

5. Environmental Analysis

5.7 HAZARDS AND HAZARDOUS MATERIALS

This section of the DEIR evaluates the potential impacts of the General Plan Update on human health and the environment due to exposure to hazardous materials or conditions. Background information on these safety hazards provides a basis for the siting of land uses that would reduce unreasonable risks and protect public health and welfare. Various federal and state programs that regulate the use, storage, and transportation of hazardous materials are also discussed in this section. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary. The analysis in this section is based, in part, upon the following source:

- *Technical Background Report to the Safety Element of the Yucca Valley General Plan*, Earth Consultants International, September 2012

A complete copy of this report is included as Appendix F to this Draft EIR.

Geologic hazards and flood hazards are addressed separately in Sections 5.5, *Geology and Soils*, and 5.8, *Hydrology and Water Quality*, respectively. Water quality and pollutant discharge are also addressed in Section 5.8.

5.7.1 Environmental Setting

5.7.1.1 Regulatory Setting

Hazardous Materials and Waste Regulation

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials can occur from a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

There are many federal, state, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste, and they are constantly changing. Federal and state statutes, as well as local ordinances and plans regulate hazardous waste management. These regulations can reduce the danger hazardous substances may pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters. Potentially relevant federal, state, and local laws, regulations, programs, and plans applicable to the proposed project are summarized below.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 is the principal federal law that regulates the generation, management, transportation, and disposal of hazardous waste. Hazardous waste management includes the treatment, storage, and disposal of hazardous waste. Treatment is any process that changes the physical, chemical, or biological character of the waste to reduce its potential as an environmental threat. Treatment can include neutralizing the waste, recovering energy or material resources from it, rendering it less hazardous, or making it safer to transport, dispose of, or store.

The RCRA gave the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from “cradle to grave,” that is, from generation to ultimate disposal. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous



5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

substances. It should be noted that RCRA focuses only on active and future facilities and does not address abandoned or historical sites.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), commonly known as Superfund, was enacted to protect water, air, and land resources from the risks created by past chemical disposal practices, such as abandoned and historical hazardous wastes sites. Through the act, EPA was given power to seek out those parties responsible for any release and to compel appropriate cleanup activities. This federal law created a tax on the chemical and petroleum industries that went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA also enabled the revision of the National Contingency Plan, which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priority List (NPL) of sites, which are known as Superfund sites.

Superfund Amendments and Reauthorization Act

CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986. Title 5 of this regulation requires that each community establish a local emergency planning committee (LEPC) to develop an emergency plan for preparing for and responding to a chemical emergency. The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The Certified Unified Program Agency (CUPA) is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with local municipalities as well as local and state agencies. The CUPA with responsibility for the Town of Yucca Valley is the San Bernardino County Fire Department (SBCFD), Hazardous Waste Materials Division (HMD). The goal is to improve public- and private-sector readiness and to mitigate local impacts resulting from natural or man-made emergencies.

Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law helps local communities protect public health, safety, and the environment from chemical hazards. The primary purpose of EPCRA is to inform communities and citizens of chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored onsite to state and local agencies. These reports help communities prepare to respond to chemical spills and similar emergencies. Section 3131 of EPCRA requires manufacturers to report releases to the environment (air, soil, and water) of more than 600 designated toxic chemicals; report offsite transfers of waste for treatment or disposal at separate facilities; pollution prevention measures and activities; and participate in chemical recycling. These annual reports are submitted to the EPA and state agencies. The EPA maintains and publishes a database that contains information on toxic chemical releases and other waste management activities by certain industry groups and federal facilities. This online, publicly available, national digital database is called the Toxics Release Inventory and was expanded by the Pollution Prevention Act of 1990.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 was enacted by Congress to give the EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The EPA repeatedly screens these chemicals and can require reporting or testing of any that may pose an environmental or human health hazard. It can ban the manufacture and import of chemicals that pose an unreasonable risk. Also, the EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. It then can control these chemicals as necessary to protect human health and the environment. The act supplements other federal statutes, including the Clean Air Act and the Toxic Release Inventory under EPCRA.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

Occupational Safety and Health Administration Regulation 29 CFR Standard 1926.62

The Occupational Safety and Health Administration (OSHA) Regulation 29 CFR Standard 1926.62 regulates the demolition, renovation, or construction of buildings involving lead materials. It includes requirements for the safe removal and disposal of lead and the safe demolition of buildings containing lead-based paint or other lead materials.

Responsible agencies that regulate hazardous materials and waste include:

United States Environmental Protection Agency (EPA): The EPA is the primary federal agency that regulates hazardous materials and waste. In general, the EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Under the authority of the RCRA and in cooperation with state and tribal partners, the Waste Management Division manages a hazardous waste program, an underground storage tank program, and a solid waste program that includes development of waste reduction strategies such as recycling.

California Environmental Protection Agency (Cal/EPA): Cal/EPA was created in 1991 by Governor's Executive Order. The six boards, departments, and offices were placed under the Cal/EPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources. Cal/EPA oversees hazardous materials and hazardous waste compliance throughout California.

California Department of Toxic Substances Control (DTSC): DTSC is the department of Cal/EPA that carries out the RCRA and CERCLA programs in California to protect people from exposure to hazardous substances and wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations, Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Under DTSC, the Statewide Compliance Division (SCD) administers the technical implementation of the state's Unified Program, a consolidation of six environmental programs at the local level. This program was established under the amendments to the California Health and Safety Code made by Senate Bill 1082 in 1994. The six programs that make up the Unified Program are:

- Hazardous Materials Business Plan/Emergency Response Plan
- Hazardous Waste/Tiered Permitting
- Underground Storage Tanks
- Aboveground Storage Tanks Spill Prevention Control and Countermeasures
- California Accidental Release Prevention Program (CalARP)
- Uniform Fire Code Hazardous Materials Management Plan

SCD also conducts triennial reviews of Unified Program agencies to ensure their programs are consistent statewide, conform to standards, and deliver quality environmental protection at the local level. SCD carries out the inspections, enforcement, and complaint response at the state's hazardous waste generators, facilities, and transporters and oversees the hazardous waste generator and onsite waste treatment surveillance and enforcement programs carried out by local Unified Programs.



5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

Certified Unified Program Agency (CUPA): A CUPA is a local agency that has been certified by Cal/EPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. A designated agency is a local agency that has not been certified by Cal/EPA to become a CUPA but is the responsible local agency that would implement the six Unified Programs outlined above until they are certified.

The Unified Program is related to the State Emergency Response Commissions (SERCs) and LEPCs that were established under both federal (EPCRA) and state authority relative to the Hazardous Materials Business Plan/Emergency Response Plan. Although the CUPA structure does not specifically incorporate the SERC and LEPCs, both SERC and CUPA have found it beneficial to establish strong communication and coordination on hazardous materials issues. The CUPA board now has a representative on the SERC, and members of LEPCs are also CUPA board members. Common issues include ensuring that hazardous materials, waste, and tank programs maintain strong coordination and communication for maximum consistency in program implementation. Shared data, joint resources, common forms, provision of emergency information, and regulatory review are other interests that are coordinated by the CUPA board and SERC/LEPCs.

San Bernardino County is a member of the Southern California Hazardous Waste Management Authority and works to solve hazardous waste problems at the regional level. SBCFD's HMD is designated by the state as the CUPA for the County of San Bernardino. The fire department focuses on the management of specific environmental programs at the local government level to address the disposal, handling, processing, storage, and treatment of local hazardous materials and waste products. The CUPAs are also responsible for implementing the leak prevention element of the Underground Storage Tank (UST) Program.

Hazardous Waste Management Programs

Programs that regulate hazardous materials and waste include:

UST Program: Releases of petroleum and other products from USTs are the leading source of groundwater contamination in the United States. The RCRA Subtitle I established regulations governing the storage of petroleum products and hazardous substances in USTs and the prevention and cleanup of leaks. In EPA Region 9 (California, Arizona, Hawaii, Nevada, Pacific Islands, and over 140 tribal nations) the UST program operates primarily through state agency programs with EPA oversight. In California, the State Water Resources Control Board (SWRCB), under the umbrella of Cal/EPA, provides assistance to local agencies enforcing UST requirements. The purpose of the UST program is to protect public health and safety and the environment from releases of petroleum and other hazardous substances. The program consists of four elements: leak prevention, cleanup, enforcement, and tank tester licensing. In September 2004, SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs, including groundwater analytical data, the surveyed locations of monitoring wells, and other data. The SWRCB's Geotracker system currently has information submitted by responsible parties for over 10,000 leaking UST (LUST) sites statewide and has been extended to include all SWRCB groundwater cleanup programs, including the LUST, non-LUST (Spill, Leaks, Investigation, and Cleanup), Department of Defense, and landfill programs.

The SBCFD's HMD is charged with the responsibility of conducting compliance inspections of regulated facilities in San Bernardino County. Regulated facilities are those that handle hazardous materials, generate or treat hazardous waste, and/or operate an underground storage tank. All new installations of underground storage tanks require an inspection, along with the removal of the old tanks under strict chain-of-custody protocol.

County of San Bernardino Hazardous Waste Management Plan: Assembly Bill 2948 (Chapter 1504, Statutes of 1986), commonly known as the Tanner Bill, authorized counties to prepare hazardous waste management plans (HWMP) in response to the need for safe management of hazardous wastes. The County of San Bernardino HWMP

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

was adopted by the board of supervisors and approved by the California Department of Health Services in February 1990. The HWMP is the primary planning document for the management of hazardous waste in San Bernardino County. It identifies the types and amounts of wastes generated in the county; establishes programs for managing these wastes; identifies an application review process for the siting of specified hazardous waste facilities; identifies mechanisms for reducing the amount of waste generated in the county; and identifies goals, policies, and actions for achieving effective hazardous waste management. Hazardous materials and waste are managed by the SBCFD HMD. As further required by the state, all cities and towns in San Bernardino County must also adopt a municipal HWMP.

Hazardous Materials Disclosure Programs: Both the federal government (Code of Federal Regulations, EPA, SARA and Title III) and the State of California (California State Health and Safety Code, Division 20, Chapter 6.95, Sections 25500–25520; California Code of Regulations, Title 19, Chapter 2, Sub-Chapter 3, Article 4, Sections 2729–2734) require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials, termed a reporting quantity, to submit a hazardous materials emergency/contingency plan (also known as a hazardous materials business plan) to its local CUPA. The CUPA with responsibility for the Town of Yucca Valley is the SBCFD HMD. The business plan includes the business owner/operator identification page, hazardous materials inventory – chemical description page, and an emergency response plan and training plan.

