
3.7 - Hazards and Hazardous Materials

3.7.1 - Introduction

This section describes the existing setting regarding hazards and hazardous materials and potential effects from Project implementation on the site and its surrounding area. Section 15125 of the State CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the area of a project that exist at the time that the Notice of Preparation (NOP) is circulated. These environmental conditions normally constitute the baseline physical conditions relative to which the CEQA lead agency evaluates the change in conditions that would result from project implementation. The NOP for this Draft EIR was issued on February 27, 2009. Therefore, environmental conditions as of February 2009 represent the baseline for CEQA purposes. To evaluate the footprint impacts of the Proposed Action (e.g., effects from Hazards and Hazardous Materials), the conditions in 2009 are considered to be the baseline. Buildout of the Project is then added to existing conditions in order to determine whether Project implementation would substantially remove or impact the resources, thereby resulting in a significant impact on the environment. Data used to determine the baseline for Hazards and Hazardous Materials were derived from information contained in the Phase I and Phase II Environmental Site Assessments (ESA) prepared in January 30, 2006 and March 10, 2006 respectively by Krazan & Associates, Inc. and are included in this Environmental Impact Report (EIR) as Appendix F. Therefore, data used to derive baseline conditions is based on existing conditions at the time of NOP issuance (February 27, 2009 through March 31, 2009) and are appropriate to use within the following analysis.

3.7.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations (CCR), are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic - causes human health effects;
- Ignitable - has the ability to burn;
- Corrosive - causes severed burns or damage to materials; and
- Reactive - causes explosions or generates toxic gases.

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that render a material hazardous also make a waste hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The CCR, Title 22,

Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Phase I Environmental Site Assessment (ESA)

California Environmental Quality Act (CEQA) requires that the lead agency consult the lists of hazardous waste sites compiled by various State agencies, pursuant to Government Code Section 65962.5 (California Public Resources Code [PRC] Section 21092.6). Databases from federal and State regulatory agencies were reviewed to identify any sites known to use, generate, store, treat and/or dispose of hazardous materials and chemicals or release incidents of such materials, which may have impacted the Project site. Environmental Data Resources, Inc. (EDR) provided information regarding a 1.0-mile radius around the Project site from the available regulatory databases.

A Phase I and Phase II ESA were prepared by Krazan & Associates Inc. in January 30, 2006 and March 10, 2006 respectively, to determine the presence or absence of hazardous materials on the Project site. The findings of the Phase I and Phase II ESA are summarized below.

Records Search

Project Site

The Project site was not listed in the EDR-provided government database report. Additionally, there were no sites with a reported release of hazardous materials to the subsurface located within a one-quarter mile radius of the Project site.

Three orphan sites (i.e. stand-alone sites) were identified in the EDR-provided government database report. The sites are summarized in Table 3.7-1, below.

Table 3.7-1: Record Search Summary

Database	Type of Record	Distance from Project Site
Cortese	Hazardous Waste & Substances Sites List	0.25 to 0.5 miles
LUST	Leaking, Underground Storage Tanks	0.25 to 0.5 miles
CORRACTS	RCRA Corrective Action Activity	0.5 to 1.0 miles
Source: Krazan & Associates, Inc, 2006.		

Site Reconnaissance

Krazan and Associates, Inc. personnel performed site reconnaissance on the Project site on February 23, 2006, which included a visual observation of the Project site and surrounding properties. The findings of the site reconnaissance is below.

During the physical observation of the Project site, no hazardous materials/waste were observed. Exposed surface soil did not exhibit obvious signs of discoloration with the exception of minor surficial soil staining of the ground beneath numerous smudge pots located throughout Parcel 167-141-02. Each smudge pot appeared to have the capacity to contain approximately five gallons of diesel fuel. No diesel fuel was observed in the smudge pots inspected during the site reconnaissance. No obvious evidence (vent pipes, fill pipes, dispensers, etc.) of Underground Storage Tanks (USTs) were observed within the Project site. No standing water or major depressions were observed on the Project site. Three concrete cisterns and their associated concrete irrigation troughs were observed on the Project site's southern boundary. The irrigation troughs run in a south to north direction on Parcels 167-141-02 and 167-141-03 and in an east to west direction on Parcel 167-141-04. Numerous concrete irrigation water distribution valves were also observed on Parcel 167-141-02. No staining of the ground surface in the vicinity of the cisterns or troughs were observed. Additionally, a concrete lined shallow drainage channel is located near the western boundary of Parcel 167-141-04.

