with the Underground Service Alert (USA); (2) notification of regional centers, in this case, the Underground Service Alert – Southern California Regional Center,[17] and the purveyor of scheduled earthmoving activities in proximity to the pipeline prior to commencement of excavation; (3) demarcation of the pipeline location; and avoidance of the pipeline area to the extent feasible. Mitigation Measure HAZ-6 would require contact with DigAlert prior to the start of grading operations and close coordination with SCGC prior to and during grading and trenching activities in the vicinity of the pipeline to provide the maximum feasible protection of workers and property.

The majority of the pipeline traversing the Project site is not PUC-rated residential grade pipe as the pipeline was installed when the area was in agricultural use. Development of the Project site will increase the density surrounding the pipeline easement and require implementation of mitigations to reduce the risk of upset associated with that development. As noted, those mitigations may include reduction in the pressure under which natural gas is transported through the pipeline and/or replacement of the pipeline with PUC-rated residential grade pipeline as determined by the PUC. As adjacent sites have developed SCGC has replaced pre-

[17] DigAlert, Underground Service Alert of Southern California, http://www.digalert.org/index.asp, accessed 12.10/2010

existing pipeline with PUC-rated residential grade pipe. Mitigation Measure HAZ-7 would require the Applicant to ensure that the same replacement would occur within the Project site prior to the issuance of building permits for structures located within 100 feet of the outer edge of the pipeline easement and prior to the paving of streets under which the pipeline would be situated. In addition, HAZ-7 would require appropriate horizontal and vertical separation between the pipeline and both wet and dry utility installations and crossings and monumentation to mark the location of the pipeline through the developed Project site.

It should be noted that when the adjacent Sundance project in the City of Beaumont was developed, the Gas Co. replaced the pipeline through that project and further to the west, and also replaced non-residential grade pipeline to the east through the Fiesta project (Tract 30906). As part of this work the Gas Co. replaced the non-residential grade pipeline a distance of 600 feet into the Butterfield project site from both the west and east boundaries. It is typically acceptable for public streets and the golf course to overlay the pipeline along its alignment through the Project site; however residential lots may not overlay the pipeline.[18] Accordingly, the Project has been designed to ensure that the pipeline is located under the public streets or within the golf course area.

School sites are required to observe a 1000' setback from the outer edge of the high pressure gas line easement. As currently located, the southerly proposed school site in Planning Area 20 is approximately 1,400 feet from the gas line and the northerly school site in Planning Area 68 is over 8,000 feet from the gas line. Accordingly, both proposed school sites meet these setback requirements.

Current law and regulation does not require definitive setbacks between residential structures and high pressure natural gas pipelines. In 2008, the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration initiated the *Pipeline Informed Planning Alliance (PIPA)* to develop land use guidance for activities on and near pipeline rights-of-way in response to *Special Report 281: Transmission Pipelines and Land Use: A Risk-Informed Approach*, prepared by the National Academies' Transportation Research Board (TRB) in 2007;[19] however, no official findings have been adopted and no guidance has been provided to date as result of this DOT effort. There are no State regulations or local ordinances that address this issue.

Mitigation Measures

HAZ-6 The contractor shall ensure that precautions are taken to avoid the Southern California Gas Company pipeline observed crossing the property diagonally from

[18] Specific easement conditions, pipeline alignments, and construction details are developed on a case-by-case basis following PUC and Gas Company policies and regulations.

[19] US DOT, PHMSA, PIPA Discussion, Risk-Informed Land Use Planning, 2009, http://primis.phmsa.dot.gov/comm/publications/FamiliarizationMaterial-RiskInformedLandUseDecisions-Edited-20090501-hmw.pdf?nocache=1228, accessed 9.28.2010.

the west-center of the Project site to the southeast corner and that may be present along the alignments of the proposed off-site infrastructure. Such precautions shall include calling Dig Alert prior to any construction activity to determine and mark the exact location of this pipeline and close coordination with Southern California Gas Company to ensure that appropriate measures are taken by SCGC, including potential reduction in pressure and on-site monitoring, to protect both workers and the pipeline from accidental damage during grading activities. The appropriate identification and setbacks shall be maintained in order to ensure the safety of adjacent properties.