The preparation, submittal and implementation of a business activity form is required by all businesses that handle a hazardous material or a mixture containing a hazardous material in quantities equal to or greater than those outlined below (SBCFD 2012):

- All hazardous waste generators, regardless of quantity generated or size of container.
- Any business that uses, generates, processes, produces, treats, stores, emits, or discharges a hazardous material in quantities at or exceeding:
 - 55 gallons or more of a liquid
 - 500 pounds or more of a solid
 - 200 cubic feet (compressed) of gas at any one time in the course of a year
- Any business that handles, stores, or uses Category (I) or (II) pesticides, as defined by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), regardless of amount.
- Any business that handles Department of Transportation (DOT) Hazard Class 1 (Explosives, as defined in Title 49 of the Code of Federal Regulations) regardless of amount.
- Any business that handles extremely hazardous substances in quantities exceeding the threshold planning quantity, as listed in Title 40 of the Federal Code of Regulations, Part 355.
- Any business subject to the EPCRA. Generally EPCRA includes facilities that handle hazardous substances above 10,000 pounds, or extremely hazardous substances above threshold planning quantities. Some exceptions include retail gas stations with up to 75,000 gallons of gasoline or 100,000 gallons of diesel if their underground storage tanks meet the 1998 upgrade requirements.
- Any business that handles radioactive materials in quantities for which an emergency plan is required to be adopted, pursuant to Parts 30, 40 or 70 of Chapter 10, Title 10, Code of Federal Regulations, or pursuant to any regulations adopted by the state in accordance with those regulations.

All business plans need to be updated by March 1st of each year or within 30 days of a substantial change. Businesses are required to submit an amendment to their business plan to the CUPA if any of the following events occur:



5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

- A change in inventory
- Any change in site conditions that may significantly impact emergency response
- Change of mailing address, phone number or business location; change of emergency contact person
- Change of ownership
- Change of business name.

Business plans must include an inventory of the hazardous materials at the facility. The entire business plan needs to be reviewed and recertified every three years. Business plans are required to include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures to follow for immediate notification to all appropriate agencies and personnel of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all emergency coordinators of the business, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel. All facilities must keep a copy of their plan on site.

Business plans are designed to be used by responding agencies, such as the SBCFD, during a release or spill to allow for a quick and accurate evaluation of each situation for appropriate response. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. Fines of up to \$25,000 per day and one year in prison may be awarded to an individual or business if a release or threatened release is not reported. If a release involves a hazardous substance listed in Title 40 of the Code of Federal Regulations in an amount equal to or exceeding the reportable quantity for that material, a notice must be filed with the California Office of Emergency Services within 15 days of the incident.

The SBCFD HMD is charged with the responsibility of conducting compliance inspections of regulated facilities in San Bernardino County (with the exception of Victorville). Specialists are assigned countywide to address the wide variety of complex issues associated with hazardous substances.

Hazardous Materials Incident Response

Under Title III of SARA, the LEPC is responsible for developing an emergency plan for preparing for and responding to chemical emergencies in that community. This emergency plan must include:

- An identification of local facilities and transportation routes where hazardous material are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting exercises to test the plan.

The plan is reviewed by the SERC and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The SBCFD HMD is responsible for coordinating hazardous material coordination and inspection in the Town.

5. Environmental Analysis

Hazardous Material Spill/Release Notification Guidance

All significant spills, releases, or threatened releases of hazardous materials must be immediately reported. Federal and state emergency notification is required for all significant releases of hazardous materials. Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. Many state statutes require emergency notification of a hazardous chemical release:

- Health and Safety Codes Sections 25270.7, 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Code Sections 13271, 13272
- California Labor Code Section 6409.1 (b)10

In addition, all releases that result in injuries or workers harmfully exposed must be immediately reported to California Occupational Safety and Health Administration (California Labor Code Section 6409.1 [b]). For additional reporting requirements, also refer to the Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65, and Section 9030 of the California Labor Code.

The California Accidental Release Prevention Program (CalARP) became effective on January 1, 1997, in response to Senate Bill 1889. CalARP replaced the California Risk Management and Prevention Program. Under the CalARP, the Governor's Office of Emergency Services (OES) must adopt implementing regulations and seek delegation of the program from the EPA. CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business, and the mitigation measures that can be implemented to reduce this accident potential. In most cases, local governments will have the lead role for working directly with businesses in this program. The SBCFD is the CUPA designated as the administering agency for CalARP.



Emergency Preparedness

The San Bernardino County OES, the SBCFD HMD, and the Town of Yucca Valley Emergency Preparedness Division are all responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with other Town of Yucca Valley departments, as well as local and state agencies.

San Bernardino County Office of Emergency Services

The San Bernardino OES is a branch of the SBCFD that deals with the planning for and response to natural and technological disasters in the county, including development and implementation of an emergency operations plan (EOP) for the county operations area (SBCFD 2013). The EOP identifies hazards and response, roles and responsibilities, and other key activities of government during a disaster. County OES also maintains current copies of all San Bernardino County City/Town EOPs. The SBCFD HMD deals with the coordination and inspection of hazardous materials facilities in the county and in the Town of Yucca Valley. The SBCFD has developed and teaches a community emergency response team (CERT) training program to help county residents prepare for potential disasters. The program is certified by the Federal Emergency Management Agency (FEMA) and the state OES. The Town of Yucca Valley is one of nine jurisdictions within the county currently supporting a citizens corps program. This program is designed to engage residents in community and family safety programs by helping families and neighbors prepare for a disaster.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

In 1984, San Bernardino County formed a regional hazardous materials emergency response team through a joint effort of the San Bernardino County Fire Chiefs Association, the San Bernardino County Department of Environmental Health Services, and the County's Communications Center. The formation of this response team was motivated by the need for highly trained personnel and expensive, specialized equipment to respond to hazardous materials incidents. The SBCFD's Hazardous Materials Response team now has more than 100 personnel, all trained to the State Fire Marshal-approved Hazardous Material Specialist level, and 19 response vehicles equipped to respond to hazardous release incidents. The SBCFD's Hazardous Materials Response Team is divided into three geographic locations, allowing them to quickly respond to hazardous materials incidents anywhere within the county. County Fire Station 36 in Joshua Tree has trained HazMat technicians and equipment, allowing them to make quick assessments and provide resource and mitigation recommendations to the incident commander in real time. The Twentynine Palms Combat Center Fire Department also has fully trained hazardous materials technicians and a large complement of equipment. They are available to assist on any and all hazardous materials incidents in the Town of Yucca Valley. Finally, the SBCFD's Hazardous Materials Response Team in San Bernardino can and will respond to incidents in Yucca Valley (ECI 2012).

SBCFD Hazardous Materials Team members are capable of monitoring unknown atmospheres, identifying unknown chemicals, plugging, patching and intervening in large chemical leaks, conducting mass decontamination, and handling confined space entry rescue operations. The hazardous materials team members often also assist local fire stations with medical emergencies, structural fires and mass casualty incidents.

Town of Yucca Valley Emergency Preparedness Division

The Disaster Mitigation Act of 2000 (DMA 2000) requires state and local governments to prepare mitigation plans that identify hazards, potential losses, mitigation needs, goals, and strategies. It is intended to facilitate cooperation between state and local governments, prompting them to work together (Emergency Planning Consultants 2010). In response to the DMA 2000, the Town of Yucca Valley Emergency Preparedness Division maintains and implements a hazard mitigation plan (HMP) for the Town. The HMP identifies mitigation goals and objectives, prioritizes specific mitigation actions, and presents an overall strategy for implementing those objectives. Mitigation outlined in the HMP is tailored to the unique natural setting of Yucca Valley, which requires special attention to wildland fire and earthquake-related hazards.

Airports

Airport authorities and other agencies regulate aircraft activity. The Town of Yucca Valley has no direct authority over airport development and operations. The State Aeronautics Act of the California Public Utilities Code establishes statewide requirements for the airport land use compatibility planning and requires nearly every county to create an Airport Land Use Commission (ALUC) or other alternative. San Bernardino County opted for an alternative to the ALUC and delegated responsibility to prepare and maintain an Airport Land Use Compatibility Plan (ALUCP) to each airport jurisdiction. In April of 1995, the Town Council of the Town of Yucca Valley, by adoption of Resolution No. 95-18, determined that the Town's Community Development Department would be the agency responsible for the preparation, adoption, and amendment of the ALUCP. Other public agencies also provide policy guidance or promulgate standards that address regional transportation and safety issues related to airport land use compatibility planning. A land use compatibility assessment is part of the Yucca Valley Airport Comprehensive Land Use Plan (San Bernardino County Planning Department, 1992).

Federal Aviation Administration

The basic responsibilities of the Federal Aviation Administration (FAA), under the US Department of Transportation, are the regulation of civil aviation to promote safety, airspace and air traffic management, and the regulation of commercial space transportation. The Code of Federal Regulations contains standards for aircraft noise emission levels.

5. Environmental Analysis

Air Safety Zones

The California ALUC Planning Handbook provides planning guidance to ALUCs and counties and cities with jurisdiction over airport area land uses. The purpose of the handbook is to support the State Aeronautics Act. The handbook allows jurisdictions flexibility in determining air safety zones that represent areas of assumed accident potential.

Fire Safety

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Office of the State Fire Marshal (OSFM) supports CAL FIRE's mission to protect life and property through fire prevention engineering programs, law and code enforcement, and education. OSFM provides for fire prevention by enforcing fire-related laws in state-owned or operated buildings; investigating arson fires in California; licensing those who inspect and service fire protection systems; approving fireworks for use in California; regulating the use of chemical flame retardants; evaluating building materials against fire safety standards; regulating hazardous liquid pipelines; and tracking incident statistics for local and state government emergency response agencies.

California Fire Plan

The California Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health. The California Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE.



California Fire Code

The 2010 California Fire Code (Title 24 California Code of Regulations, Part 9) is based on the 2000 Uniform Fire Code and includes amendments from the State of California fully integrated into the code. The California Fire Code contains fire-safety-related building standards that are referenced in other parts of Title 24 of the California Code of Regulations.

5.7.1.2 Existing Setting

Contaminated Sites

Superfund Sites

According to the EPA, there are no Superfund sites in the Town of Yucca Valley. However, in the EPA CERCLIS database, the Yucca Mercury Spill site at 7050 La Contenta Road, in Yucca Valley 92284 is listed as a Superfund site, although not included on the National Priority List. The site is also known as La Contenta Middle School, and was cleaned up with EPA fund-financed monies on an emergency basis on March 24-25, 2007. The cleanup consisted of removal of the contaminant.