Three sewer manhole covers were located adjoining the drainage channel, which runs in a south to north direction prior to discharging to San Bernardino Avenue. No staining of the concrete lined shallow drainage channel was observed.

A former wind turbine was observed on Parcel 167-141-03 within the east-central portion of the subject site during Krazan and Associates, Inc. site reconnaissance; however, the former wind turbine is no longer present on-site. No Above Ground Storage Tanks (ASTs) were observed at the base of the former wind turbine.

No pad or pole-mounted electrical transformers were located on the Project site. Additionally, no electrical power lines rated at 69,000 volts or higher were located within 100 feet of the Project site.

Adjacent Streets and Property Usage

Adjacent roads and site uses observed during the site reconnaissance are located in Table 3.7-2

Table 3.7-2: Adjacent Streets and Property Usage

Direction	Adjacent Street	Adjacent Property Use
North	San Bernardino Avenue	Vacant Land, Orchard
East	None	Vacant Land, Residential
South	None	Vacant Land, Commercial
West	Tennessee Street	State Highway 210
Source: Krazan & Associates, Inc, 2006.		

Site History

Historically, the Project site has been utilized primarily for agricultural purposes as an orchard from at least 1938 until approximately 2002. Historical aerial photographs show three single-family

residential structures occupied the northeast corners of Parcels 01 and 02 and the northern boundary of Parcel 04 from at least 1938 until the demolition of the dwellings on Parcels 01 and 04 in approximately the early 1990s. Presently, the Project site is primarily vacant land occupied by a fallow orchard on Parcel 02 located in the west-central portion of the Project site. In addition, the single-family residential structure observed in the historical aerial photographs near the northeast corner of Parcel 02 is no longer on the Project site. Since the 1970s, the general Project area has been increasingly developed with residential and commercial structures to the immediate east and south.

Hazardous Building Materials

Hazardous Materials

A review of the most current local regulatory agency records was conducted to help determine if hazardous materials have been handled, stored, or generated on the Project site and/or the adjacent properties and businesses.

The San Bernardino County Fire Department - Hazardous Materials Division (SBCFD-HMD) was contacted regarding records of historical hazardous/flammable permits, hazardous materials handling, hazardous/flammable incidents, and/or UST that are on file for the Project site. According to SBCFD-HMD officials, no records regarding historical hazardous/flammable permits, hazardous materials handling, hazardous/flammable incidents, and/or USTs were available for the Project site.

Asbestos-Containing Building Materials

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air, they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (CalOSHA) defines asbestos-containing construction materials as any material that contains more than 0.1 percent asbestos by weight.

As previously indicated, there are no existing structures located on the Project site. Therefore, asbestos-containing building materials (ACMs) are not an on-site environmental concern at this time.

Lead-Based Paint

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably in paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil. Both the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Health Services define lead paint as containing a minimum of 0.5 percent by weight. Lead containing waste materials with a concentration greater than 0.1 percent are considered hazardous waste by California law.

No structures are located on the Project site. Therefore, lead-based paints (LBPs) are not an on-site environmental concern at this time.

Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are mixtures of synthetic chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977.

As previously stated, no pad or pole-mounted electrical transformers were located on the Project site. Therefore, PCBs are not an on-site environmental concern at this time.

Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, which is found in the earth's crust. The State of California Department of Health Services (DHS) conducted a statewide radon survey during 1990-1991, which entailed testing of radon in homes in designated geographic areas. Radon detection devices were placed in homes throughout the study region to determine geographic regions with elevated radon concentrations. The U.S. EPA has set the safety standard for radon gas in homes to be 4 pico Curies per liter (pCi/l). According to the DHS radon survey, and current correspondence with the DHS, radon concentrations in residences in the geographical region of the Project site average below 4 pCi/l, therefore radon is not anticipated to adversely impact the Project site.