HAZ-7: The Applicant shall ensure that the existing high pressure gas line is replaced by the operator with pipeline that is PUC-rated for location in residential areas. Replacement of the pipeline and required relocation shall occur prior to trenching for sewer, water and storm drain within 25 feet of the outer edge of the pipeline easement and/or prior to the issuance of building permits for residences located within 100 feet of the ultimate pipeline alignment and prior to the paving of any roads within the pipeline alignment. Unless directed otherwise by the PUC, wet utility crossings shall observe a minimum ten-foot vertical separation and ten-feet of horizontal separation from the pipeline, to the extent feasible given the needed depth of utility services. Undergrounded electrical services shall observe a minimum 10 foot horizontal separation from the pipeline. The location of the pipeline shall be indicated with appropriate curbside notation and/or monuments at minimum 50-foot intervals along its route and by ground-level monumentation through the golf course, or at intervals required by the PUC.

Pursuant to existing regulations, implementation of Mitigation Measures HAZ-6 and HAZ-7, the risk of upset associated with the presence of an operating high pressure natural gas pipeline would be reduced to a less that significant level.

Impact Analysis – Radon

Determination: Less than Significant

Radon is a naturally occurring radioactive gas, usually found in igneous rock and soil and is a carcinogen that can cause lung cancer with prolonged exposure at certain levels. *The Radon Act 51* set the natural outdoor level of radon gas (0.4 pCi/L) as the target radon level for indoor radon levels. The US EPA has set an action level of 4 pCi/L. The Project site is located in Riverside County, which is classified by the EPA as Zone 2, defined as having a predicted screening level of 2 to 4 pCi/L[20]. This classification indicates that there is a potential for slightly elevated levels of radon to be present in the Riverside County area. However, the radon zones

[20] *Technical Memorandum – Hazardous Materials Review,* Converse Consultants, March 12, 2007.

are linked to counties and not necessarily to a specific location within the County. Typically, mountainous areas present a higher risk for radon exposure due to the presence of igneous rock and soil, while the risk for alluvial plain areas, where the Project is located, is lower. Since the majority of the project site is located on an alluvial plain, hazards involving potential exposure to naturally occurring radon are considered to be less than significant.

Impact Analysis – Construction Phase Accidental Releases

Determination: Less than Significant with Mitigation Incorporated

The proposed Project includes approximately four phases of mass grading as well as multiple phases of rough grading and precise grading for each of the residential neighborhoods, golf course, and commercial site. Grading involves the use of heavy equipment, which must be fueled and serviced on the site during the course of grading operations. The first phase of mass grading in particular, which is expected to involve approximately 850 acres of the Project site and require approximately 4 million cubic yards of raw cut and fill plus 3 million cubic yards of remedial grading, will require the use of approximately 20 pieces of heavy equipment each day through the completion of the phase. Heavy equipment requires refueling during the course of the workday as well as on-site maintenance both during and after construction hours. Fuel may be stored in temporary above ground storage tanks and/or may be supplied by tanker trucks. In either case, accidental spillage could result from on-site storage and/.or refueling activities. The State Water Resources Control Board, with EPA concurrence, has determined that any above ground petroleum storage tank in California has a reasonable possibility of discharging oil in harmful quantities.

The *Riverside County Certified Program Agency* (CUPA) for Riverside County is authorized to ensure that above ground petroleum storage tanks with single tank capacity greater than 1,320 gallons or with a cumulative storage capacity of 1,320 gallons stored in containers of 55 gallons or greater have in place a Spill Prevention Control and Countermeasure (SPCC) Plan in place pursuant to the provisions of the *California Aboveground Petroleum Storage Act* (APSA). The SPCC would include provisions that would ensure that containment and other countermeasures would be put in place to prevent oil spills that could reach navigable waters of the U.S. or waters of the State. Smith Creek, which traverses the center of the project site, and Pershing Channel, located along its eastern boundary, have connection to traditionally navigable waters. Accordingly, any above ground fuel storage facility located on the Project site would include provisions in the SPCC plan to prevent contamination of both drainages. Enforcement of these requirements is the responsibility of the County Department of Environmental Health through its *Aboveground Storage Tank Program.*

Conditional California APSA Exemptions exempt some facilities from preparing an SPCC plan. This conditional exemption applies to a farm, a nursery, logging site and a construction site (note that a construction site is the portion of the facility that is actually undergoing

construction. A construction *yard* is not a construction site). This exemption applies if: (1) no aboveground tank exceeds 20,000 gallons; and (2) the cumulative storage capacity at the site is less than 100,000 gallons. To maintain this exemption the facility must conduct daily inspections of the aboveground tank(s), be inspected by the local CUPA and install secondary containment if required; however, these facilities may still be required to prepare and implement a Federal SPCC plan and in the case of the Project site, its proximity to navigable waters would dictate the need for one, as indicated above.