Toxic Chemical Releases

A search of the EPA Toxic Release Inventory (TRI) database on November 10, 2011, showed that there are no records of on- or offsite disposed or otherwise released chemicals in zip codes 92284 and 92286, the two zip codes that encompass the Town of Yucca Valley. The database includes the most recent data released to the public on December 2010 with data for the year 2009.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

Leaking Underground Storage Tanks

The California Regional Water Quality Control Boards (RWQCB), in cooperation with the Office of Emergency Services, maintain an inventory of leaking underground storage tanks (LUSTs) in a statewide database called GeoTracker. The database lists 10 reported LUST cases in the Yucca Valley area. According to the LUST database, all 10 sites have been remediated and closed; they are listed in Table 5.7-1.

**Table 5.7-1
Leaking Underground Tanks Reported in Yucca Valley**

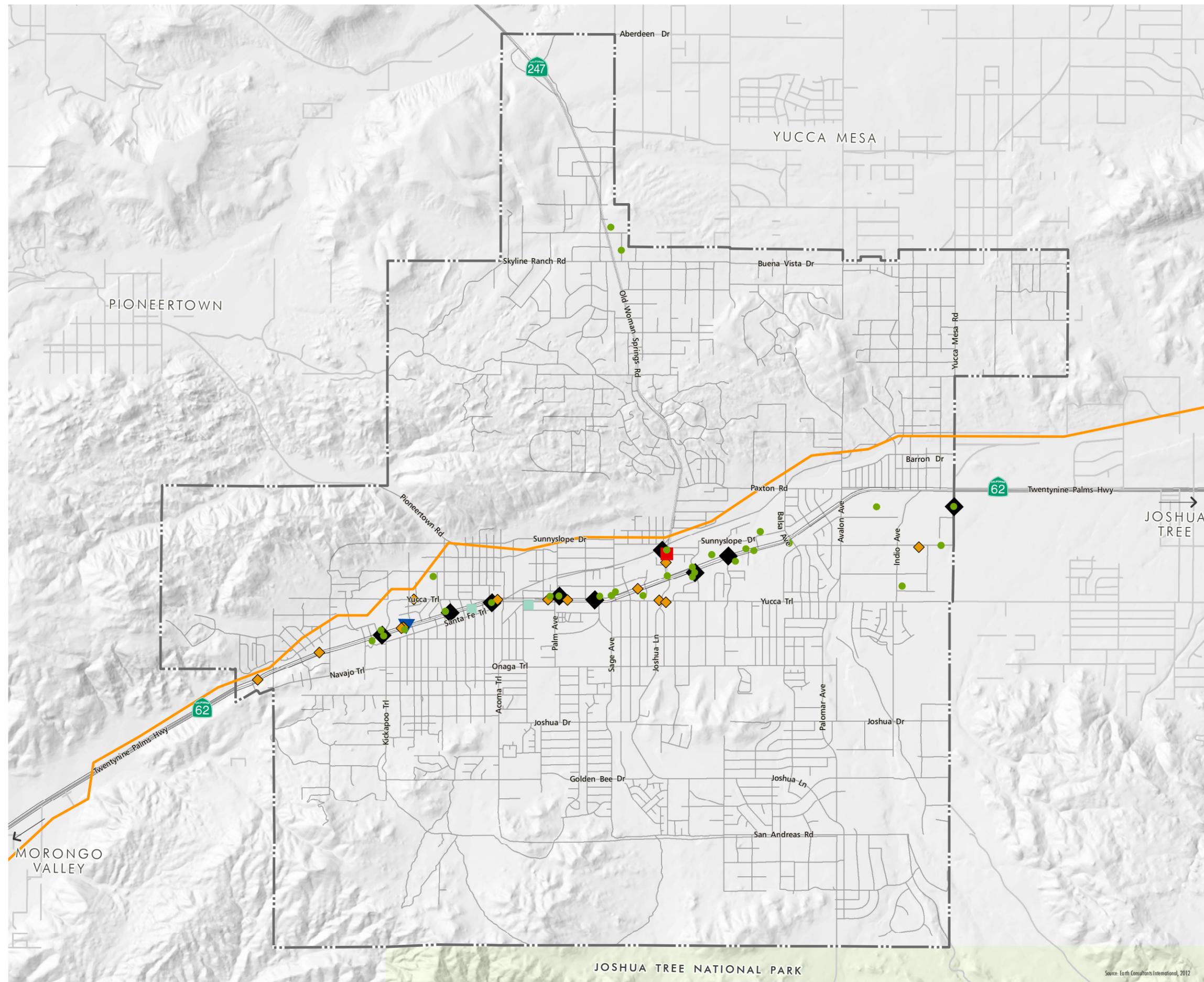
Site Name	Address	Contaminants	Status	Year Closed
7-11 Station	55277 29 Palms Hwy.	Gasoline	Case Closed	1999
Arco #9720	56888 29 Palms Hwy.	Gasoline	Case Closed	2003
Bills Service	56504 29 Palms Hwy.	Fuels Oxygenate, Gasoline	Case Closed	2004
Caltrans Paradise Valley	6690 La Contenta Rd.	Gasoline	Case Closed	1990
Circle K #902	6940 Old Woman Springs Rd.	Gasoline	Case Closed	1988
EZ Serve Station	56079 29 Palms Hwy.	Gasoline	Case Closed	1999
Goodyear Tire	57672 29 Palms Hwy.	Waste Oil	Case Closed	1995
Mag Gas	55716 29 Palms Hwy.	Gasoline	Case Closed	1999
San Bernardino Co. Yucca Valley Forest Fire	7105 Airway Ave.	Gasoline	Case Closed	1984
Thrifty Oil Station #350	56888 29 Palms Hwy.	Gasoline	Case Closed	1990

Source: Earth Consultants International 2013.

Because of the deep groundwater table in the Town of Yucca Valley area, all 10 reported leaks listed in Table 5.7-1 reportedly impacted the soil only; that is, none of the leaks impacted groundwater. In cases like these, the stained soils are generally excavated and replaced with clean soil, and the contaminated soil is then shipped to a facility that accepts hazardous materials. Specific information about each of these sites, including any reports submitted to the RWQCB by the consultants that conducted the cleanups, if available, can be found on the GeoTracker website. LUSTs and underground storage tanks that are not leaking are both shown in Figure 5.7-1, *Hazardous Materials Sites Map*.

5.7 - HAZARDS AND HAZARDOUS MATERIALS

Figure 5.7-1
HAZARDOUS MATERIALS SITES MAP



- EPA-Registered Small Quantity Hazardous Waste Generator (LQG) Facility
- EPA-Registered Small Quantity Hazardous Waste Generator (SQG) Facility
- EPA-Registered Hazardous Waste Generator (size unknown)
- ◆ Leaking Undergrounds Storage Tank (LUST) Site - Case Closed
- ◆ Permitted Underground Storage Tank (UST)
- ▼ Land Disposal Site
- Gas Transmission
- Town

Source: Earth Consultants International, 2012

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.

5. Environmental Analysis

EPA-Registered Small- and Large-Quantity Generators of Hazardous Materials

Many different types of businesses can be producers of hazardous waste. Small businesses like dry cleaners, auto repair shops, medical facilities or hospitals, photo processing centers, and metal plating shops are usually generators of small quantities of hazardous waste. The EPA (Title 40 of the Code of Federal Regulations) defines a small quantity generator as a facility that produces between 100 and 1,000 kilograms (Kg) of hazardous waste per month (approximately equivalent to between 220 and 2,200 pounds, or between 27 and 275 gallons). A “conditionally exempt” small quantity generator is a business that generates 220 pounds (27 gallons) or less of hazardous waste per month. Larger businesses are sometimes generators of large quantities of hazardous waste. These generally include some gas stations, chemical manufacturers, large electroplating facilities, petroleum refineries, and military installations. The EPA defines a large-quantity generator as a facility that produces over 1,000 Kg (2,200 pounds or about 275 gallons) of hazardous waste per month. Large-quantity generators are fully regulated under RCRA.

The EPA identifies one large-quantity generator of hazardous materials in the Yucca Valley area as of November 2011: the Southern California Edison (SCE) Twentynine Palms Service Center at 6999 Old Woman Springs Road. As of the same date, the EPA identifies 26 facilities in the Yucca Valley area as small-quantity generators and two sites with an unspecified handler type. These facilities are listed in Appendix F of this DEIR.

Household Hazardous Waste and Recycling

Household hazardous waste is defined under the California Health and Safety Code as “any hazardous waste generated incidental to owning or maintaining a place of residence. Household hazardous waste does not include any waste generated in the course of operating a business concern at a residence.” Households often generate solid wastes that could technically be hazardous wastes (e.g., old solvents, paints, pesticides, fertilizer, poisons).

The San Bernardino County Solid Waste Management Department has adopted a Household Hazardous Waste and Oil-Recycling program free to residents, in accordance with the California Integrated Solid Waste Management Act of 1989 (AB 939). The County has established several regional household hazardous waste collection centers, in addition to regional antifreeze, batteries, oil (and filters), and paint (latex only) collection centers. Those facilities within approximately 50 miles of the Town of Yucca Valley are listed in Table 5.7-2.



**Table 5.7-2
Regional Household Hazardous Waste Collection Centers**

Name	Type	Address	Other Information
Joshua Tree	Collection Facility	62499 29 Palms Hwy.	West of Solid Management Building 3 rd Saturday of the month 9:00 AM to 1:00 PM
Apple Valley	Collection Facility	13450 Nomwaket Rd.	Saturdays 10:00 AM to 2:00 PM
Lucerne Valley	Antifreeze, Batteries, Oil, and Paint Only	33269 Old Woman Springs Rd.	Behind Fire Station 3 rd Saturday of the month 9:00 AM to 12 Noon

Source: Earth Consultants International 2013.

Personnel who have been trained in hazardous waste handling and emergency response procedures operate these facilities. At the permanent waste collection centers, a variety of household toxics are accepted, including: chlorine bleach, disinfectants, hair dyes, fiberglass and epoxy resins, paint stripper, paint thinner and turpentine, chemicals

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

used in photo processing, insecticides, pesticides and herbicides, motor oils, rodent poisons, pool/spa chemicals, camp propane tanks, outdated medications, etc. Materials not accepted include radioactive materials, explosives, medical waste, and asbestos. Waste from businesses and nonprofit organizations are not accepted at these collection centers. Some collection centers only accept antifreeze, batteries, oil, and latex paint.