High-Voltage Power Lines

High-voltage power lines emit electromagnetic fields (EMFs), which have been alleged to be a cause of cancer. However, scientific research has never conclusively established a link between EMFs and cancer.

As previously stated, no electrical power lines rated at 69,000 volts or higher were located within 100 feet of the Project site. Therefore, High-voltage power lines are not an on-site environmental concern at this time.

Potable Water Source

Upon development, the water purveyor for the Project site will be the Redlands Municipal Utilities Department (RMUD). The RMUD's water quality monitoring is an on-going program with water samples obtained on a regular basis. It is the responsibility of the RMUD to provide customers with potable water in compliance with the California State Maximum Contaminant Levels (MCLs) for primary drinking water constituents in water supplied to the public. The previously existing three

single-family residential structures located along the northern boundary of the Project site likely used a domestic water well. However, domestic water wells were not observed in the locations of the former dwellings and according to RMUD officials, no records for the former dwelling address of 1105 San Bernardino Avenue were on file.

Fire Hazard

According to California Department of Forestry and Fire Protection, the Project area is categorized as having a non-VHFHSZ (Very High Fire Hazard Severity Zones) risk from fires. There are also City fire stations in the general Project area. The closest City fire station is located at 10 West Pennsylvania Avenue (Fire Station 263), approximately 0.8-mile east of the Project site. In addition, the City and County have a mutual aid agreement. Accordingly, the Project site is not susceptible to undue fire hazards.

Airports/Airfields

The Redlands Municipal Airport is located approximately 2.34 miles east of the Project site. The Redlands Municipal Airport (FAA identification KREI) is a 180-acre facility with a 4,570 foot long by 75-foot wide runway serving approximately 240-based aircraft. There are a number of Fixed Base Operators at the airport offering a variety of services that include fuel (avgas, jet), flight training, repair and maintenance, hangar and tie-down rental, airplane rental, and related services.

The San Bernardino International Airport (SBD) is located approximately 1.86 miles northwest of the Project site. The SBD Airport allows for Stage 2 aircraft and has over 60,000 annual flight operations comprised mainly of charter, corporate and general aviation users. The width of SBD Airport's northeast to southwest facing runway is 10,000' x 200' (3,408 x 61 meters) and approximately 11,000 feet in length. Additionally, the Airport has recently completed a redesigned Passenger Terminal Facility in anticipation of future passenger airlines services (SBD website 2009).

Aboveground and Underground Storage Tanks

According to the Phase I ESA, the City of Redlands Building Department was contacted regarding records for the Project's Assessor Parcel Number (APN). According to the Building Department officials, no building permits were on file for the subject site APNs with the exception of a demolition permit issued on May 3, 1985 for the demolition of a "pit cover" at 1105 San Bernardino Avenue located near the northeast corner of Parcel 02. No address information was available for the former single-family dwellings located on Parcels 01 and 04. Therefore, no building permits for items of environmental significance such as underground storage tanks or septic systems were on file for the Project site APNs.

Phase II Environmental Site Assessment (ESA)

A Phase II ESA was conducted at the Project site located on the 20-acre portion of land at the west corner of the Project site, adjacent to Tennessee Street and San Bernardino Avenue. The purpose of the Phase II ESA was to collect and analyze soil samples in selected areas of the Project site to

identify the presence or confirm the absence of pesticides contamination at those locations and screen any detected chemicals for potential risk. The Phase II ESA tested 11 different sampling points located within the Project site using a grid sampling approach and a basis of approximately one soil sample location for every 2.5 acres.

A total of 26 soil samples were collected from 11 sampling locations within the 20-acre site. One near surface soil sample and one subsurface soil sample were collected from each location from depths of approximately 6 inches and 24 inches below ground surface (bgs), respectively. All soil samples were analyzed for organochlorine pesticides in accordance with the U.S. EPA.