Installation of temporary above ground fuel storage on construction sites may also be regulated locally. The County of Riverside Fire Department, which provides comprehensive services to the City of Banning, enforces the provisions *of Riverside County Ordinance 546 (Fire Protection Regulation)*. Division XII of the Ordinance regulates the storage of liquefied petroleum gases and limits the capacity of such tanks to no more than 2,000 gallons. Installation of above ground fuel storage tanks requires a permit from the County Fire Department and compliance with the provisions of *Riverside County Ordinance 546* and *Chapter 49 of the California Fire Code*. The City of Banning has also adopted the 2010 *California Fire Code* as part of its *Municipal Code* and the County regulations would apply to the proposed Project. To further minimize the potential risk of upset impacts that could be created by an above ground fuel storage tank Mitigation Measure HAZ-8, which requires appropriate permitting prior to installation and appropriate site maintenance and use subsequent to installation, shall be required.

In the event hazardous substances and/or contaminated soil are encountered during site grading, work shall immediately cease in the area and the property owner/developer shall notify the Riverside County Fire Department Hazardous Materials Unit located in FS 20 in Beaumont, the County Department of Environmental Health HAZMAT team in Riverside, and City Public Works Department. Additionally, implementation of mitigation measure HAZ-3 would ensure that the Project site is remediated of all existing potentially hazardous materials, including batteries, pipelines, engines, tires and other debris.

Mitigation Measures

Mitigation Measure HAZ-8 requires permitting and appropriate maintenance, containment and operation of any above ground temporary fuel storage tank during the Project's construction phase. Together with the enforcement of existing regulations and regular inspections by the City and/or the Fire Department pursuant to the permit conditions, the risk of upset from the installation and operation of an above ground fuel storage tank would be reduced to a less than significant level.

HAZ- 8 A permit shall be obtained from the Riverside County Fire Department (Banning Services Unit) and, if required, from the County Department of Environmental Health, prior to installation of any temporary above ground fuel storage tank on the Project site.

- A hazardous materials business plan consisting of an owner/operator page, a chemical description/inventory page, and a site map must be submitted with the application for permit.

- The storage area shall be kept free of weeds and extraneous combustible material.

- Plans must be submitted for approval prior to installation. Aboveground fuel/mixed liquid tanks(s) shall meet the following standard: Tank must be tested and labeled to UL2085 Protected Tank Standard or SwRI 93-01. The test must include the Projectile Penetration Test and the Heavy Vehicle Impact Test. A sample copy of the tank's label from an independent test laboratory must be submitted with the tank plans.

- The tank shall be kept 50 feet from buildings and conspicuously marked with the name **DIESEL** and **COMBUSTIBLE – KEEP FIRE AWAY**.

- The tank shall be located within a secondary containment area such as earthen berms covered from end to end by a thick mil plastic. Concrete or steel may also be used to provide secondary containment. /show calculations for secondary containment on the Site Plan.

- The tank shall be secured to prevent movement on the containment surface or be mounted on metal skids (not on an elevated stilt rack).

- The project manager or contractor shall contact the fire department representative for inspections at the time prior to when product is put into the tank to verify compliance, **AND** at the time when the tank is removed from the site to check for evidence of ground contamination.

Impact Analysis – Operational Phase Impacts

Determination: Less than Significant with Mitigation Incorporated

Refer to above discussion under Impact 4.8-1.

Impact 4.8-3: School Safety

Threshold: *Would the proposed Project result in hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Determination: Less than Significant

At final build-out, the proposed Project would consist of 5,387 dwelling units, 35.8 gross acres of commercial uses, two elementary school sites, a golf course, parks, drainage area, natural open space and slope/common area landscape. In addition, two schools exist within ¼ mile of the Project site: Sundance Elementary School, located at 1520 E. 8th Street in Beaumont; and Calvary Christian School, located at 1325 North Mountain Avenue in Banning.