Several other businesses in and around the Town of Yucca Valley, such as Home Depot, UPS Mailing Centers, Office Depot and similar stores may receive and recycle certain kinds of materials such as used batteries, spent light bulbs, and old electronics.

Fire Hazards

Yucca Valley is in the lower Mojave section of the Southeastern Deserts Bioregion, an area characterized by isolated, steep-sided mountain ranges separated by broad alluvial basins. Lower elevation areas of the region feature desert scrub or are barren of vegetation. The limited amount of vegetation and low surface fuel loads typically hinder the spread of fire. Higher elevations both inside and outside the Town, including areas such as Joshua Tree National Park, feature a variety of vegetation types. Because of the increased diversity of surface fuel and relatively higher loads and continuity of vegetation, the spread of fire in these regions is higher than on the desert floor. This is reflected in the higher number of fires reported historically in Joshua Tree National Park and in the mountains to the northwest, compared with the Yucca Valley area proper. In addition to vegetation, weather also impacts the risk of wildfires in Yucca Valley. Drought conditions that further reduce the low level of precipitation and summer thunderstorms that produce lightning are both factors that increase the likelihood of wildland fires in the community.

According to CAL FIRE data, there have been a few but significant large fires (defined as 300 acres or greater by CAL FIRE and ten acres or greater by the U.S. Forest Service) in the Yucca Valley area between 1910 and 2008, as shown in Figure 5.7-2, *Historical Wildland Fires in Yucca Valley*. Notable recent fires are outlined below in Table 5.7-3, *Recent Significant Fires in or near Yucca Valley*.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

Table 5.7-3
Recent Significant Fires in or near Yucca Valley

Name	Year	Details
Acoma Fire	2008	<ul style="list-style-type: none"> • Burned 356 acres • Destroyed one outbuilding • Human caused (exact cause unknown)
Covington and Whispering Pines Fires	2006	<ul style="list-style-type: none"> • Burned 300 (Covington) and 1,000 acres (Whispering Pines) • Impacted Joshua Tree National Park • Both ignited by lightning • Destroyed two uninhabited structures
Pushwalla Complex Fire	2006	<ul style="list-style-type: none"> • Burned 2,000 acres in Joshua Tree National Park
Sawtooth-Millard-Heart Complex Fire	2006	<ul style="list-style-type: none"> • Largest historical fire to impact the area • Several independent fires merged • Burned 85,700 acres in the Yucca Valley and San Geronio areas • Ignited by lightning near Big Bear Lake • Destroyed 50 homes, 8 mobile homes, 13 garages, 171 outbuildings, 194 vehicles, 27 trailers, 2 railcars, and 9 tractors • Seventeen people were injured, and one person died • Cost \$17 million and 861 fire personnel to battle
Pioneer Fire	2005	<ul style="list-style-type: none"> • Burned 1,900 acres near Pioneertown (4 miles west of Yucca Valley)
Paradise Fire	2005	<ul style="list-style-type: none"> • Burned 3,022 acres in the Morongo Valley • Destroyed six homes • Over 1,000 emergency personnel responded
Juniper Complex Fire	1999	<ul style="list-style-type: none"> • Burned 13,894 acres in Joshua Tree National Park • Extended to within 1.5 miles of Yucca Valley

Source: Earth Consultants International 2012.



As shown in Figure 5.7-2, most wildland fires in and around Yucca Valley have occurred and are more likely to occur in the future in hillside and foothill areas and not in the valley proper. In the developed, relatively flat areas of the Town, vegetation fires are not considered a substantial hazard due to topography and little or no vegetation. This is not to say that vegetation fires do not occur in developed areas, but these tend to be smaller and less intense in heat. The geographic distribution of fire risk discussed above is reflected in the fire hazard severity zones mapped by CAL FIRE and other agencies and shown in Figure 5.7-3, *Fire Hazard Severity Zones*. The Town of Yucca Valley, which is considered a “local responsibility area”, is mapped as having a moderate to very high wildland fire risks. Portions of the Town in very high fire hazard severity zones are located in the hillsides to the south and west-northwest of the Town. These areas extend into very high fire hazard severity zones in state and federal responsibility areas outside the Town’s boundaries.

Fire hazards in Yucca Valley are not limited to those associated with wildlands. The SBCFD identifies the facilities listed below as being the largest “target hazards” in Yucca Valley, which means they are the locations where a structure fire would result in a large loss of life or property.

- Wal-Mart/Stater Brothers Shopping Center (Hilton Road and Highway 62)
- Stater Brothers Shopping Center (Highway 62, east of Barberry Avenue)
- The Home Depot (Highway 62, east of Avalon Avenue)
- The Best Western Motel (56525 Highway 62, east of Palm Avenue)
- Amerigas Propane (Old Woman Springs Road and Buena Vista Drive)

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

- Ferrelgas (Yucca Trail and Cherokee Trail)
- G&K Propane (Yucca Trail and Wall Street)
- Santa Fe Assisted Living (55475 Santa Fe Trail, west of Shawnee Trail)
- Sky Harbor Convalescent (57333 Joshua Lane, east of Hardesty Drive)
- Desert Manor Convalescent (8515 Cholla Avenue, off of Golden Bee Drive)

Other high probability/high consequence fire risks of concern include high-rise buildings due to the specialized fire-fighting equipment needed, the limited routes of access into and out of a building, and the potential for great loss of life. However, there are currently no high-rise buildings in Yucca Valley.

Airports

Yucca Valley Airport

Yucca Valley Airport is a public use general aviation facility leased and operated by the Yucca Valley Airport District for aircraft storage, maintenance, use, and training. The airport is unique in that homes with attached and detached hangars are located on the property for the convenience of residents with privately owned aircraft. The Town of Yucca Valley determines which land uses and height limits are compatible with airport operations by consulting the airport's ALUCP. The Town enforces a deed notice area in which property buyers must be notified of their proximity to the airport at the time of certain real estate transactions. Areas of the community where a height limit must be enforced for aircraft safety and deed notices are required are shown in Figure 5.7-4, *Yucca Valley Airport Avigation Easement Map*.

Within the ALUCP's planning area, there are three "safety review areas" that each reflect a particular level and type of aviation-related hazard or risk:

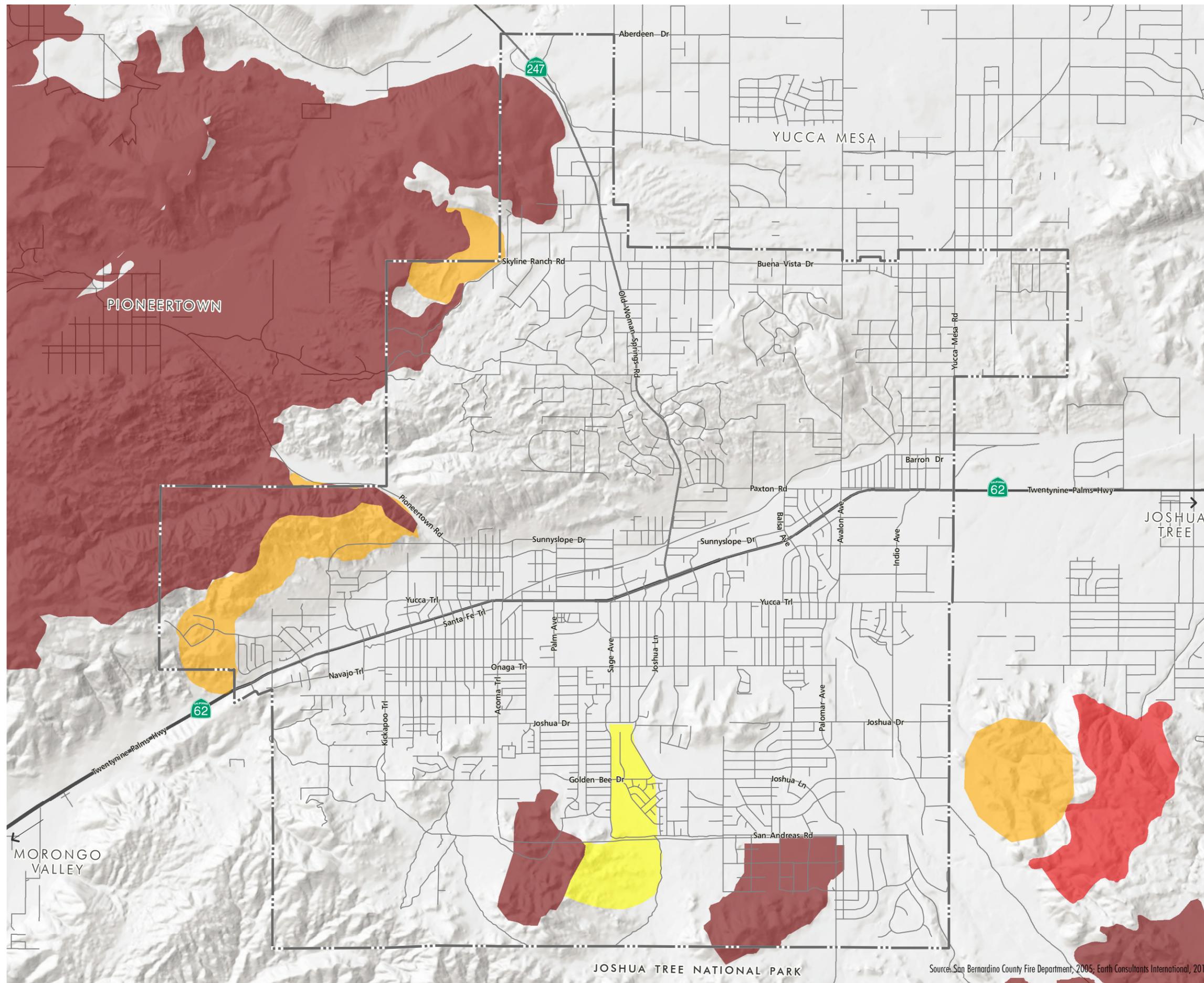
- **Safety Review Area 1:** those areas at either end of a runway, outside the airport boundaries, that correspond with the FAA-designated runway protection zone. This area is designed to provide protection to people and property on the ground and to provide protection to airborne aircraft. It includes a "runway object free area" and a "runway protection zone" where obstructions to aircraft operations are prohibited.
- **Safety Review Area 2:** those areas within the adopted 65 CNEL (community noise equivalency level) noise contours. This area also provides protection to both people on the ground and aircraft operations. It includes an "obstacle free zone", a three-dimensional volume of airspace centered above the runway. Objects are prohibited in this area so that aircraft can transition from ground to airborne or airborne to ground without risk of impact with other entities.
- **Safety Review Area 3:** the area within one mile of the outer boundaries of the airport ownership. This area provides protection to people, property, and aircraft. It is designed to provide aircraft with sterile maneuvering airspace within the immediate vicinity of the airport.