The Phase II ESA concluded that with exception of two soil samples, all soil samples contained detectable concentrations of (Dichlorodiphenyldichloroethylene) DDE. In addition, with exception to four soil samples, all analyzed soil samples contained detectable concentrations of (Dichlorodiphenyltrichloroethane) DDT. However, according to the Phase II ESA, all detected pesticide concentrations (DDE and DDT) are well below their respective residential soil (1.7 mg/kg) and industrial soil (7 mg/kg) EPA Preliminary Remediation Goals (PRG). Therefore, the reported pesticide concentrations are significantly below the PRGs established by the EPA and may likely represent ambient “background” concentrations.

Furthermore, on the basis of slightly elevated results achieved for three of the samples compared to the California Title 22 Hazardous Waste Regulations, soils would be characterized as California hazardous waste. Any removal of the soil from the specific areas of the site will require profiling and manifesting for disposal as potentially hazardous waste.

3.7.3 - Regulatory Framework

Federal

Several federal agencies regulate hazardous materials, including the EPA, the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). The EPA is the primary federal agency responsible of the implementation and enforcement of hazardous material regulations. In most cases, enforcement of the federal laws and regulations is delegated to State and local environmental regulatory agencies. The following are some major federal statutes and issue areas:

- Resources Conservation and Recovery Act (RCRA) – hazardous waste management.
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – cleanup of contamination.
- Superfund Amendment And Reauthorization Act (SARA) – cleanup of contamination.
- Hazardous Materials Transportation Act (HMTA) – safe transport of hazardous materials.

With respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency

management at the federal, State, and local levels. Enforcement of these laws and regulations is delegated to State and local environmental regulatory agencies.

State

The California EPA (Cal/EPA) has broad jurisdiction over hazardous materials management in the State. The Department of Toxic Substance Control (DTSC) within the Cal/EPA regulates hazardous chemical materials management. The regulations found in CCR Title 26 ‘Toxics’, regulates hazardous waste more stringently than the EPA regulations in 40 Code of Federal Regulations 260. Other State agencies involved in hazardous materials management include the Regional Water Quality Control Board (RWQCB), Office of Emergency Services, Caltrans, California Highway Patrol (CHP) Air Resources Board (ARB), and California Integrated Waste Management Board (CIWMB).

California hazardous materials management laws include the following:

- Hazardous Materials Management Act – business plan reporting;
- Hazardous Substance Act – cleanup of contamination;
- Hazardous Waste Control Act – Hazardous waste management; and
- Safe Drinking Water and Toxic Enforcement Act of 1986 –releases of and exposure to carcinogenic chemicals.

Local

The following are lists of goals or policies pertaining to hazards identified in the City of Redlands General Plan:

Policy 8.30a Work to prevent wildland and urban fire, and protect lives, property, and watershed from fire dangers.

Policy 8.30b Adhere to the requirements for high fire hazard areas designated by the Redlands Fire Department on the official Roof Classification Zone Map, updated as of June 1994, and as specified in the document on file at the Redlands Fire Department describing High Fire Hazard Area Fire Safety Modification Zones.

Policy 8.60c Ensure that buildings and public infrastructure are constructed and sited to withstand high wind velocities, as data becomes available.

Policy 8.80 Airport Safety

Safety areas are established in the vicinity of airports to minimize hazards to life and property both in the air and on the ground. Consistent with the Aviation Safety Component of the San Bernardino County General Plan (1989), three Airport Safety Areas are defined within the Redlands Planning Area:

Safety Area 1: Clear zones or crash hazard zones are defined by the Federal Aviation Agency (FAA) or military AICUZ studies. Only Redlands Airport clear zones, which are partially outside the airport boundary, are within the Planning Area. Urban development within the clear zones is unacceptable.

Safety Area 2: The area outside the airport boundaries within the 65 Community Noise Equivalent Level (CNEL) (or Ldn) noise contour line. Within Safety Area 2, residential development and places of public assembly are unacceptable, but light industry (maximum 25 employees per acre) and open recreational uses such as a golf course are normally acceptable.