Two elementary schools are proposed within Planning Areas 20 and 68. Residential, commercial and park uses would be located within 0.25 miles of the proposed school sites. Residential uses, commercial uses, and parks would involve the storage or use of hazardous materials (i.e., household cleaners, automobile oil, gardening chemicals, etc.); however, the small volume and low concentration of these materials would make the risk of upset less than significant.

A Southern California Edison easement runs through the middle of the Project in an east-west direction. The smaller power line in the northerly 100-foot-wide easement is in the 115 kilovolt (kV) range, and the larger line is in the 330-foot-wide easement is in the 220 to 240 kV range. SCE, however, is pursuing Pubic Utilities Commission approval to install 500 kV lines in these easements (a separate action from the proposed SCE power line relocations discussed above). The amount of required setback between the SCE easement and any school site per the State limits would be determined based on the kV size of the power lines. The PA 68 school site is located in proximity to the SCE easement. Pursuant to state law, the site must be located at least 350 feet north of the easements due to the potential future 500 kV lines. Per the State limits, the required setback is measured from any part of the school site to the edge of the easement. The proposed school in PA 68 is located beyond the required 350-foot buffer and, therefore, impacts to schools associated with the power line location would be less than significant. The Planning Area 20 school site is also located more than 350 feet from the edge of the central SCE transmission line easement.

Neither of the proposed on-site schools would be located within 1,500 feet of the existing or relocated high pressure gas line. Were any of the school sites changed subsequent to the adoption of the Specific Plan, new sites would be subject to the same setback requirements by existing regulations. Accordingly, impacts to school safety associated with utility locations would be less than significant.

Impact 4.8-4: Affect Known Hazardous Materials Site(s)

Threshold: *Would the proposed Project be located on a site that is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?*

Determination: Less than Significant

As previously noted, a Phase I Environmental Site Assessment was prepared for the Project site, including the 21-acre parcel added to the original Deutsch Specific Plan Project site. Pursuant to *Government Code Section 65962.5*, an Environmental Database Report (EDR) of Standard Environmental Record Sources (records) was prepared specifically for the Project site. No portion of the site was identified on any hazardous materials database in the EDR report. While properties in the vicinity of the Project site were identified as potential sources of hazardous materials and/or contaminants, it was determined that these nearby properties represent a low risk due to the nature of their contamination and their distance from the Project site; refer to the Phase I Site Assessment located in Appendix F for more information.

Impact 4.8-5: Emergency Management Plans

Threshold: *Would implementation of the proposed Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Determination: Less Than Significant with Mitigation Incorporated

The City adopted a Multi-Hazard Functional Planning document in 1996. The document is organized into three parts, which include: 1) the Banning Emergency Plan; 2) twelve functional annexes that describe the emergency response organization; and 3) a listing of operational data such as resources, key personnel, and essential facilities and contacts. The Emergency Plan addresses the City's planned response to extraordinary emergency situations associated with natural and man-made disasters and emergencies including earthquakes, wildfire, explosion, and major hazardous materials incidents. The proposed Project would not impair implementation of the City's Emergency Plan. The City has not established emergency evacuation routes although, depending on the location and extent of an emergency, major surface streets and I-10 could be utilized to route traffic through the City. The Project would be required by current regulations to provide adequate ingress and egress, street width, turning radius, fire hydrants and adequate fire flow before certificates of occupancy could be issued. The presence of adequate fire flow and paved access would be certified by the Fire Department. That certification is required by the City prior to permitting the delivery of combustible materials to the Project site or the erection of building framing. The requirement is enforced by City inspection and Fire Department inspection during the construction phase.

On-site construction phase activities that could interfere with emergency access include extensions of utility infrastructure that could close, or partially block streets within the occupied areas of the Project for periods of time. Implementation of mitigation measure HAZ-9 would require pre-construction consultation with the Fire Department to establish protocols for response and access by emergency vehicles during each phase of Project construction. Adequate fire flow would be required on site, and would be verified by the Fire Department,

before wood for vertical construction could be dropped on the site pursuant to existing regulations.