Safety review areas for Yucca Valley Airport are shown in Figure 5.7-5, *Yucca Valley Airport Safety Review Areas*. Because Safety Review Area 2 is limited to the air space above the airport runway, it is considered the most vulnerable to potential hazards. However, it does not contain structures or land uses other than the airport runway. Safety Review Area 3 is considered the least vulnerable to potential hazards but contains a variety of land uses, including residential, commercial, industrial, institutional, and other uses (San Bernardino County Planning Department 1992). The Yucca Valley Airport ALUCP addresses land use compatibility in its planning area by identifying acceptable and unacceptable land uses for each of the three safety review zones.

5.7 - HAZARDS AND HAZARDOUS MATERIALS

Figure 5.7-2

HISTORICAL WILDLAND FIRES IN YUCCA VALLEY



- Year of Last Burn
- 2000 - 2008
 - 1990 - 1999
 - 1980 - 1989
 - 1970 - 1979
 - Town Limits

Note: This map is intended for general land use planning only. Information on this map is not sufficient to serve as a substitute for detailed studies of individual sites

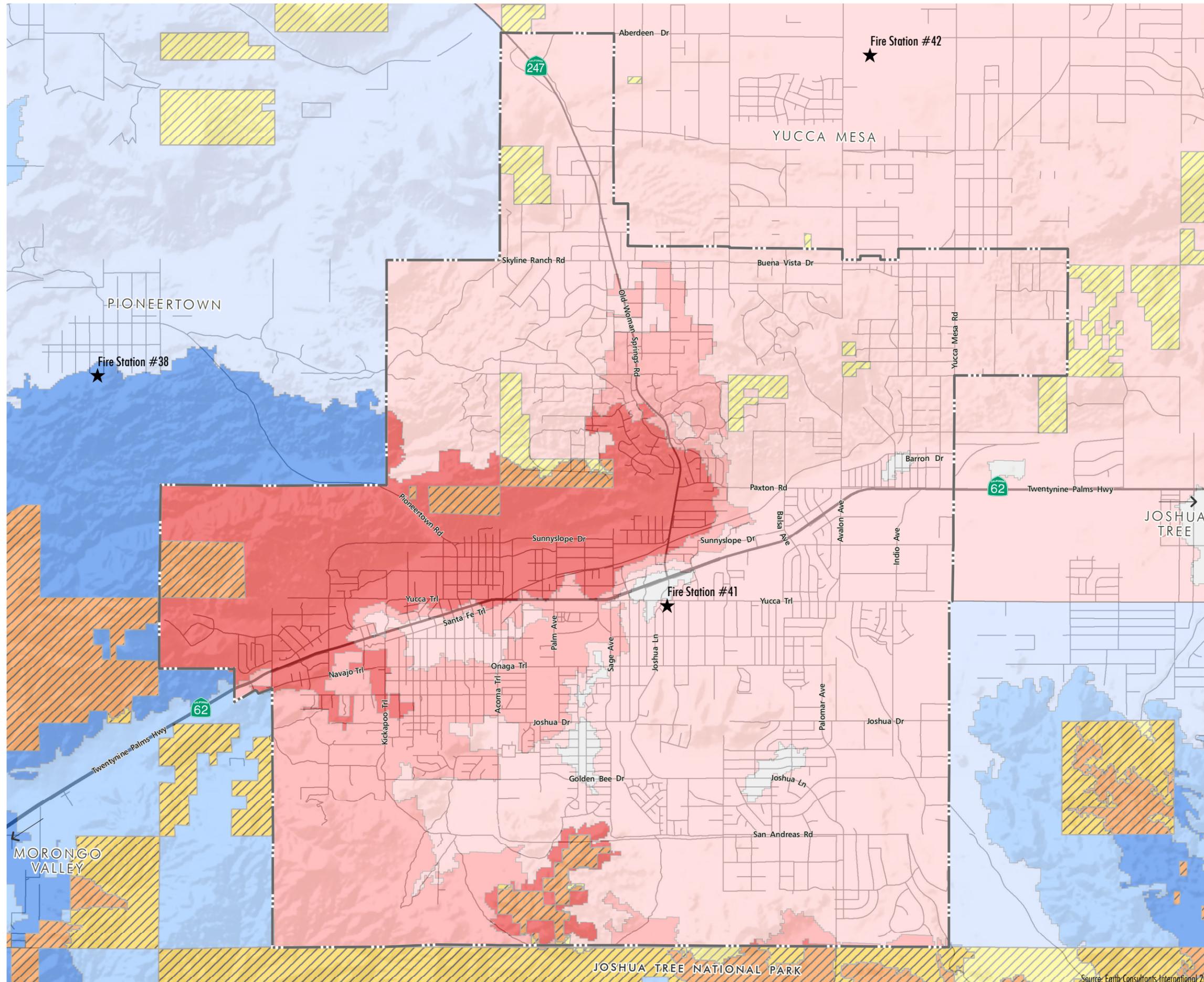
5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.

5.7 - HAZARDS AND HAZARDOUS MATERIALS

Figure 5.7-3
FIRE HAZARD SEVERITY ZONES



- Town Limits
- Fire Station
- Local Responsibility Area**
 - Very High Fire Hazard Severity Zone
 - High Fire Hazard Severity Zone
 - Moderate Fire Hazard Severity Zone
 - Urban Unzoned
- State Responsibility Area**
 - Very High Fire Hazard Severity Zone
 - High Fire Hazard Severity Zone
 - Moderate Fire Hazard Severity Zone
- Federal Responsibility Area**
 - Very High Fire Hazard Severity Zone
 - High Fire Hazard Severity Zone
 - Moderate Fire Hazard Severity Zone

Note: This map is intended for general land use planning only. Information on this map is not sufficient to serve as a substitute for detailed studies of individual sites



YUCCA VALLEY
GENERAL PLAN
DRAFT EIR

TYV-01 08.26.13



Source: Earth Consultants International 2012

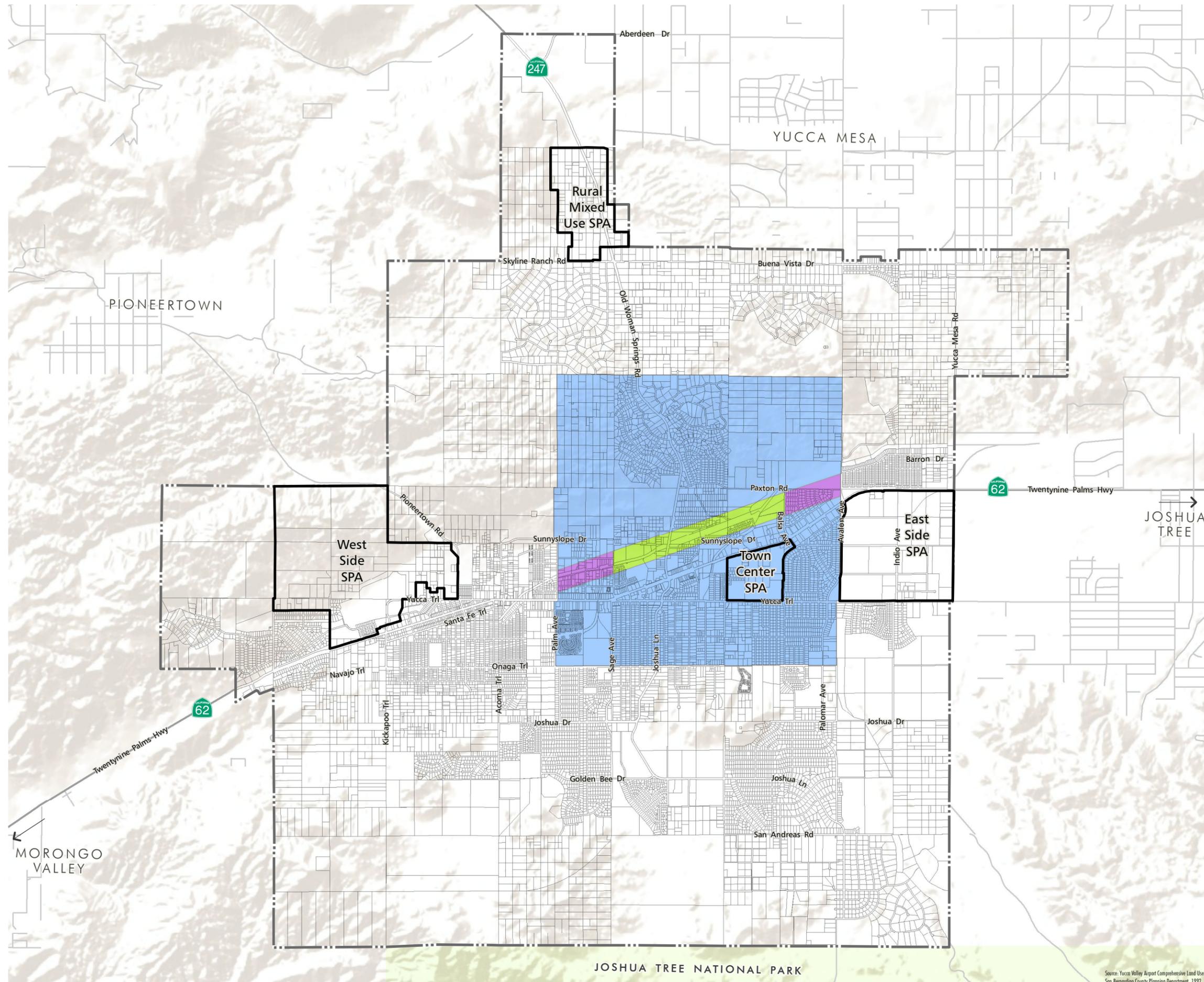
5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.

5.7 - HAZARDS AND HAZARDOUS MATERIALS

Figure 5.7-4
YUCCA VALLEY AIRPORT AVIGATION EASEMENT MAP



Impact

- Aviation Easement - 35' Height Limit
- Aviation Easement - 45' Height Limit
- Deed Notice
- SPA - Special Policy Area
- Town Limits

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.

5. Environmental Analysis

SCE Service Center Heliport

Southern California Edison’s (SCE) privately owned Yucca Valley Service Center Heliport is in Mid-Town Yucca Valley, approximately 500 feet south of the western end of the runway of Yucca Valley Airport.

Twentynine Palms Marine Corps Air Ground Combat Center Helicopter Flight Path

The MCAGCC is approximately 7 miles northeast of Yucca Valley’s town limits. This installation is a 24/7, live-fire military installation used for training. Operations at the MCAGCC include takeoffs and landings of military aircraft. Many of these aircraft—primarily helicopters—fly over portions of Yucca Valley. The MCAGCC’s helicopter flight route through the Town is shown in Figure 5.7-6, *MCAGCC Helicopter Flight Path*. Overflight of aircraft traveling to and from the MCAGCC is sporadic and at a high altitude.

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- H-2 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.
- H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- H-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 result in a safety hazard for people residing or working in the project area.
- H-6 For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- H-7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- H-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.



5.7.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

IMPACT 5.7.1: FUTURE CONSTRUCTION AND/OR OPERATIONS ACTIVITIES OF DEVELOPMENT PROJECTS ACCOMMODATED BY THE GENERAL PLAN UPDATE WOULD INVOLVE THE TRANSPORT, USE, AND/OR DISPOSAL OF HAZARDOUS MATERIALS; HOWEVER, EXISTING FEDERAL, STATE AND LOCAL REGULATIONS WOULD ENSURE RISKS ARE MINIMIZED. [THRESHOLDS H-1, H-2, AND H-3]

Impact Analysis: The routine transport, use, or disposal of hazardous materials would be associated with new development, redevelopment, and demolition activities that would be permitted under the General Plan Update. Commercial project operations would involve the use of hazardous materials including solvents, cleaning agents, paints, and pesticides. However, these would generally be materials that, when used correctly, would not result in a significant hazard to residents in the proposed project area. Industrial-grade chemicals would also continue to be transported, used, and disposed of consistent with current industrial operations in the Town. In general, implementation of the General Plan Update would increase the number of businesses and residents in the Town, thereby increasing the amount of hazardous materials being transported, stored, and manufactured, and the amount of people being exposed to these materials. While businesses/users are required by federal, state, and local regulations to properly transport, use, and dispose of hazardous material within the Town, it is possible that upset or accidental conditions may arise that result in the release of hazardous materials into the environment.

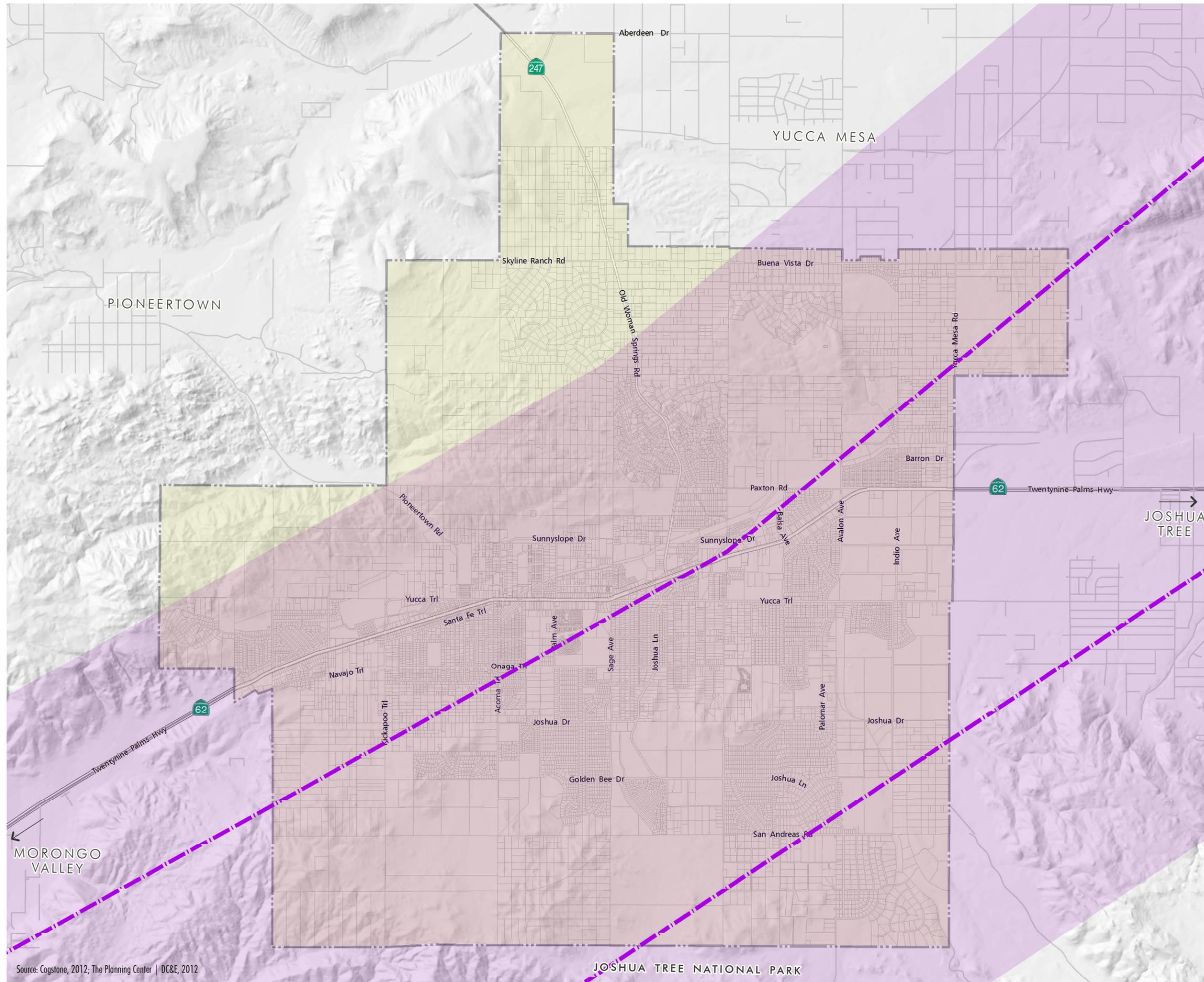
In addition to hazardous materials transported and/or used by local businesses, hazardous materials may be transported through the community to and from locations outside the Town. According to the National Hazardous Materials Route Registry maintained by the Federal Motor Carrier Safety Administration (a division of the U.S. Department of Transportation), both State Routes 62 (SR-62) and 247 (SR-247) are prescribed or permitted to carry hazardous materials. All types of hazardous materials are permitted on both of these roads, and they are both recommended for the transport of Class 1 Explosives. Other roads in the vicinity of Yucca Valley with the same status on the registry are Adobe Road and Amboy Road near the MCAGCC. As a result, these roads pose a potential for spills or leaks from nonstationary sources to occur within the Town. However, existing regulations address the transport of hazardous materials. Vehicles carrying hazardous materials are required to have placards that indicate at a glance the chemicals being carried, and whether or not they are corrosive, flammable, or explosive. The conductors are required to carry detailed "material data sheets" for each of the substances on board. These documents are designed to help emergency response personnel assess the situation immediately upon arrival at the scene of an accident, and take the appropriate precautionary and mitigation measures. The California Highway Patrol is in charge of spills that occur in or along freeways, with Caltrans, the San Bernardino County Fire Department, Hazardous Materials Division, and local sheriffs providing additional resources as needed.

One Southern California Gas Company transmission pipeline extends eastward across and near the Town of Yucca Valley. This gas transmission pipeline crosses sections of the Pinto Mountain fault zone within the Town of Yucca Valley, especially in the central portion of town. Given the large displacements expected along the Pinto Mountain fault when this fault ruptures next (an average of about 5 meters of left-lateral displacement could occur if the fault ruptures along its entire length), the pipeline can be expected to rupture where it crosses or overlies the fault. Gas would be released into the air, and if there are ignition sources nearby, fires could ensue. However, pipeline operators are responsible for the continuous maintenance and monitoring of their pipelines and the authorization of excavations around those pipelines. As with all development in California, development in Yucca Valley is required to follow the procedural requirements of the Underground Service Alert of Southern California, or DigAlert.

Existing regulations with respect to hazardous materials transportation, management, and disposal are designed to be protective of human health. The RCRA, EPCRA, state regulations, provisions of the Yucca Valley Municipal Code, and policies in the General Plan Update all minimize potential hazardous material impacts. Therefore, no significant hazards impacts to the public or environment through the routine transport, use, or disposal of hazardous waste/materials is anticipated as a result of the proposed project.

5.7 - HAZARDS AND HAZARDOUS MATERIALS

Figure 5.7-6
MCAGCC HELICOPTER FLIGHT PATH



-  Helicopter Flight Route Center Line
-  Helicopter Flight Route
-  Town Limits

Source: Cogstone, 2012; The Planning Center | DC&E, 2012

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

IMPACT 5.7-2: AREAS OF THE TOWN ARE INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES; HOWEVER, COMPLIANCE WITH EXISTING REGULATIONS WOULD ENSURE HAZARDS ARE REMEDIATED TO THE APPLICABLE STATE AND FEDERAL STANDARDS. [THRESHOLD H-4]

Impact Analysis: Based on the review of the environmental data resources database report included the *Technical Background Report to the Safety Element of the Yucca Valley General Plan* (see Appendix F), the Town encompasses an area that includes numerous businesses that have had historical releases of hazardous substances to the environment and/or are undergoing environmental investigation or remediation. Database searches identified the following types of sites in the Town. Listing does not imply that sites are contaminated or require remediation. Some sites listed may have been granted site closure by a regulatory agency.

- 29 generators of hazardous waste are listed in the EPA's EnviroMapper database, including 1 large-quantity generator, 26 small-quantity generators, and 2 generators of unknown quantities.
- 10 leaking underground storage tanks are listed in the GeoTracker LUST database. All ten sites have been remediated and closed.
- No NPL sites are listed for Yucca Valley. However, there is a listed Superfund site (La Contenta Middle School) where a one-time release of mercury was cleaned up in 2007.
- No sites were listed by the EPA Toxic Chemical Release Inventory System.
- No sites in Yucca Valley were listed on the Cortese list. The closest site on the list is the Twentynine Palms Marine Air to Ground Combat Center north of Twentynine Palms.
- No oil or geothermal wells have been drilled in Yucca Valley.

Due to the fact that there are numerous sites undergoing investigation and/or remediation within and adjacent to the Town, impacts from hazardous substance contamination on or adjacent to specific project developments in the Town may occur. Future developments in the Town in accordance with implementation of the General Plan Update may be impacted by hazardous substance contamination remaining from historical operations on a particular site that may pose a significant health risk. However, properties contaminated by hazardous substances are regulated at the local, state, and federal level and are subject to compliance with stringent laws and regulations for investigation and remediation. For example, compliance with the CERCLA, RCRA, California Code of Regulations, Title 22, and related requirements would remedy any potential impacts caused by hazardous substance contamination. Therefore, buildout of the General Plan Update would result in a less than significant impact upon compliance with existing laws and regulations.

IMPACT 5.7-3: BUILDOUT OF THE GENERAL PLAN UPDATE WOULD PLACE ADDITIONAL DEVELOPMENT AND RESIDENTS IN THE VICINITY OF THE YUCCA VALLEY AIRPORT, WITHIN THE AIRPORT'S LAND USE PLAN, AND WITHIN THE HELICOPTER FLIGHT PATH OF THE MARINE CORPS AIR GROUND COMBAT CENTER; HOWEVER, LAND USES WOULD BE COMPATIBLE WITH THE AIRPORT LAND USE COMPATIBILITY PLAN . [THRESHOLDS H-5 AND H-6]

Impact Analysis: Potential land use compatibility associated with the Yucca Valley Airport and helicopter overflights from the MCAGCC are discussed below:

Yucca Valley Airport

Yucca Valley Airport is a public use general aviation facility in Mid-Town Yucca Valley leased and operated by the Yucca Valley Airport District for aircraft storage, maintenance, use, and training. The airport is unique in that homes



5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

with attached and detached hangars are located on the property for the convenience of residents with privately owned aircraft. The Town of Yucca Valley determines which land uses and height limits are compatible with Airport operations through the ALUCP. They also establish a deed notice area in which property buyers must be notified of their proximity to the airport at the time of certain real estate transactions. Areas of the community where a height limit must be enforced for aircraft safety and deed notices are required are shown in Figure 5.7-4, *Yucca Valley Airport Avigation Easement Map*.

Airport influence areas are areas that can be affected by airport operations. Their geographic ranges are based on airport flight patterns that generate noise and safety issues associated with aircraft overflights. Yucca Valley Airport's influence area falls entirely within Town boundaries. It contains a variety of existing uses, including single-family residential, multifamily residential, commercial, and public uses. The General Plan Update would continue to allow a variety of uses in the influence area, including commercial, industrial, and mixed uses near SR-62 and residential uses to the north and south of the SR-62 corridor. Changes in land use designation proposed for the area include the transition of parcels north of the airport from Rural Living to Rural Residential and the application of a Corridor Residential Overlay on parcels in the SR-62 corridor currently planned for Commercial uses under the existing General Plan. The proposed transition of parcels from a Rural Living land use designation to a Rural Residential designation was established to reflect the existing conditions on those parcels.

Despite the above-mentioned increases in density and intensity allowed in the Yucca Valley Airport influence area under the General Plan Update, development in this area would be required to comply with the airport's ALUCP. The ALUCP establishes standards for the compatibility between the Yucca Valley Airport and surrounding parcels. The standards identify land uses that are considered incompatible with airport operations and areas where the greatest noise from aircraft is expected to occur, and establish height limits in select areas around the runway. The ALUCP identifies safety review areas, shown in Figure 5.7-5, that establish horizontal and three-dimensional airspace where obstructions to aircraft movement are prohibited. Safety Review Areas 1 and 2 are primarily limited to the footprint of the airport and the air space above it, and Safety Review Area 3 consists of the area within one mile of the airport's boundary. A variety of land uses are allowed in Safety Review Area 3 under the proposed General Plan. However, as stated above, new land uses built pursuant to the General Plan Update would be required to comply with standards outlined in the ALUCP.

The Land Use Element of the proposed General Plan is compatible with the Yucca Valley Airport Comprehensive Land Use Plan and contains the following policies aimed at reducing potential hazards relating to the airport.

Policy LU 3-1 Allow compatible and supportive land uses around the Yucca Valley Airport as determined in the Airport Comprehensive Land Use Plan.

Policy LU 3-2 Limit building heights in select areas according to the Avigation Easement map and standards provided in the Airport Compatibility Land Use Plan.

Adherence to the above policies would ensure that land use allowed under the proposed General Plan Update would not encroach into areas required for the safe takeoff and landing of aircrafts at Yucca Valley Airport. Compliance with these policies and land use restrictions included in the airport's ALUCP would minimize potential safety hazards for people residing and working near Yucca Valley Airport. Therefore, no significant impacts relating to airport hazards are anticipated.

Marine Corps Air Ground Combat Center

The MCAGCC is approximately 7 miles east of Yucca Valley's town limits. The installation is a 24/7, live-fire military installation used for training. Operations at the MCAGCC include takeoffs and landings of military aircraft. Many of these aircraft—primarily helicopters—fly over portions of Yucca Valley. The MCAGCC's helicopter flight route through the Town is shown in Figure 5.7-5, *MCAGCC Helicopter Flight Path*. Despite the location of this flight route

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

over portions of Yucca Valley, overflight of aircraft traveling to and from the MCAGCC is sporadic and at a high altitude. Therefore, hazards relating to military aircraft overflight are minimal and no significant impacts are anticipated.

IMPACT 5.8-4: FUTURE DEVELOPMENT THAT WOULD BE ACCOMMODATED BY THE GENERAL PLAN UPDATE WOULD NOT AFFECT THE IMPLEMENTATION OF AN ADOPTED EMERGENCY RESPONSE OR EVACUATION PLAN. [THRESHOLD H-7]

Impact Analysis: The Town relies on the Town of Yucca Valley EOP, San Bernardino County EOP, and Town of Yucca Valley HMP to provide guidance for the Town's response to emergency situations including natural and manmade disasters. All new development that would be accommodated by the General Plan Update would be required to follow the Town's emergency response and evacuation guidelines and be compatible with emergency evacuation routes. Additionally, all construction activities associated with development in accordance with the General Plan Update would be performed per Town and SBCFD standards and codes, thereby avoiding any interference with emergency response or evacuation plans.

Implementation of Policy S 7-4 of the proposed General Plan would ensure that the Town's EOP and HMP reflect new changes in regulation and/or local conditions:

S 7-4 Update and maintain the Emergency Operations Plan and Hazard Mitigation Plan, keeping them current with county, state, and federal requirements; include measures pertaining to man-made and natural hazards such as flood, access, earthquakes, landslides, hazardous materials, evacuation, severe weather, and fire.

Implementation actions S 30 through S 38 of the proposed Safety Element implement the above policy, ensuring that the Town's emergency plans are regularly reviewed and updated (policies S 30 and S 35) and that the Town collaborate with the County of San Bernardino to minimize safety risks via emergency planning (policies S 31 and S 36).

Implementation of the General Plan Update is not expected to interfere with an adopted emergency response or evacuation plan and no significant impacts are anticipated.

IMPACT 5.8-5: PORTIONS OF THE TOWN ARE DESIGNATED HIGH AND VERY HIGH FIRE HAZARD ZONES AND COULD EXPOSE STRUCTURES AND/OR PEOPLE TO FIRE DANGER; HOWEVER, NEW STRUCTURES WOULD BE REQUIRED TO MEET THE CALIFORNIA BUILDING CODE AND CALIFORNIA FIRE CODE REQUIREMENTS TO MINIMIZE RISK. [THRESHOLD H-8]

Impact Analysis: The expansive open space areas in and surrounding are susceptible to destructive wildland fires, often exacerbated by dry weather and Santa Ana winds. A wildland fire is an uncontrolled fire in areas of little or no development, but these fires can quickly spread to the urban/wildland interface where development meets expanses of vegetative fuels. Yucca Valley is an interface area where a proactive approach to preventing the start and spread of wildland fire is vital to protecting lives and property. Fire suppression services are provided by the San Bernardino County Fire Department, which operates one fire station within the Town limits and another in nearby unincorporated Pioneertown. CAL FIRE provides wildland fire assistance in the community. The Town was most recently threatened by the Millard/Sawtooth Complex Fire in 2006. The fire injured 17, resulted in one fatality, and destroyed approximately 69,000 acres. The Juniper Complex Fire, the largest fire in the history of the Joshua Tree National Park, burned 13,894 acres adjacent to the Town in 1999. Both fires were ignited by lightning hitting dry desert vegetation in the summer. These and other wildland fires are shown in Figure 5.7-2, *Historical Wildland Fires in Yucca Valley*.



5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

As shown in Figure 5.7-3, *Fire Hazard Severity Zones*, the California Fire Plan and the Wildland Fire Threat Map of the National Fire Plan both designate Yucca Valley an area with moderate, high, and very high wildland fire threats. Areas susceptible to high and very high fire danger are in the hillsides to the south and west-northwest of central Yucca Valley. Although these areas includes portions of the valley in between, relatively flat areas of the Town are considered less hazardous due to topography and lack of fuel loading (either as a result of little to no vegetation, or due to carefully maintained, drought-tolerant landscaping). This is not to say that vegetation fires could not occur in developed areas of Yucca Valley, but these types of fires tend to be smaller and less intense in heat. Areas of Yucca Valley designated as having the highest risk for wildland fires are the hills between SR-62 and Pioneer town to the northwest of the Town. The California Fire Authority has designated Yucca Valley a “community at risk” given that it has and is adjacent to federally regulated lands with a high wildland fire hazard.

To help protect the Town and its residents from fire hazards, the Town of Yucca Valley and the County of San Bernardino have building and fire codes that must be followed. The fire chief may also use his/her authority to instate certain building, planning, or landscaping requirements. The Town of Yucca Valley addresses the issue of weeds and other vegetation as a potential fire hazard and identifies the steps that the Town takes to abate this hazard in Chapter 6.04 of the Town's Municipal Code. Specifically, the Town considers it unlawful and a nuisance for a property to have weeds, dry grass, rubble, brush, litter, or any flammable material which by its volume, extent, or nature endangers the public safety by creating a fire hazard. The Town Manager, code enforcement officer, or his/her designee has the authority to give the property owner of record a notice of violation requiring him/her to abate the hazard. If the owner does not abate the hazard during the time period specified in the notice, the Town may take further action to reduce the fire hazard in the form of tax liens and fines. SBCFD personnel are planning to conduct courtesy home inspections in the urban-wildland interface areas to educate homeowners on being fire safe and maintaining a defensible space.

Additionally, the Town of Yucca Valley has adopted the 2010 California Fire Code, as amended by the county, a modification of the International Fire Code. These codes are revised on a triennial cycle. Provisions include sprinkler and fire hydrant requirements in new structures and remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains. The SBCFD chief is authorized and directed to enforce the provisions of the California Fire Code throughout the Town. The Town has also adopted the most recent (currently 2010) version of the California Building Code that includes sections on fire-resistant construction material requirements based on building use and occupancy. The construction requirements are a function of building size, purpose, type, materials, location, proximity to other structures, and the type of fire suppression systems installed.

Implementation of policies S 4-1 through S 4-6 of the proposed Safety Element would, like the fire codes listed above, minimize potential wildfire impacts in Yucca Valley. Policies S 4-1 and S 4-2 emphasize the role of homeowners and other residents in minimizing wildfire risk, while policies S 4-3 through S 4-6 focus on planning infrastructure, land uses, and public services to prevent or minimize wildfire impacts. Successful execution of implementation actions included in the Safety Element would also minimize impacts of wildfires by ensuring that adequate emergency services are provided in Yucca Valley in the event that a fire occurs.

Because the State of California, County of San Bernardino, and the Town of Yucca Valley require adherence to building codes and review by the fire department to reduce fire hazards, project impacts on fire hazards would be less than significant.

5. Environmental Analysis

5.7.4 Relevant General Plan Policies and Implementation Actions

Land Use Element

Land Use Element Policies

Balanced Land Uses

LU 1-19 Encourage the relocation of industrial operations that are not compatible with adjacent uses to areas that are conducive to such operations.

Yucca Valley Airport

LU 3-1 Allow compatible and supportive land uses around the Yucca Valley Airport as determined in the Airport Comprehensive Land Use Plan.

LU 3-2 Limit building heights in select areas according to the Avigation Easement map and standards provided in the Airport Compatibility Land Use Plan.

Land Use Element Implementation Actions

Balanced Land Uses

LU 5 Amend the development code to create standards addressing appropriate treatments to buffer industrial and commercial uses from residential and other sensitive uses.

Yucca Valley Airport

LU 19 Periodically coordinate with the Yucca Valley Airport District to stay informed of any operational or facility changes that could impact the community.



Open Space and Conservation Element

Open Space and Conservation Element Implementation Actions

Natural Open Space and Parks

OSC 9 Update the Land Use Map when necessary to designate newly identified hazard zones as open space areas.

Safety Element

Safety Element Policies

Wildland Fire Hazard

S 4-1 Require property owners adjacent to wildland fire areas to maintain a defensible space around structures consistent with San Bernardino County Fire Department standards.

S 4-2 Continue public education efforts to inform the community of wildland fire hazards and ways to minimize the damage caused by fires.

S 4-3 Ensure that public and private water distribution and supply facilities have adequate capacity and reliability (peakload water supply) to supply both every day and emergency firefighting needs.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

- S 4-4 Continue long-range wildland fire safety planning, including enforcement and updates to the Municipal Code, improved infrastructure, and partnerships with other public agencies and the private sector.
- S 4-5 Update the Fire Hazard Areas map as development changes.
- S 4-6 Enforce fire standards and regulations in accordance with the California Building Code, Town Municipal Code for building and landscaping, and the San Bernardino County Fire Department regulations for all new development.

Hazardous Materials

- S 6-1 Collaborate with the County of San Bernardino and other appropriate agencies to facilitate the safe and immediate clean-up of all hazardous waste sites and to provide safe facilities for disposal in accordance with applicable federal, state, and local regulations.
- S 6-2 In conjunction with the San Bernardino County Fire Department, review and monitor potentially hazardous materials associated with industrial uses.
- S 6-3 Encourage businesses to utilize practices and technologies that will reduce the generation of hazardous waste.
- S 6-4 Promote the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials.
- S 6-5 Cooperate with the state and gasoline station owners and operators in monitoring the conditions of subsurface tanks.
- S 6-6 Maintain an inventory of hazardous materials and their location in Town.
- S 6-7 Maintain a protocol for communicating with responsible agencies, and coordinate efforts to assure that state and federal regulations for the testing and monitoring of leaking underground fuel storage tanks are enforced.
- S 6-8 Cooperate with regulators and encourage the enforcement of laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify such materials, and notify the appropriate county, state and/or federal agencies as required by law.
- S 6-9 Require all business that use, store or produce hazardous materials to comply with the County Fire Department's Business Plan requirements.
- S 6-10 Coordinate with the San Bernardino County Fire Department and the County Environmental Health Department to assure improved response to, and capability for, handling hazardous materials incidents.

Emergency Services

- S 7-4 Update and maintain the Emergency Operations Plan and Hazard Mitigation Plan keeping them current with county, state, and federal requirements, include measures pertaining to man-made and natural hazards such as flood, access, earthquakes, landslides, hazardous materials, evacuation, severe weather and fire.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

Safety Element Implementation Actions

Hazardous Materials

- S 24 Update the inventory of all hazardous materials sites, including underground storage tanks.
- S 25 Work with the County of San Bernardino’s Hazardous Material Division to distribute information to the community on the proper disposal, handling, transport, delivery, treatment, recovery, recycling, and storage of hazardous materials. Include disposal and recycling locations that are closest to Yucca Valley as well as emergency contact information. Make the information available at Town Hall and on the Town’s website.
- S 26 Stay up to date on hazardous materials associated with industrial and commercial uses by communicating with county, state, and federal agencies.
- S 27 Make information available to local businesses for incentives to reduce the generation of hazardous waste. Program components can include rebates for recycling; apply for grant funding through CalRecycle.
- S 28 Require new businesses handling hazardous materials to submit a Business Plan consistent with County Fire Department standards for handling, storing, transporting and disposing of hazardous materials and wastes. The plan should be submitted as a part of the development approval process.
- S 29 Communicate with the San Bernardino County Fire Department and other regulators of hazardous materials to enforce safe handling of hazardous materials.



Emergency Services

- S 30 Review and update the Emergency Operations Plan with local key staff members including medical, fire, police, etc. to ensure that the Town is adequately prepared for most likely and demanding emergency disasters.
- S 31 Work with San Bernardino County Sheriff and Fire Departments to create an educational program to enhance awareness of public safety. Components of the program could include a brochure, a workshop, a booth at community events, and additional information posted to the Town’s website. Topics can include earthquakes, urban and wildfires, severe weather conditions, hazardous materials, and flooding.
- S 33 When feasible, encourage ongoing education for Town staff to better understand local natural and human-made hazards and how they can affect development proposals and disrupt vital services.
- S 35 Maintain the Town of Yucca Valley Hazards Mitigation Plan and update it to include hazardous materials and the emergency evacuation routes with guidance for signage. Continue to make it available to the public at Town Hall and on the Town’s website.
- S 36 Communicate with the San Bernardino County Sheriff and Fire Departments to ensure an adequate level of service.
- S 37 Analyze the possibility of establishing a Public Safety Assessment District to offset the costs of providing police and fire services to new development.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

- S 38 Encourage the County Fire Department to conduct periodic inspection of commercial, industrial and institutional buildings, and multi-family developments, to ensure compliance with fire code compliance and to educate building and development managers on fire safety issues.

Circulation Element

Circulation Element Policies

Efficient Goods and Services Movement

- C 1-18 Maintain truck route designations to support heavy vehicle use and connections to the Yucca Valley Airport as noted on Figure C-3.

5.7.5 Existing Regulations

State and Federal Regulations

- California Code of Regulations, Title 22, Divisions 4 and 4.5
- California Fire Code
- California Labor Code Section 6409.1 (b)10
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980
- Emergency Planning & Community Right-to-Know Act
- Government Code Sections 51018, 8670.25.5 (a)
- Hazardous Materials Disclosure Programs
- Health and Safety Codes Sections 25270.7, 25270.8, and 25507
- OSHA Rule 29 and Code of Federal Regulations Part 1926
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Resource Conservation and Recovery Act (RCRA) of 1976
- The Toxic Substances Control Act of 1976
- Vehicle Code Section 23112.5
- Water Code Sections 13271, 13272

Town of Yucca Valley Municipal Code

- Title 2, *Administration and Personnel*, Chapter 2.40: *Emergency Organization*, provides for the preparation and carrying out of plans for the protection of persons and property within the Town in the event of an emergency or disaster. The chapter outlines protocol for the formation of a Town disaster council, requires development of a municipal emergency plan, and requires that two emergency operating centers be maintained in the Town.
- Title 6, *Health and Sanitation*, Chapter 6.02: *Solid Waste and Recycling Services*, regulates the collection, transfer, and disposal of solid waste within Yucca Valley. The chapter prohibits disposal of hazardous materials in containers provided by the Town's solid waste handler.

5.7.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and compliance with policies contained within the General Plan Update, the following impacts would be less than significant: 5.7-1, 5.7-2, 5.7-3, 5.7-4, and 5.7-5.

5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

5.7.7 Mitigation Measures

No significant impacts were identified and no mitigation measures are necessary.

5.7.8 Level of Significance After Mitigation

Compliance with regulatory requirements identified above would reduce potential impacts associated with hazards and hazardous materials to less than significant. Therefore, no significant unavoidable adverse impacts relating to hazards and hazardous materials have been identified.

5.7.9 References

Earth Consultants International (ECI). 2012, September. *Technical Background Report to the Safety Element of the Yucca Valley General Plan*.

Emergency Planning Consultants (EPC). 2010. Town of Yucca Valley Draft Hazard Mitigation Plan.
http://www.yucca-valley.org/pdf/public_safety/hazard_mit_plan_draft_2010_12.pdf.

San Bernardino, County of. 2012. *County of San Bernardino 2007 General Plan*. Prepared by URS Corporation.
<http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>

San Bernardino County Fire Department (SBCFD). 2013. Office of Emergency Services.
<http://www.sbcfire.org/oes>.

———. 2012. "Business Emergency Contingency Plan Guidelines and Forms."
http://www.sbcfire.org/hazmat/forms/business_plan_V3_6_guidelines_and_forms.pdf.

San Bernardino County Planning Department. 1992. Airport Comprehensive Land Use Plan, Yucca Valley Airport.
http://www.yucca-valley.org/pdf/general_plan/AirportLandUse_ComprPlan1992.pdf.



5. Environmental Analysis

HAZARDS AND HAZARDOUS MATERIALS

This page intentionally left blank.