Safety Area 3: The area one mile outside the 65 CNEL noise contour line. Development of all types is normally acceptable within Safety Area 3, but the City of Redlands requires dedication of an aviation easement (a right to fly over granted to an airport owner) as a condition of project approval.

East Valley Corridor Specific Plan

The following are applicable goals and policies pertaining to hazards as identified in the East Valley Corridor Specific Plan (EVCSP).

EV4.0225(b)(5) Every use shall be so operated that there is no emission of toxic, noxious or corrosive fumes of gases.

EV4.0225(b)(7) Every use shall be operated so that there is no dangerous amount of radioactive emissions.

EV4.0225(b)(7) Every use shall be consistent with the provisions of the San Bernardino County Hazardous Waste Management Plan.

NOP Comment Letters

A Notice of Preparation (NOP) comment letter was provided by the DTSC on March 27, 2009. The DTSC stated that the EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment.

A NOP comment letter was provided by the California Public Utilities Commission (CPUC) on September 14, 2007. The CPUC stated that the EIR should evaluate potential safety issues related to the Burlington Northern Santa Fe Railroad line nearby the Project site.

3.7.4 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether hazards and hazardous materials are significant environmental effects, the following questions are analyzed and evaluated:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it 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 been 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 the Project area?
- 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 area?
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
- i) Will the Project be affected by climate change, which could increase the risk of wildfires?
- j) Will the Project be significantly impacted by climate change through a rise in sea levels or increased flooding?
- k) Will the Project be affected by climate change by exposing Project residents to increased or severe heat?

3.7.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the Project and provides mitigation measures where appropriate.

Routine Use

Impact HHM-1	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? [CEQA Hazards / Hazardous Materials Threshold 8(a)]
---------------------	---

Impact Analysis

Short-Term Impacts

Construction Activities

Grading and construction activities may involve the limited transport, storage, usage, or disposal of hazardous materials, such as the fueling/servicing of construction equipment. However, such activity is short-term or one-time in nature and is subject to federal, State, and local health and safety requirements. Adherence to federal, State, and local health and safety requirements would reduce the potential impacts associated with construction activities to less than significant.

In addition, septic systems and domestic water wells were likely associated with the three former on-site dwellings located along the northern boundary of the Project site. According to a Bear Valley Mutual Water Company (BVMWC) official, no water wells were associated with the Project site. However, it is unknown if septic systems are currently located in the vicinity of the former dwellings. Therefore, short-term impacts during excavation are potentially significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Septic systems or domestic wells may be uncovered during excavation. Therefore, the following measure is recommended to reduce the potential risks during grading.

MM HHM-1a	If septic systems or domestic water wells are identified during excavation of the Project site, then the septic systems and domestic water wells shall be properly abandoned/closed or destroyed in accordance with Section 13.42.020, Permits, of the City of Redlands Municipal Code.
------------------	---

Level of Significance After Mitigation

Less than significant impact.

Long-Term Impacts

Hazards and Hazardous Materials

The Project site is not listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Based on the site reconnaissance and a review of physiographic, historical, and regulatory information, there is no evidence of incidents or accidents involving hazardous materials on the Project site. However, hazardous materials have been used on the site in the past, mainly for agricultural uses. Therefore, there is a potential for soil contamination on the site.

In addition, the proposed Project would result in the construction of approximately 275,500 square feet of commercial retail uses and a gas station on-site. Potentially hazardous materials such as petroleum products, pesticides, fertilizer, and other household hazardous products such as paint products, solvents, and cleaning products would be stored and sold in conjunction with on-site commercial retail sales. The transport, storage, handling, and retail sale of these substances are routinely conducted at such sites. All activity involving hazardous substances would be conducted in accordance with applicable local, State, and Federal safety standards. The transport and delivery of fuel to gasoline stations is regulated by the Federal Department of Transportation while the Hazardous Materials Division of the San Bernardino County Fire Department provides permitting, inspection, and enforcement activities of gas stations including leaking and non-leaking underground storage tanks (USTs) and spill incidents. With adherence to the existing requirements applicable to activities at the commercial retail and gas station, potential impacts associated with the use, transport, storage, and disposal of hazardous materials would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Development of the Project will remove a historic source of potential hazmat contamination (i.e., agricultural uses). However, on-site excavation could release hazardous materials. Therefore, the following measures are recommended to reduce the potential risks during grading.