Implementation of off-site infrastructure could potentially result in diminished emergency response times in affected areas due to construction traffic and partial road closures during roadway and pipeline improvements. Mitigation measure HAZ-10 would require preparation and implementation of a construction traffic management plan would ensure that evacuation and emergency response routes remain functional during all construction phases both on and off-site. Approval of the Plan by the City and potentially by the Fire Department prior to the issuance of encroachment permits allowing work within the public right of way. Enforcement of the provisions of the approved Traffic Control Plan would be the responsibility of the City during the course of Project construction.

Mitigation Measures

HAZ-9: Prior to the approval of Final Tract maps, the City Engineer and Riverside County Fire Department (Banning Services Unit) shall discuss with the Applicant approximate locations of work activities and ingress and egress points in and out of the construction site to assure there is adequate access and communications protocols for emergency response vehicles during each of the proposed construction phases.

HAZ-10: Prior to the issuance of grading permits or road encroachment permits, a Traffic Management Plan providing safety control measures for area-wide streets that would be affected by construction traffic and activities must be prepared by a licensed civil or traffic engineer, to the satisfaction of the City Engineer, that would minimize safety hazards and emergency access impacts. The temporary measures in the Traffic Management Plan could include: flaggers, temporary lane restriping, temporary lanes, caution signs, reduced-speed zones, temporary detours, and other safety and traffic control devices.

With implementation of existing regulations and Mitigation Measures HAZ-9 and HAZ-10, the construction phase impacts of the Project on emergency access and response would be reduced to a less than significant level.

Impact 4.8-5: Wildland Fires

Threshold: *Would implementation of the Project 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 wildland?*

Determination: Less Than Significant with Mitigation Incorporated

Portions of the Project site are locally designated Hazardous Fire Areas and the site also includes property designated as High, and Very High fire hazard severity zones by the City's General Plan and the State FHSZ mapping program; however, pursuant to the Cal Fire 2010 Very High Fire Severity Zone Map, only a small portion of the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ), as shown on the Exhibit 4.8-1, *Wildfire Susceptibility Map*.[21] The State-designated VHFHSZ corresponds with PA 73.

Development of the Specific Plan site will gradually introduce homes, roadways, and water infrastructure into the project site, resulting in changes in the configuration and characterization of existing fire threat or fire hazard zones. *The 2010 State Fire Code*, *2010 California Residential Code* and *the 2010 California Building Code* all contain specific requirements for construction and fuel management within Urban Wildland Interface Areas pursuant to the fire hazard severity zone determined by the State's mapping program.

The City's General Plan relies on the State's FHSZ mapping program to designate and rate fire severity hazard areas. Based on current designations and definitions development of the Specific Plan would likely result in incremental changes in wildfire threat rating and UWI-related impacts:

1. Development within portions of the property currently classified as "No Fuel/Non-burnable Open Space" would result in a re-designation of those areas most proximate to Wilson Street, Highland Springs Avenue and improved portions of Highland Home Road to "Urban/Non-Zoned," defined as developed areas spatially removed from proximity to wildland fire areas by 200 feet to 0.75 mile, depending upon the availability of water infrastructure, terrain and ease of access for emergency equipment.

2. Development areas within those areas of the site proximate to designated "High" fire hazard severity zones could be incrementally reclassified to either "Urban/Non-Zoned" areas (particularly those located in proximity to Wilson Street and Highland Home Road in the southeastern portion of the site) and to "Moderate" fire hazard severity zones for development occurring adjacent to designated "High" and "Very High" fire threat zones, until such time as development extends into "High" and "Very High" designated areas. In these areas temporary fuel modification zones might be required by the Fire Department along the development perimeter of specific subdivisions.

3. Development within areas currently designated "High" fire hazard severity zones could result in the incremental reclassified of the area to "Moderate" or

[21] Cal Fire, Very High Fire Hazard Severity Zones in LRA, as recommended by Cal Fire 1/2010, http://frap.cdf.ca.gov/webdata/maps/riverside_west/fhszl_map.60.pdf, accessed 7/23/10.

"Urban Non-zoned" fire threat zones depending upon the distance of each development project from the boundaries of the remaining undeveloped "Very High" fire hazard severity zone areas, the terrain, ease of access, and response times of locally based first responders.