MM HHM-1b If any hazardous materials or contamination is found during excavation, all work shall be halted in the affected area until a qualified hazmat consultant (i.e., Registered Environmental Assessor, Registered Geologist) makes a determination as to the scope and extent of the contamination. If contamination is limited, remediation of the site shall be conducted by a licensed contractor in accordance with State and local guidelines. If the scope of the contamination is considered extensive, the developer shall contact the State DTSC to determine the appropriate form of remediation, which may include the developer entering into a Voluntary Work Plan (VWP). The hazmat consultant shall file a final report to the City upon completion of remediation activities. This measure shall be implemented to the satisfaction of the Development Services Director or his designee.

MM HHM-1c Any removal of the soils from the entire site identified to contain elevated levels of DDT and DDE will require profiling and manifesting for disposal as potentially hazardous waste. If contamination is limited, remediation of the site shall be conducted by a licensed contractor in accordance with State and local guidelines. Any soils removed from the site that have high levels of DDT or DDE shall be disposed of at a landfill or other facility licensed to accept such materials. If the scope of the contamination is considered extensive, the developer shall contact the

State DTSC to determine the appropriate form of remediation, which may include the developer entering into a VWP. The hazmat consultant shall file a final report to the City upon completion of remediation activities. This measure shall be implemented to the satisfaction of the Development Services Director or his designee.

Level of Significance After Mitigation

Less than significant impact.

Accident Conditions

Impact HHM-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?
	[CEQA Hazards / Hazardous Materials Threshold 8(b)]

Impact Analysis

Based on the Phase I and Phase II ESAs, there is no evidence of incidents or accidents involving hazardous materials on the Project site. Due to the past presence of agricultural activities, it is likely on-site soils may be contaminated by low levels of pesticides, herbicides, waste oil from smudge pots, etc. Some persistent chemicals were used in the past for citrus orchards and row crops (e.g., DDT, DDE, etc.). Therefore, a Phase II ESA was conducted on the westerly portion of the Project site to identify areas with soils contaminated by hazardous materials, if any are still present on-site.

The Phase II ESA concluded that with exception to two soil samples, all soil samples contained detectable concentrations of DDE. In addition, with exception to four soil samples, all analyzed soil samples contained detectable concentrations of DDT. However, according to the Phase II ESA, all detected pesticide concentrations (DDE and DDT) are well below their respective residential soil (1.7 mg/kg) and industrial soil (7 mg/kg) EPA PRG. Therefore, the reported pesticide concentrations are significantly below the PRGs established by the EPA and may likely represent ambient “background” concentrations.

Additionally, on the basis of slightly elevated results achieved for three of the samples compared to the California Title 22 Hazardous Waste Regulations, soils would be characterized as California hazardous waste. Any removal of the soil from the specific areas of the site will require profiling and manifesting for disposal as potentially hazardous waste. Therefore, the Project could have potentially significant impacts related to the possible release of hazardous materials during on-site grading and construction.

Furthermore, septic systems and domestic water wells were likely associated with the three former on-site dwellings located along the northern boundary of the Project site. According to a BVMWC official, no water wells were associated with the subject site. However, it is unknown if septic systems are currently located in the vicinity of the former dwellings. However, the presence of septic systems is not anticipated to adversely impact the Project site due to their use for domestic purposes only. Therefore, impacts from accidental conditions will be potentially significant. However,

through mitigation measures MM HHM-1a through MM HHM-1c, potentially significant impacts can be reduced to a less than significant level.

The Project would not be a large-quantity user of hazardous materials. Small quantities of hazardous materials would be used on-site, including cleaning solvents (e.g., degreasers, paint thinners, and aerosol propellants), paints (both latex- and oil-based), acids and bases (such as many cleaners), disinfectants, and fertilizers. These substances would be stored in secure areas and would comply with all applicable storage, handling, usage, and disposal requirements. The potential risks posed by the use and storage of these hazardous materials are primarily limited to the immediate vicinity of the materials. Transport of these materials would be performed by commercial vendors who would be required to comply with various federal and state laws regarding hazardous materials transportation.

In addition, because of the volume of materials involved in the transport and dispensing of petroleum products, any hazardous material release at either the proposed gas station or tire and lube facility could be larger than that at any of the proposed commercial retail uses. As stated within Impact HHM-1, any hazardous materials on-site would be handled in accordance with all applicable State and Federal laws, specifically the Hazardous Materials Business Plan (HMBP), which includes containment, reporting, and remediation requirements in the event of a spill or accidental release. The handling of hazardous materials in accordance with all applicable local, State, and Federal standards, ordinances, or regulations would reduce the impacts associated with environmental and health hazards related to an accidental release of hazardous materials to a less than significant level.

The Project may also include a medical clinic, which would involve the potential for storage, transport, and disposal of biomedical wastes (e.g., needles). These wastes would be regularly picked up and disposed of by commercial vendors who would be required to comply with all applicable federal, state, and local laws and regulations regarding hazardous materials transportation. Furthermore, the medical clinic would only offer basic services such as check-ups and, thus, medical wastes would be limited to low-level, non-bio-hazardous items such as bandages, latex gloves, needles, tongue depressors, and similar items.

The Burlington Northern Santa Fe Railroad line is located approximately 0.85 mile south of the Project site. Due to the distance to the Project site (i.e. 0.85 mile) and the up-gradient elevation of 40 feet above mean sea level to the Project site (i.e. an elevation of 1,245 above mean sea level at the Burlington Northern Santa Fe Railroad line to an elevation of 1,285 feet above mean sea level at the Project site), potential impacts related to a release of hazardous materials by the Burlington Northern Santa Fe Railroad are considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Through Mitigation Measures HHM-1a through HHM-1c, the potentially significant impact can be reduced to less than significant.

Level of Significance After Mitigation

Less than significant impact.

Schools

Impact HHM-3	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? [CEQA Hazards / Hazardous Materials Threshold 8(c)]
---------------------	---

Impact Analysis

The Project site is approximately 1,600 feet (0.30 mile) south from the closest school site (Citrus Valley High School, 800 West Pioneer Avenue), which is over the minimum 1,320 foot (one-quarter mile) significant threshold of CEQA. Therefore, no school sites have the potential to be impacted due to the distance from the Project site.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant.

Hazardous Materials Site Listing

Impact HHM-4	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? [CEQA Hazards / Hazardous Materials Threshold 8(d)]
---------------------	--

Impact Analysis

The Project site is not listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In addition, based on the site reconnaissance and a review of physiographic, historical, and regulatory information, there is no evidence of incidents or accidents involving hazardous materials on the Project site. Therefore, impacts in this regard would be less than significant.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant.

Airports

Impact HHM-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working the Project area?
[CEQA Hazards / Hazardous Materials Threshold 8(e)]

Impact Analysis

The Project site is located more than two miles from the Redlands Municipal Airport (east). Therefore, the Project site is not located within an applicable Airport Safety Area, respectively.

The Project site is, however, located approximately 1.86 miles northwest of the SBD. The SBD Airport allows for Stage 2 aircraft and has over 60,000 annual flight operations comprised mainly of charter, corporate and general aviation users. The width of SBD Airport’s northeast to southwest facing runway is 10,000’ x 200’ (3,408 x 61 meters) and approximately 11,000 feet in length. Additionally, the Airport has recently completed a redesigned Passenger Terminal Facility in anticipation of future passenger airlines services (SBD website 2009).