4. Development within areas currently designated as "Very High" fire hazard severity zones could result in incremental reclassification of at least portions of this area to "Moderate" or "High" fire hazard severity zones, based on distance from remaining undeveloped "Very High" fire hazard severity zones and/or VHFSHZ areas. Development located within 0.25 mile of remaining "Very High" fire hazard severity zones and/or at the developed edge of off-site "Very High" fire hazard severity zones could be reclassified to "High" fire hazard severity zones, although implementation of defensible space features and fuel modification strategies could significantly reduce hazard even in these areas.

5. While the edges of PAs 69, 73, and 75 adjacent to natural, undeveloped open space are the areas that most clearly meet the California Fire Code and 2010 CBC/CRC definition of a UWI area in the ultimate development condition, the Project also proposes low- and medium density residential development for the nearby PAs 50, 51, 60, 61 and 52 as well as a school site located on PA 68. Because of their proximity (0.25 mile or less) to undeveloped wildland areas these PAs could continue to be considered "High" fire hazard severity zones. Road standards designed to accommodate fire equipment, and signage identifying streets, roads and buildings, when combined with the fuel modification at the UWI in PAs 69, 73, and 75 would reduce the potential impacts related to wildland fires on human life and property in the build out condition within these nearby planning areas.

Fire hazard severity zone changes would occur incrementally, and in many cases more than once as the Project site develops, with areas changing designation as wildland interface boundaries retreat from the individual tract edges due to additional development. Each subdivision, as it proceeds, will need to be evaluated by the Fire Department to determine the risk posed by wildfire at the time the subdivision is built and the need to implement, on a temporary or permanent basis, the fire reduction strategies typical of UWI areas. Implementation of interim fuel modification zones may be required at the time of construction even though the hazard posed to structures within the subdivision will ultimately be reduced as development continues within the Specific Plan area.

Chapter 7A of the 2010 CBC, Section R327 of the 2010 CRC, both adopted by the City of Banning as part of its *Municipal Code*, and the County Fire Department's UWI Standards require submission of a *Fire Management Plan or Fuel Modification Plan (FMP)*, prepared pursuant to the requirements of the 2010 CBC and/or CRC and the *California Fire Code, Chapter 49*. In the City of

Banning, preparation of a FMP and its approval by the Fire Department is required prior to the approval of any Tentative Tract Map or Land Use Permit for property adjacent to natural open space pursuant to the *Municipal Code* as amended in December 2010, when the City adopted the 2010 CFC as its *Fire Safety Code*. In addition, the 2010 building codes require specific construction methods and materials for residential units built in UWI areas. Since the City has adopted these codes in their entirety by amending its *Municipal Code*, the City would enforce all of these requirements during plan check precedent to the issuance of building permits and during the life of the project, through periodic inspection of fuel modification zones by the Fire Department acting as the City's agent.

The ***Fire Department Urban-Wildland Interface Standards*** require inclusion of a definition of standards, fuel modification zone locations, the species of plants to be used, building construction, roadway widths, emergency access, design, maintenance, timing, financing and other applicable conditions related to fire protection as part of the FMP. The Butterfield Specific Plan Project will be required to comply fully with all of these requirements.

Maintenance of fuel management zones located within private lots are the responsibility of the property owner; however, a fuel modification maintenance easement will be recorded over all fuel modification areas allow the Master Homeowners Association, neighborhood association or other appropriate maintenance agency/entity approved by the City of Banning to carry out maintenance activity as needed.

Lastly, according to the County Fire Department, service to the Project area could be inadequate after development extends north of Brookside Avenue and/or east of Highland Home Road unless equipment, personnel, and/or the fire station proposed for construction within the Project site is built and staffed. This issue is discussed in greater detail in Section 4.12.2.1, *Fire Protection Services,* and specific mitigation measures have been imposed in that section which require submission, review, and approval of a Fire Response Plan prior to the recordation of any final map for subdivisions within the Specific Plan area (Mitigation Measure PSU-1a) and which further prohibit the issuance of building permits for residential units north of Brookside Avenue and/or east of Highland Home Road until such time as a new fire station is constructed and operational, or until such time as the Fire Chief determines that adequate fire service can be provided (Mitigation Measure PSU-1b). These Mitigation Measures are referenced in this analysis and included as mitigation measures that address UWI wildfire issues.

Mitigation Measures

In addition to required compliance with the applicable provisions of the City of Banning's Municipal Code Chapters dealing with fire safety and its Building Code, which incorporate in their entirety the provisions of the 2010 CBC, 2010 CRC, the following Mitigation Measures are imposed to further reduce the potential impacts of wildfire that could be associated with the implementation of the proposed Project. With Project Design Features noted above, adherence

to the Fire Department requirements, applicable laws and regulations and implementation of these Mitigation Measures and Mitigation Measures PSU-1a and PSU-1b, Project impacts related to wildland fires would be reduced to a less-than-significant level.

HAZ-11: All proposed subdivisions within the Specific Plan project area shall be evaluated by the Fire Department to determine whether the Department's Urban-Wildland Interface requirements should be implemented as part of the development. If the Department determines that either an interim or permanent condition of high fire risk would be present, a Fuel Modification Plan that meets the then-current requirements of the Fire Department shall be prepared and shall be approved by the Fire Department prior to recordation of a Final Tract Map. Maintenance of interim fuel modification areas shall be the responsibility of the master Homeowners Association and/or the property owner and/or a LLMP and temporary maintenance easements shall be recorded over interim fuel modification areas. Such easements shall be quitclaimed when the Fire Department determines that additional new development has eliminated the need for fuel modification in these areas.

HAZ-12 Seed mix used for the temporary re-vegetation of graded areas that will remain as undeveloped open space for a period of 6 months or more shall consist primarily of drought-tolerant grasses that may combine native and non-native species. These mixes include grasses that require little maintenance and do not grow tall, but do provide sufficient vegetative coverage to be effective in controlling wind and water-caused erosion. Defensible spaces as defined by the Fire Department pursuant to Chapter 49 of the California Fire Code shall be maintained around the exposed perimeters of subdivisions abutting un-irrigated grassland and/or chaparral through weed abatement, mowing, and other fuel reduction/modification strategies.

HAZ-13 The applicant shall continue to provide annual fuel modification as required by City code. The annual fuel modification (thinning) shall also be conducted in the future development areas south of Highland Home Road extension as needed (which excludes PAs 50, 51, 52, 60, 61 and 73, which shall remain natural until such time these areas are developed or require infrastructure improvements).

4.8.5 CUMULATIVE IMPACTS

Determination: Less than Significant with Mitigation Incorporated

The developer(s) and contractor(s) would be required to conform to all applicable hazardous materials and hazardous waste standards, permit conditions, and regulations during its construction phase. Hazardous materials used, or hazardous waste generated, during the

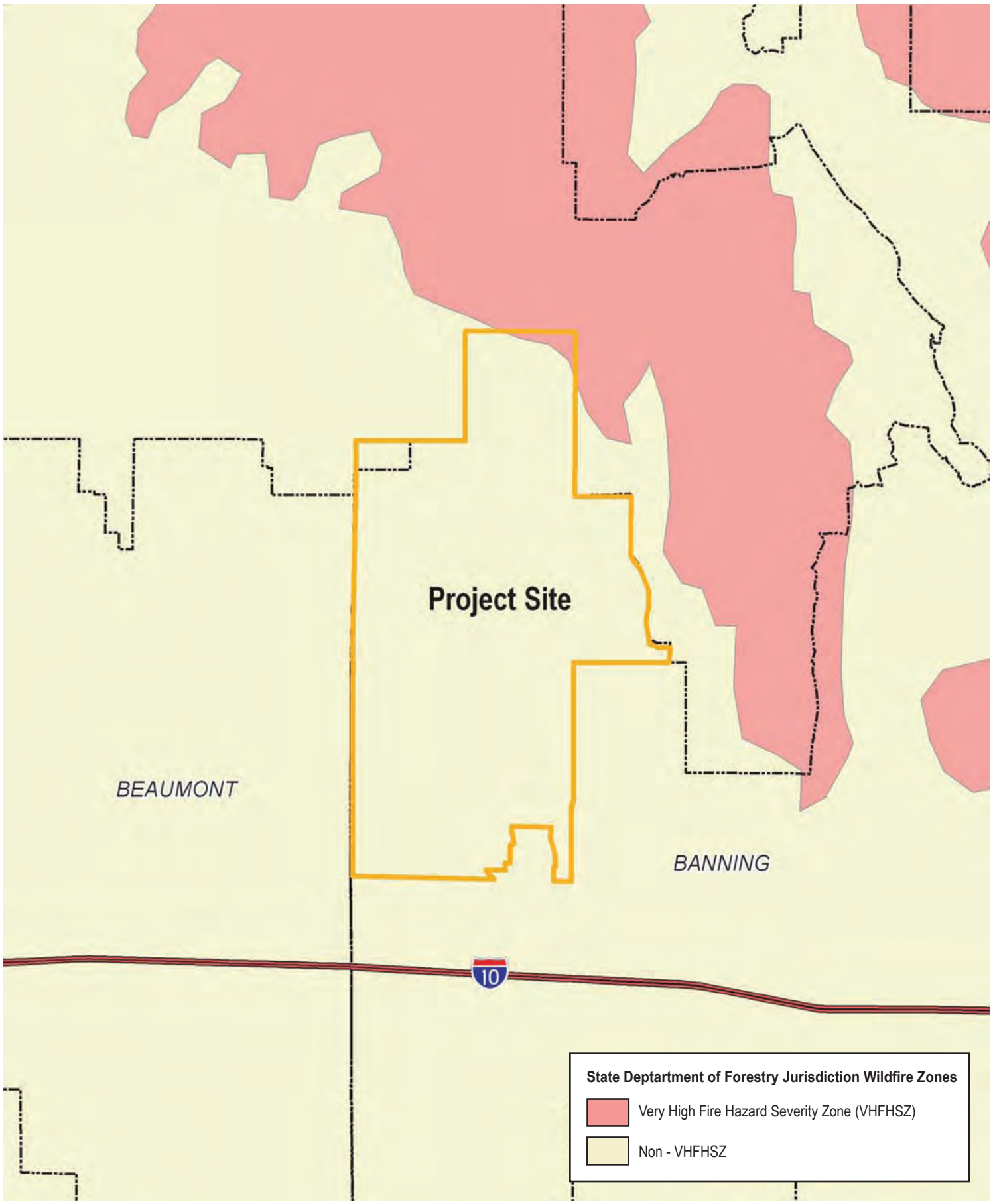
operational phase of the Project would not be quantitatively significant. Accordingly, the proposed Project's contribution would not be cumulatively considerable and would be considered less than significant with mitigation incorporated.

Development of the proposed Project would increase the number of residential structures located in urban-wildland interface areas within the City of Banning and therefore the number of structures and persons vulnerable to the effects of wildfire. This is a potentially significant cumulative impact. Records of historical wildfires in California indicate that structure losses, loss of human life, and injury related to wildfire increase as development encroaches on or adjacent to wildland areas. The proposed Project would be one of many developments existing, planned and future developments within the City of Banning, the neighboring City of Beaumont, and adjacent unincorporated areas that would built in the vicinity of fire-vulnerable wildlands. However, new development would be required to implement the most current State and local codes and regulations regarding creation of defensible space, creation and maintenance of fuel modification zones, building code requirements, and landscape requirements designed to significantly improve the ability of structures to survive wildfire. In addition, new development will extend streets and water infrastructure and pay fees that will enable the construction of additional fire stations and the purchase and maintenance of additional equipment while improving access to adjacent wildlands. The recent history of fire risk at the UWI demonstrates the effectiveness of these measures in protecting structures and lives. Accordingly, with adherence to existing and future laws, ordinances, and regulations and implementation of appropriate Mitigation Measures mandating uniform and effective maintenance of defensible space/fuel modification areas the risk posed by new construction in UWI areas would be reduced to less than cumulatively considerable.

4.8.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With adherence to federal, State, and local laws, ordinances, and regulations pertaining to the use, disposal, storage, handling, and transport of hazardous materials, and with the implementation of Mitigation Measures HAZ-1 through HAZ-10 the proposed Project would result in less than significant impacts with regard to hazards and hazardous materials.

With adherence to federal, State, and local laws, ordinances, regulations, and standards, Mitigation Measures HAZ-11 through HAZ-13, and PSU-1a and PSU-1b the proposed Project would reduce its impacts to a less than significant level as regards vulnerability to wildfire and its related impacts on human life and property.



SOURCE: State Dept. of Forestry & Fire Protection, Riverside County (West)
Fire Hazard Severity Map, recommended January 2010, accessed March 23, 2010

NOT TO SCALE

5/27/11 JN: 65-100290

PARDEE HOMES • BUTTERFIELD SPECIFIC PLAN EIR

Wildfire Susceptibility Map

EXHIBIT 4.8-1