Currently, the SBD Airport is in the process of updating their Airport Land Use Plan. As per conversation with Bill Ingraham (August 6, 2009), analysis of the Project should be compared to the California Airport Land Use Planning Handbook (January 2002) as a guideline for the Project’s impacts to the SBD Airport. According to Figure 9K of the California Airport Land Use Planning Handbook, long general aviation runways with a length of 6,000 feet or more require a safety compatibility zone setback of 6,000 feet. The Project site is located approximately 9,800 feet from the northeast corner of SBD’s runway. Therefore, the Project site is well over the minimum required safety compatibility zone setback of 6,000 feet and will not put people at significant risk related to a safety hazard for people residing or working the Project area.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant.

Private Airstrip

Impact HHM-6 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 area?
[CEQA Hazards / Hazardous Materials Threshold 8(f)]

Impact Analysis

The Project site is not located within two miles of a private airstrip. Therefore, the Project would not put people at a significant risk of safety hazard related to a nearby private airstrip.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant.

Emergency Plans

Impact HHM-7	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
	[CEQA Hazards / Hazardous Materials Threshold 8(g)]

Impact Analysis

The City of Redlands has an Emergency Disaster Plan that identifies specific evacuation routes within the City. In addition, the San Bernardino County General Plan designates potential evacuation routes in the event of an emergency. Within the San Bernardino Valley, the major routes out of the County are Interstates 10, 15, and 215, along with State Highways 30 (now State Highway 210), 31, 60, 66, 71, and numerous major and secondary highways.

Caltrans has identified a number of possible evacuation routes in the San Bernardino Valley. These roads have the least number of bridges, and may be among the safest roads to travel in the event of a major earthquake. In the East Valley, those roads, which connect with the Planning Area, include:

- Hospitality Drive from Tippecanoe Avenue to Waterman Avenue;
- Coulston Street from Mountain View Avenue to Tippecanoe Avenue;
- Lugonia Avenue from Orange Street to Mountain View Avenue; and
- Redlands Boulevard from Orange Street to Waterman Avenue.

An increase in short-term construction traffic is anticipated and could temporarily affect traffic flow on nearby roadways used for evacuation routes. However, nearby roadways currently include wide paved lanes that could be used by vehicles to allow emergency vehicles to pass. Therefore, short-term construction related impacts in regards to evacuation routes would be less than significant.

In addition, Project implementation would not hinder the City of Redlands ability to coordinate with San Bernardino County or Caltrans on its emergency response and emergency evacuation plans. As the primary north-south transportation corridor through the City, the adjacent SR-210 serves as an obvious route for both emergency response and emergency evacuation purposes. In addition, the

Project would introduce on-site emergency response or evacuation plans, including employees who would be subject to emergency evacuation or response in the event of a major disaster. Therefore, the Project would not result in a significant impact regarding emergency evacuation plans.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant.

Wildland Fires

Impact HHM-8	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
	[CEQA Hazards /Hazardous Materials Threshold 8(h)]

Impact Analysis

According to California Department of Forestry and Fire Protection, the Project area is categorized as having a non-VHFHSZ (Very High Fire Hazard Severity Zones) risk from fires. There are also City fire stations in the general Project area. The closest City fire station is located at 10 West Pennsylvania Avenue (Fire Station 263), approximately 0.8-mile east of the Project site at the intersection of Pennsylvania Avenue and Orange Street. In addition, the Redlands Fire Department (RFD) has a mutual aid agreement with the San Bernardino County Fire Department (SBCFD), which allows the SBCFD to provide fire services to areas within the City of Redlands and vice versa. The closest SBCFD fire station to the Project site is Station 9, located at 1300 Crafton Avenue, Mentone. The SBCFD provides complete fire protection, including fire, public service and emergency medical aid response, but County services do not include ambulance and transport services. In addition, The RFD has mutual aid agreements with the California Department of Forestry, and the Loma Linda Fire Department. Consistency with the mutual aid program will reduce impacts to the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, the Project will not create significant impacts related to wildland fire hazards. For more analysis regarding fire hazards, see Section 3.13, Public Services.

Level of Significance Before Mitigation

Less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant.