



5.10 Hazards and Hazardous Materials



5.10 HAZARDS AND HAZARDOUS MATERIALS

5.10.1 PURPOSE

This section identifies existing hazards and hazardous materials sites within the Study area and provides an analysis of potential impacts associated with implementation of the General Plan Update. Potential impacts are identified and mitigation measures to address potentially significant impacts are recommended, as necessary.

For the purpose of this analysis, the term “hazardous material” refers to both hazardous substances and hazardous waste. A material is defined as “hazardous” if it appears on a list of hazardous materials prepared by a Federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as “hazardous” by such an agency. A “hazardous waste” is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity). Other hazards, such as potential airport-related safety hazards for people residing/working in the project area, interference with an adopted emergency response plan, and exposure of people/structures to risk involving wildland fires, are also addressed in this section.

5.10.2 EXISTING REGULATORY SETTING

FEDERAL AND STATE REGULATIONS

According to the Environmental Protection Agency (EPA), a “hazardous” waste is defined as one “which because of its quantity, concentrations, or physiochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed” (U.S. Public Health and Welfare Code Section 6903). Special handling and management are required for materials and wastes that exhibit hazardous properties. Treatment, storage, transport, and disposal of these materials are highly regulated at both the Federal and State levels. Compliance with Federal and State hazardous materials laws and regulations minimizes the potential risks to the public and the environment presented by these potential hazards, which include, but are not limited to, the following:

- 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; and
- Hazardous Materials Transportation Act (HMTA) – safe transport of hazardous materials.



These laws provide the “cradle to grave” regulation of hazardous wastes. Businesses, institutions, and other entities that generate hazardous waste are required to identify and track their hazardous waste from the point of generation until it is recycled, reused, or disposed of. The primary responsibility for implementing RCRA is assigned to the EPA, although individual States are encouraged to seek authorization to implement some or all RCRA provisions.

The EPA and the Department of Toxic Substances Control (DTSC) have developed and continue to update lists of hazardous wastes subject to regulation. In addition to the EPA and DTSC, the Regional Water Quality Control Board (RWQCB), San Diego Region (Region 9), is the enforcing agency for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil and groundwater. Other State agencies involved in hazardous materials management include the Office of Emergency Services (Cal OES), California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Air Resources Board (CARB), and CalRecycle. California hazardous materials management laws include, but are not limited to, 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.

Department of Toxic Substances Control

The responsibility for implementation of RCRA was given to California Environmental Protection Agency's (Cal EPA) Department of Toxic Substances Control (DTSC) in August 1992. The DTSC is also responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and regulate a larger number of chemicals. Hazardous wastes regulated by California, but not by EPA, are called “non-RCRA hazardous wastes.”

State Water Resources Control Board

Brownfields are underutilized properties where reuse is hindered by the actual or suspected presence of pollution or contamination. The goals of the State Water Resources Control Board's (SWRCB) Brownfield Program are to:

- Expedite and facilitate site cleanups and closures for Brownfields sites to support reuse of those sites;
- Preserve open space and greenfields;



- Protect groundwater and surface water resources, safeguard public health, and promote environmental justice; and
- Streamline site assessment, clean up, monitoring, and closure requirements and procedures within the various SWRCB site cleanup programs.

Site cleanup responsibilities for brownfields primarily reside within four main programs at the SWRCB: the Underground Storage Tank Program, the Site Cleanup Program, the Department of Defense Program, and the Land Disposal Program. These SWRCB cleanup programs are charged with ensuring sites are remediated to protect the State of California's surface and groundwater and return it to beneficial use.

California Air Resources Board

One of CARB's major goals is to protect the public from exposure to toxic air contaminants. The California Air Toxics Program establishes the process for the identification and control of toxic air contaminants and includes provisions to make the public aware of significant toxic exposures and for reducing risk.

The Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplements the AB 1807 program, by requiring a Statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

Under AB 1807, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, the CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community." AB 1807 also requires CARB to use available information gathered from the AB 2588 program to include in the prioritization of compounds. This report includes available information on each of the above factors required under the mandates of the AB 1807 program. AB 2588 air toxics "Hot Spots" program requires facilities to report their air toxics emissions, ascertain health risks, and to notify nearby residents of significant risks. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Accidental Release Prevention Law

The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and Federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the Federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agencies (CUPAs) and requires that any business, where



the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the responsible CUPA as a manager of regulated substances and prepare a Risk Management Plan. A Risk Management Plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location. The CUPA with jurisdiction over the City of Rancho Santa Margarita is the Orange County Health Care Agency (OCHCA) Environmental Health Division (EHD).

Transportation of Hazardous Materials/Wastes

Transportation of hazardous materials/wastes is regulated by California Code of Regulations (CCR) Title 26. The United States Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling and routing). The CHP and Caltrans enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State and local governmental authorities and private persons through a State Mandated Emergency Management Plan.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

LOCAL

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) works with CARB and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines. SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of asbestos containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage and disposal requirements for asbestos-containing waste materials. SCAQMD Rule 166 sets the



requirements to control the emission of volatile organic compounds (VOCs) from excavating, grading, handling, and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition.

San Diego Regional Water Quality Control Board

The San Diego RWQCB is the enforcing agency for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil and groundwater. The San Diego RWQCB's underground storage tank (UST) Program provides regulatory oversight for the investigation and cleanup of sites impacted by leaking USTs, and develops regional guidance on implementing the policies and procedures of the SWRCB.¹ The program is administered by the State Water Board and consists of four program elements: leak prevention, cleanup, enforcement, and tank tester licensing. The San Diego RWQCB oversees the cleanup element of the UST program.

Orange County Health Care Agency – Environmental Health Division

As previously noted, the CUPA with jurisdiction over the Study Area is the Orange County Health Care Agency Environmental Health Division (OCHCA EHD). The EHD is the local administrative agency (i.e., CUPA) that coordinates the regulation of hazardous materials and hazardous wastes in Orange County through the following six programs:

- Hazardous Waste (HW);
- Underground Storage Tank (UST);
- Aboveground Petroleum Storage Tank (APST);
- Hazardous Materials Disclosure (HMD);
- Business Emergency Plan (BEP); and
- California Accidental Release Prevention (CalARP).

The CUPA provides its regulated businesses several convenient benefits such as a single point of contact for permitting, billing, and inspections; uniformity and consistency in enforcement of regulations; and a single fee system incorporating all of the applicable fees from the six CUPA programs.

HAZARDOUS WASTE INSPECTION PROGRAM

The EHD implements the Hazardous Waste Inspection Program throughout Orange County. The purpose of this program is to ensure that all hazardous wastes generated by Orange County businesses are properly handled, recycled, treated, stored, and

¹ State Water Resources Control Board, San Diego Region – Underground Storage Tank (UST) Cleanup Program, https://www.waterboards.ca.gov/sandiego/water_issues/programs/ground_water_basin/ust_program.html, accessed on April 26, 2018.



disposed. Specialists in this program inspect facilities that generate hazardous waste, evaluate hazardous waste generating industries, investigate reports of illegal hazardous waste disposal, and respond to emergency hazardous chemical spills. Specialists also participate in public education programs designed to inform industries and residents about the laws and regulations relating to safe disposal of hazardous waste.

UNDERGROUND STORAGE TANK PROGRAM

An UST is any one or combination of tanks, including associated piping that is used to contain industrial solvents, petroleum products, and other hazardous substances underground. The tank is totally or substantially (10 percent) beneath the surface of the ground. The definition for "tank" is a stationary device constructed primarily of non-earthen materials (e.g., wood, concrete, steel, and plastic) designed to contain an accumulation of hazardous substance. A storage tank system includes the tank, associated piping, monitoring system, and containment equipment.

The purpose of the UST Program is to ensure that hazardous materials stored in underground tanks are not released into the environment, potentially polluting ground and surface waters. Any California business that stores hazardous substances in USTs must comply with California Health and Safety Code (H&SC), Division 20, Chapter 6.7, and the underground tank regulations in the CCR, Title 23, Division 3, Chapter 16.

ABOVEGROUND PETROLEUM STORAGE TANK PROGRAM

Assembly Bill 1130 (AB 1130) authorized the administration and implementation of the Aboveground Petroleum Storage Tank (APST) Program to the local CUPA. For businesses in Orange County, the APST Program has been delegated to the Orange County CUPA throughout the County. This change consolidates environmental programs, fees, and inspection authority into one single regulating agency.

The Aboveground Petroleum Storage Act of 1990 (APSA) requires owners or operations of aboveground petroleum storage tank (APST) facilities to file a tank facility statement, to develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan, and to pay fees. The purpose of this program is to protect the State's people and natural resources from aboveground petroleum storage tank spills or releases.

HAZARDOUS MATERIALS DISCLOSURE PROGRAM/BUSINESS EMERGENCY PLAN

Chapter 6.95, Division 20 of the H&SC and Chapter 116, Section 11022 of Title 42 of the United States Code contains the minimum requirements for hazardous material inventory reporting and data management. These regulations require businesses within the Orange County jurisdiction to complete a chemical inventory form to disclose hazardous materials stored, used, or handled on site. This disclosure information will assist emergency responders in planning for and handling emergencies involving hazardous materials. The main program objective is to safeguard the lives of emergency responders, the public, and to minimize property loss.



The H&SC also requires a Business Emergency Plan (BEP). The intent of the BEP is to assist in mitigating a release or threatened release of a hazardous material; and to minimize any potential harm or damage to human health or the environment.

CALIFORNIA ACCIDENTAL RELEASE PREVENTION (CAL-ARP) PROGRAM

The CalARP program's main objective is to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment. These substances are called Regulated Substances (RS), which include flammable and toxic hazardous materials listed on the Federal Regulated Substances for Accidental Release Prevention and the State of California Regulated Substances list. RS and their threshold quantities can be found in CCR Title 19 in the following tables:

- Table 1: Federal list of Toxic Regulated Substances;
- Table 2: Federal list of Flammable Regulated Substances; and
- Table 3: California list of Regulated Substances.

Businesses that handle RS in industrial processes above threshold quantity levels are subject to CalARP Program requirements.

Orange County Fire Authority

The City of Rancho Santa Margarita's fire services are provided by the Orange County Fire Authority (OCFA). In addition to delivering fire, emergency medical, and rescue services, OCFA provides the following services:

- Coordinates the inspection of all commercial buildings, investigates all fires, and enforces hazardous materials regulations.
- Conducts Uniform Fire Code inspections, assists in reducing risks associated with the use of hazardous materials in the community, and administers the State-mandated Risk Management and Prevention Program.
- Investigates fires to determine their cause, prepares arson and hazardous materials cases for the district attorney, and initiates actions to recover costs for negligently caused fires.

Orange County Waste and Recycling

Orange County (OC) Waste and Recycling manages the solid waste disposal system that serves Orange County residents and businesses. OC Waste and Recycling serves residents and businesses in the County's 34 cities and unincorporated areas. OC Waste



and Recycling has three active landfills which annually receive more than four million tons of solid waste, as well as four household hazardous waste collection centers.²

The Household Hazardous Waste Collection Program gives Orange County residents a legal and cost-free way to dispose of unwanted household chemicals that cannot be disposed of in the regular trash. There are four Household Hazardous Waste Collection (HHWC) centers in Orange County: Anaheim; Huntington Beach; Irvine; and San Juan Capistrano. The HHWC center located nearest to the Study Area is the Irvine Collection Center located at 6411 Oak Canyon. The collection center accepts common household wastes including, but not limited to, cleaning products, workshop/ painting supplies, batteries, automotive products, indoor pesticides, e-waste, and other flammable products.³

The OC Waste and Recycling does not accept waste from businesses, churches, schools, nonprofit organizations, or government agencies. Privately contracted disposal services provide solid waste disposal services for these entities operating in Rancho Santa Margarita.

City of Rancho Santa Margarita Emergency Operations Plan

The City of Rancho Santa Margarita adopted its Emergency Operations Plan (EOP) in February 2016. The EOP addresses the planned response to emergency situations, such as natural disasters, national security emergencies, and technological incidents. The EOP's primary focus is coordinated mutual aid within the City and fulfilling reporting requirements to the Orange County Operational Area. The EOP establishes policies and procedures for emergency response, identifies authorities, and assigns responsibilities for response activities. Local emergency preparedness plans serve as extensions of the California Emergency Plan and the Emergency Resource Management Plan.

City of Rancho Santa Margarita Hazard Mitigation Plan

The City adopted its Hazard Mitigation Plan in 2007.⁴ The Hazard Mitigation Plan is intended to reduce or prevent injury and damage from natural hazards in the City. The Plan identifies mitigation activities, policies, and programs, as well as mitigation strategies for the future. The Hazard Mitigation Plan also guides hazard mitigation activities by establishing hazard mitigation goals and objectives. According to the Hazard Mitigation Plan, the natural hazards determined to be most applicable to the City include earthquake, fire, flood/storm, landslides, drought, dam failure, and vector issues. The City is planning to update the Hazard Mitigation Plan in 2019/2020.

2 Orange County Waste & Recycling, *About OC Waste & Recycling*, <http://www.oclandfills.com/about>, accessed on April 26, 2018.

3 Orange County Waste & Recycling, *How to use Orange County's Household Hazardous Waste Collection Centers*, [https://www.ehs.uci.edu/programs/enviro/HouseholdChemicalElectronicWaste Disposal.pdf](https://www.ehs.uci.edu/programs/enviro/HouseholdChemicalElectronicWaste%20Disposal.pdf), accessed on April 26, 2018.

4 City of Rancho Santa Margarita, *Natural Hazard Mitigation Plan for the City of Rancho Santa Margarita*, 2007.



City of Rancho Santa Margarita Municipal Code

Rancho Santa Margarita Municipal Code (Municipal Code) Chapter 5.06, *Solid Waste*, regulates solid waste handling in order to protect public health, safety, and welfare and meet the City's obligations under the California Integrated Waste Management Act 1989 (AB 939). Pursuant to Section 5.03.550, *Hazardous Solid Waste*, generators, owners, and/or possessors of hazardous waste are required to dispose of all hazardous solid waste in accordance with all zoning laws. Pursuant to Section 5.06.560, *Hazardous Waste Inspection and Reporting*, solid waste collectors are required to inspect collected solid waste. If reportable quantities of hazardous waste are identified, collectors must notify the City and all agencies with jurisdiction, if appropriate, including the DTSC, local emergency response providers and the National Response Center. In addition to other required notifications, if a franchisee or solid waste permittee observes any substances which it or its employees reasonably believe or suspect to contain hazardous waste unlawfully disposed of or released on any City property, including storm drains, streets or other public rights-of-way, the solid waste collector, as applicable, is required to immediately notify the City Manager or his or her designee.

Municipal Code Chapter 10.06, *California Fire Code – Adoption*, adopts and incorporates the 2016 California Fire Code, as amended by Chapter 10.07, *Amendments to the California Fire Code*. Known as the "Rancho Santa Margarita Fire Code," Municipal Code Chapter 10.06, *California Fire Code – Adoption*, and Chapter 10.07, *Amendments to the California Fire Code*, are the City's main ordinance to reduce the risk of structural fire hazards. The Rancho Santa Margarita Fire Code also includes specific site safety requirements for development within wildland-urban interface areas and vegetation management.

5.10.3 EXISTING ENVIRONMENTAL SETTING

HAZARD VERSUS RISK

Workers and their public health are potentially at risk whenever hazardous substances are present or will be used. It is important to differentiate between the "hazard" of these substances and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The risk to human health and the environment is determined by the probability of exposure to the hazardous substance and the severity of harm such exposure would pose. The likelihood and means of exposure, in addition to the inherent toxicity of a substance, determine the degree of risk to human health. When the risk of an activity is judged acceptable by society in relation to perceived benefits, the activity is judged to be safe.

MEANS OF EXPOSURE

Exposure to hazardous substances could occur in the following manner: (1) improper handling or use of hazardous substances during the course of business, particularly by untrained personnel; (2) failure of storage containment systems; (3) environmentally unsound treatment/disposal methods; (4) transportation accidents; (5) fire, explosion or



other emergencies; or, (6) permitted release of hazardous substances by regulatory agencies.

The following factors influence the health effects of exposure to hazardous substances: the dose to which the person is exposed; the frequency of exposure; the duration of exposure; the exposure pathway (route by which a chemical enters a person's body); and the individual's unique biological susceptibility.

The means of exposure as outlined above would determine the way in which hazardous materials are absorbed into the body and, therefore, the bodily organs or systems affected. The major ways in which toxic substances may enter and be absorbed by the body are through the mouth (ingestion), the skin (penetration), or the lungs (inhalation). How a hazardous substance gets into the body and what damage it causes depends on the form or physical properties of the substance (i.e., liquid, solid, gas, dust, fibers, fumes or mist). A chemical may be toxic by one route and not another.

Health effects from exposure to toxic substances may be acute or chronic. Acute effects, usually resulting from a single exposure to a hazardous substance, may include damage to organs and systems in the body, and possibly death. Chronic effects, usually resulting from long-term exposure to a hazardous substance, may also include systemic and organ damage, as well as birth defects, genetic damage, and cancer.

EMERGENCY VERSUS INCIDENT

A hazardous materials "Emergency" requires emergency responders, causes danger to employees requiring immediate medical attention, can require response from different regulating agencies, and/or results in an actual or potential uncontrolled release. In contrast, a hazardous materials "Incident" is a spill or release that can be absorbed, neutralized, or otherwise controlled at the time of the release. Generally, the substance can be controlled by the employees in the immediate area or by maintenance personnel and there are no immediate safety or health hazards.

REPORTED REGULATORY PROPERTIES

Hazardous materials are used in the Study Area for a variety of purposes, including in service industries, small businesses, schools, and households. Many chemicals used in household cleaning, construction, dry cleaning, landscaping, and automotive maintenance and repair are considered hazardous. Accidents can occur in the production, use, transport, and disposal of hazardous waste. Uses known to handle, store, and/or maintain hazardous materials within the Study Area involve fixed facilities comprised of gas stations, pump stations, commercial and retail businesses, and municipal uses. The majority of properties within the City containing hazardous materials are located along Santa Margarita Parkway, Antonio Parkway, Aventura, and Arroyo Vista. These facilities include gasoline service stations, utility facilities, dry cleaner facilities, and a former military site (Trabuco Bombing Range).



GeoTracker

GeoTracker is the SWRCB's data management system for tracking sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

The Geographic Environmental Information Management System (GEIMS) is a data warehouse that tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies using GeoTracker. GeoTracker and GEIMS were developed pursuant to a mandate by the California State Legislature (AB 592, SB 1189) to investigate the feasibility of establishing a Statewide GIS for leaking underground fuel tank (LUFT) sites. The GeoTracker database provides lists of the following site types, among others:

- Leaking Underground Storage Tank (LUST) Cleanup Sites;
- Other Cleanup Sites;
- Land Disposal Sites;
- Military Sites;
- Waste Discharge Report (WDR) Sites; and
- Permitted Underground Storage Tank (UST) Facilities.

As of April 26, 2018, the GeoTracker search results indicate that there is a total of 11 sites within the City of Rancho Santa Margarita.⁵ These are summarized, as follows:

Leaking Underground Storage Tank (LUST) Cleanup Sites. There is a total of three LUST Cleanup Sites in the City: 1) Fire Station #45 (T0605991308), located at 30131 Aventura; 2) Mobil Gas Station (T0605966905), located at 31421 Santa Margarita Parkway; and 3) the Plano Lift Station Force Main Sewage Spill (T10000002278), located along Antonio Parkway. All LUST Cleanup Sites in the City have received a Case Closed status.

Other Cleanup Sites. There are no Other Cleanup Sites in Rancho Santa Margarita.

Land Disposal Sites. There are no Land Disposal Sites in Rancho Santa Margarita.

Military Sites. There are no Military Sites in Rancho Santa Margarita.

Permitted Underground Storage Tank (UST) Facilities. There are a total of five Permitted Underground Storage Tank (UST) Facilities in the City: AT&T California – LER23 at 30161 Aventura; Circle K Store #2709428 at 31521 Santa Margarita Parkway; Del Mar Petroleum Inc. #2 at 30832 Santa Margarita Parkway; Tesoro (Shell) #68592 at 30114 Santa Margarita Parkway; and Zapa Energy, Inc. at 29880 Santa Margarita Parkway.

⁵ State of California Water Resources Control Board, *GeoTracker Database – Orange County*, <http://geotracker.waterboards.ca.gov/search?cmd=search&hidept=True&status=&reporttitle=Orange+County&county=Orange>, accessed on April 26, 2018.



EnviroStor

The DTSC's EnviroStor database is an online search and Geographic Information System (GIS) tool. EnviroStor provides access to detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. EnviroStor allows someone to search for information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted, or have been completed under DTSC's oversight. The EnviroStor database provides lists of the following site types:

- Cleanup Sites
 - Federal Superfund (National Priority List);
 - State Response;
 - Voluntary Cleanup;
 - School Cleanup; and
 - Corrective Action.
- Hazardous Waste Facilities
 - Permitted – Operating;
 - Post-Closure Permitted; and
 - Historical Non-Operating.

EnviroStor provides site/facility name, site/facility type, clean-up status, address/description, any restricted use (recorded deed restrictions), past use(s) that caused contamination, potential contaminants of concern, potential environmental media affected, site history, planned, and completed activities. As of April 27, 2018, there is one State Response Site in the City: the Trabuco Bombing Range (J09CA020900), and 1,800-acre property partially located within O'Neill Regional Park.^{6,7} The cleanup status of this site is Inactive – Needs Evaluation. A cleanup status of Inactive – Needs Evaluation identifies non-active cleanup sites where DTSC has determined a Preliminary Environmental Assessment or other evaluation is required.

TRANSPORT OF HAZARDOUS MATERIALS/WASTE

Over 250 miles of interstate highway and 719 miles of other major transportation routes run through Orange County. The CHP has designated these highways as hazardous materials transportation corridors. Hazardous substance incidents could occur within the

6 California Department of Toxic Substances Control, *EnviroStor*, https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM,COLUR&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29, accessed on April 27, 2018.

7 California Department of Toxic Substances Control, *EnviroStor*, *Trabuco Bombing Range (J09CA020900)(30970010)*, https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=30970010, accessed on August 22, 2018.



Study Area due to the transportation systems (major arterials and SR-241) that traverse the area. These transportation routes are used to transport hazardous materials (among other materials/freight) from suppliers to users. Transportation accidents involving hazardous materials could occur on any of the routes, potentially resulting in explosions, physical contact by emergency response personnel, environmental degradation, and exposure to the public via airborne exposure.

ILLEGAL DISPOSAL

Illegal disposal of toxic materials and hazardous materials/waste on public or private property is a criminal act due to the health and safety threat it poses. As the costs and restrictions increase for legitimate hazardous waste disposal sites, illegal dumping of hazardous materials may also increase. In general, illegal disposal has not been an issue within the Study Area.

LANDFILLS

Landfills can have adverse impacts on surrounding properties, the ground, and groundwater below the landfill. The concern from these facilities is related to the kind of materials disposed of in them, which can consist of non-hazardous (Class III), hazardous waste (Class I), or a combination of both (Class II). There are no active or inactive landfill sites located in the City of Rancho Santa Margarita.⁸

OTHER POTENTIAL SOURCES OF HAZARDOUS MATERIALS

Asbestos Containing Materials

Asbestos is a common name for a group of naturally occurring fibrous silicate minerals that are made up of strong durable fibers, which vary in size and physical shape. Asbestos is strong, incombustible, and corrosion resistant. Because of its physical properties, asbestos was used in many commercial products in construction and many other industries, since prior to the 1940s and up until the early 1970s. Asbestos is commonly found in various manmade products including insulation, ceiling and floor tiles, roof shingles, cement, and automotive brakes and clutches.

Asbestos fibers are relatively stable in the environment, because asbestos is a mineral. Asbestos fibers do not evaporate into air. Asbestos Containing Materials (ACMs) are building materials containing more than one (1) percent asbestos (some State and regional regulators impose a one-tenth of one [0.10] percent threshold). ACMs that can be crushed into a powder are termed "friable asbestos." When ACMs become friable, there is chance that asbestos fibers can become suspended in air.

It is under these conditions that airborne asbestos fibers represent the most significant risk to human health. Asbestos particles do not migrate through soil. Asbestos fibers do not dissolve in water, but under certain conditions, could become water borne and accumulate in steam beds and sediment. Asbestos is a potential health concern, since

⁸ CalRecycle, Solid Waste Information System, *SWIS Sites in Orange County*, <http://www.calrecycle.ca.gov/SWFacilities/Directory/SearchList/List?COUNTY=Orange>, accessed on April 27, 2018.



long term, chronic inhalation exposure to high levels of asbestos can cause lung diseases including asbestosis, mesothelioma, and/or lung cancer. The City of Rancho Santa Margarita was developed as a series of master planned communities beginning in 1986.⁹ As a result, the potential for ACMs is considered remote.

Several Federal, State, and local agencies regulate asbestos. Generally, worker exposure is regulated by the Federal OSHA and its State counterpart Cal/OSHA.

Lead-Based Paints

Until 1978, when the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead, many homes were treated with paint containing some amount of lead. It is estimated that over 80 percent of all housing built prior to 1978 contains some lead-based paint (LBP). The mere presence of lead in paint may not constitute a material to be considered hazardous. In fact, if in good condition (no flaking or peeling), most intact LBP is not considered to be a hazardous material. In poor condition, LBPs can create a potential health hazard for building occupants, especially children. As stated, the City was developed as a series of master planned communities beginning in 1986. As a result, the potential for LBPs to be found in the City is considered remote.

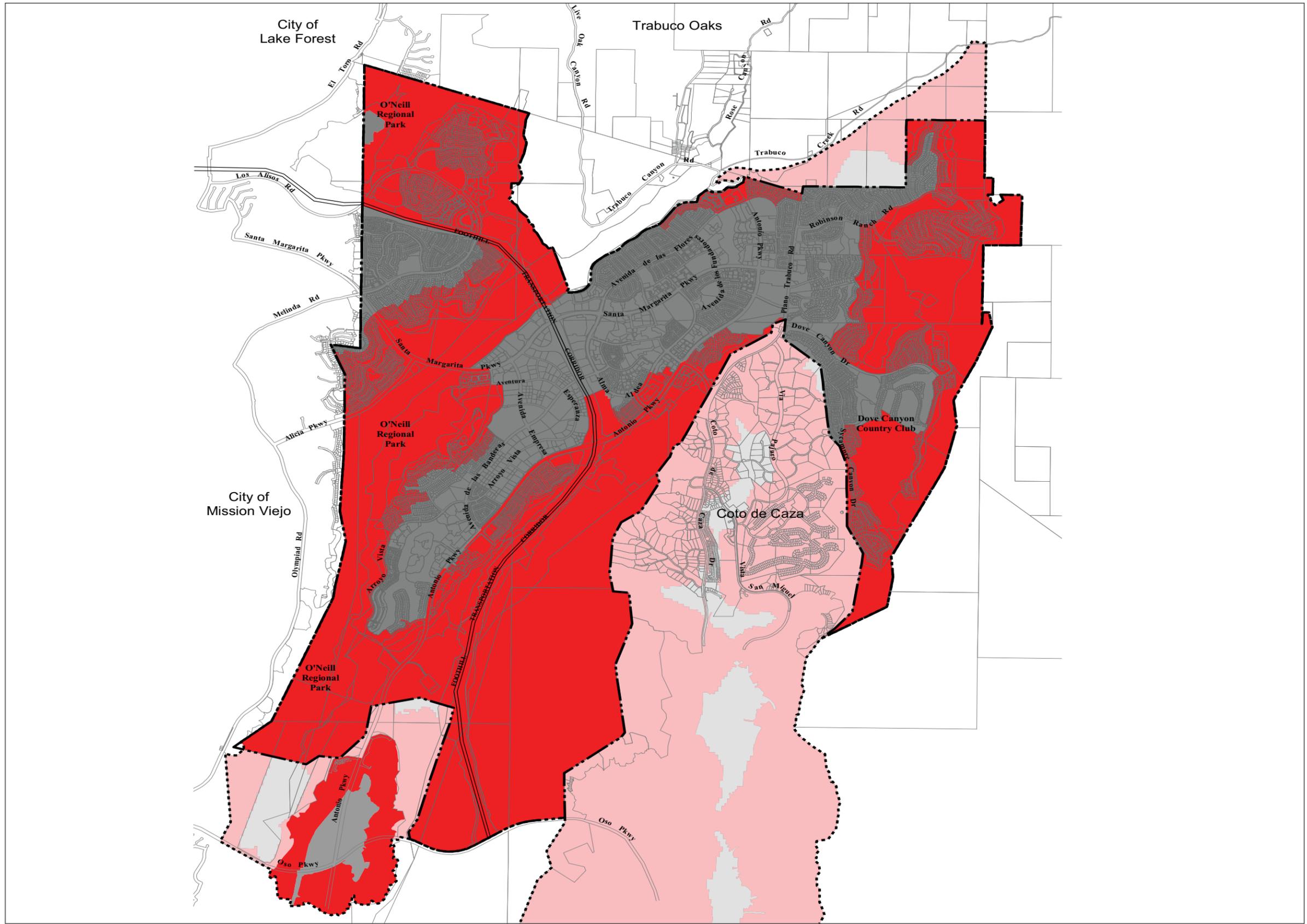
Airport Hazards

There are no public or private airports within the City of Rancho Santa Margarita. Further, the City is not located within an Airport Land Use Plan; refer to Section 9.0, *Effects Found Not To Be Significant*.

Wildland Fire Hazards

Given the large portion of land that remains as open space within the Study Area, including rugged topography with highly flammable native vegetation, wildland fires are a significant risk. The California Government Code requires safety elements of general plans to identify land designated as a State Responsibility Area for fire services and land designated within a very high fire hazard severity zone (VHFHSZ). CAL FIRE prepares wildfire hazard severity maps including mapping areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors; refer to Exhibit 5.10-1, *Wildfire Hazard Areas*. These zones, referred to as Fire Hazard Severity Zones (FHSZ), define the application of various mitigation strategies and influence how people construct buildings and protect property to reduce risk associated with wildland fires. VHFHSZs are located in the west, south, and east areas of the City.

⁹ City of Rancho Santa Margarita, *History*, <https://www.cityofrsm.org/399/History>, accessed on April 27, 2018.



LEGEND

Local Responsibility Area

- VHFHSZ
- Non-VHFHSZ

State and Federal Responsibility Area

- VHFHSZ
- Non-VHFHSZ

- City Boundary
- Sphere of Influence

VHFHSZ - Very High Fire Hazard Severity Zone



Sources: CALFire Fire Resource and Assessment Program (FRAP), October 2011 and Orange County Local Area Formation Commission, 2013.



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Wildland fires have occurred in Orange County, particularly in the fall, ranging from small localized fires to disastrous fires covering thousands of acres. The most severe fires have typically occurred during Santa Ana wind conditions. Wildland fires are difficult to control due to adverse weather conditions, such as excessive wind and heat; large quantities of combustible fuel; inaccessible terrain; nonexistent or very limited water supply; and large fire frontage requiring disbursement of fire forces.

Fire protection challenges within the Study Area include higher density residential areas and urbanized areas located within and directly adjacent to high hazard wildland areas. As the number of structural features increase, so does the incidence of fire. Generally, certain development patterns pose more difficult fire problems. These include multi-story, wood frame, high-density apartment developments, multi-story research developments, large continuous developed areas with combustible roofing materials, and facilities that use and/or store hazardous materials. Features of structural conditions that affect fire control include the type and use of structure, area of building, number of stories, roof covering, and exposures to the building.

5.10.4 SIGNIFICANCE THRESHOLDS AND CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions relating to hazards and hazardous materials. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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 create a significant hazard to the public or the environment;
- 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 in the project area (as explained in Section 9.0, *Effects Found Not To Be Significant*, further analysis of this topic is not required in this EIR;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area (as explained in Section 9.0, *Effects Found Not To Be Significant*, further analysis of this topic is not required in this EIR;



- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (as explained in Section 9.0, *Effects Found Not To Be Significant*, further analysis of this topic is not required in this EIR; and/or
- 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.

5.10.5 PROJECT IMPACTS AND MITIGATION MEASURES

ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS

- **FUTURE DEVELOPMENT IN THE CITY WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS.**

Impact Analysis: Many types of businesses utilize various chemicals and hazardous materials, and their routine business operations involve chemicals that are manufactured, warehoused, or transported. Currently, there are a variety of existing business operations in the City that use, store, or transport hazardous substances, as well as generate hazardous waste. Implementation of the General Plan Update would accommodate the future development of residential and non-residential uses. Increased development would result in an increase in the routine transport, use, and storage of hazardous materials in the City, potentially resulting in accidental releases. Risk of upset can involve scenarios that could adversely affect the public or the environment through accidental release of hazardous materials. Exposure of persons to hazardous materials could also occur through the operations of future developments associated with the improper handling of hazardous materials/wastes, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. Typical incidents that could create a hazard involve accidental releases of hazardous materials including accidents during transport causing a “spill” of a hazardous materials and/or natural disasters causing the unauthorized release of a substance. If not cleaned up immediately and completely, these and other types of incidents could cause contamination of soil, surface water and groundwater, in addition to any toxic vapors that might be generated. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

All future commercial uses where the maximum quantity of a regulated substance exceeds the specified threshold quantity (500 pounds of a solid, 55 gallons of a liquid, or 200 cubic feet of a gas) would be required to register with the OCHCA EHD (CUPA) and prepare a Risk Management Plan. As required under California Code of Regulations Title 27, Section 15200, the OCHCA EHD, as the CUPA with jurisdiction over the Study Area, is required to routinely inspect all hazardous materials or chemicals used by future commercial uses to ensure that these materials are being stored, handled, and used in accordance with all applicable Federal, State, and local standards and regulations.



OCFA has several guidelines for special hazards uses, including refrigeration systems, aboveground fuel dispensing, combustible storage, plant processing, etc. that require special requirements and forms to be completed for OCFA's plan review and/or inspections. Further, the transport of hazardous materials to and from the respective commercial uses would be subject to compliance with all applicable Caltrans protocols. The City of Rancho Santa Margarita works to minimize accidents and health risks from hazardous materials through its corporation with Federal, State, and County agencies; refer to Safety Element Policy 5.3. Specifically, the City works with the County of Orange to implement the applicable portions of the County Hazardous Waste Management Plan and the Hazardous Materials Area Plan and the OCHCA EHD to administer RMPs within the City.

Compliance with the requirements of Federal, State, and local laws and regulations regarding the use and storage of hazardous materials would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the General Plan Update would be less than significant.

Proposed General Plan Update Goals and Policies:

SAFETY ELEMENT

Goal 5: Protect the community from hazards related to air pollution, hazardous materials and ground transportation.

Policy 5.3: Cooperate with responsible Federal, State, and county agencies to minimize the risk to the community from the use, transportation, disposal, and storage of hazardous materials through the City.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

SHORT-TERM CONSTRUCTION-RELATED ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS

- **SHORT-TERM CONSTRUCTION-RELATED ACTIVITIES ASSOCIATED WITH FUTURE DEVELOPMENT COULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT.**

Impact Analysis: Construction activities associated with implementation of the General Plan Update could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions. Potential construction-related impacts associated with accidental release of hazardous materials are discussed below.



Demolition. Specific development projects have not been identified. However, future development accommodated through implementation of the General Plan Update could involve the demolition of existing structures and buildings as areas within the City are redeveloped. As discussed, given the age of existing development, it is unlikely that these buildings would contain LBP, ACM, and/or other contaminants, which are typically present in buildings and structures constructed prior to 1978. Nonetheless, all demolition that could result in the release of ACMs or LBPs would be conducted according to Federal and State regulations which govern the renovation and demolition of structures where ACMs and LBPs are present. The National Emission Standards for Hazardous Air Pollutants mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. In accordance with SCAQMD Rule 1403, if ACM material is found, abatement of asbestos would be required prior to any demolition activities. If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste would be required to be evaluated independently from the building material by a qualified Environmental Professional in accordance with California Code of Regulations Title 8, Section 1532.1. If LBP is found, abatement would be required to be completed by a qualified Lead Specialist prior to any demolition activities. Compliance with existing regulations related to ACM and LBP would reduce potential impacts to a less than significant level.

Soil and Groundwater Contamination in Unknown Contaminated Sites. Future development accommodated through implementation of the General Plan Update could involve grading and excavation activities which could expose construction workers and the public to previously unknown hazardous substances present in the soil or groundwater. Exposure to contaminants could occur if the contaminants migrated to surrounding areas or if contaminated zones were disturbed at the contaminated location. Grading and excavation activities could also reveal previously unidentified USTs. Although UST removal activities could pose risks to workers and the public, potential risks would be minimized by managing the tank according to existing OCHCA EHD's standards. Potential impacts to groundwater would be dependent upon the type of contaminant, the amount released, and depth to groundwater at the time of the release.

Mitigation Measure HAZ-1 requires preparation of a project-specific Phase I Environmental Site Assessment (ESA) for any properties identified on any list of hazardous materials compiled pursuant to Government Code Section 65962.5. The Phase I ESA would be prepared in accordance with ASTM Standard Practice E 1527-05 or the Standards and Practices for All Appropriate Inquiry (AAI), prior to any demolition or construction activities. The Phase I ESA would identify specific Recognized Environmental Conditions (RECs) which may require further sampling/remedial activities by a qualified Hazardous Materials Specialist with Phase II/site characterization experience. If the Phase I ESA reveals RECs, the Hazardous Materials Specialist would be charged with identifying remedial activities, which would be strictly controlled by local, State, and Federal requirements.

Pursuant to Safety Element Policy 5.3, the City of Rancho Santa Margarita would cooperate with responsible Federal, State, and County agencies to minimize the risk to the community from the use, transportation, disposal, and storage of hazardous materials



through the City. Compliance with existing regulations and Mitigation Measure HAZ-1 would reduce potential impacts to a less than significant level.

Proposed General Plan Update Goals and Policies:

SAFETY ELEMENT

Goal 5: Protect the community from hazards related to air pollution, hazardous materials and ground transportation.

Policy 5.3: Cooperate with responsible Federal, State, and county agencies to minimize the risk to the community from the use, transportation, disposal, and storage of hazardous materials through the City.

Mitigation Measures:

HAZ-1 Prior to issuance of any grading or building permit (whichever occurs first) for a project subject to California Environmental Quality Act (CEQA) review (meaning, non-exempt projects) on a site identified on any list of hazardous materials compiled pursuant to Government Code Section 65962.5, a formal Phase I Environmental Site Assessment (ESA) shall be prepared in accordance with ASTM Standard Practice E 1527-05 or the Standards and Practices for All Appropriate Inquiry (AAI). The Phase I ESA shall identify specific Recognized Environmental Conditions (RECs), which may require further sampling/remedial activities by a qualified Hazardous Materials Specialist with Phase II/site characterization experience prior to demolition, and/or construction. The Hazardous Materials Specialist shall identify proper remedial activities appropriate to the hazardous material(s) found (e.g., removal and disposal; bio-remediation; pump and treat; soil vapor extraction, and in situ oxidation), as necessary.

Level of Significance After Mitigation: Less Than Significant Impact With Mitigation Incorporated.

LONG-TERM OPERATIONS-RELATED ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS

- **LONG-TERM OPERATION ACTIVITIES ASSOCIATED WITH FUTURE DEVELOPMENT WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT.**

Impact Analysis: Long-term operation activities associated with future development could 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. The General Plan Update does not propose site-specific development; thus, specific hazardous materials that could be accidentally released cannot be predicted at this time. Typical incidents that could occur due to the



accidental release of hazardous materials include leaking USTs, spills during transport, inappropriate storage or use, and/or natural disasters.

If not cleaned up immediately and completely, these and other types of incidents could cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

Leaking Storage Tanks. Future businesses handling chemicals and/or wastes stored in aboveground or underground storage tanks would be subject to compliance with the OCHCA EHD's UST and APST programs. The UST and APST programs are administered by the OCHCA EHD to ensure that hazardous materials stored in underground and aboveground petroleum tanks are not released into the environment, potentially polluting ground and surface waters. Owners or operators of APST facilities would be required to file a tank facility statement and develop and implement a SPCC Plan. Compliance with the OCHCA EHD's UST and APST programs would reduce the likelihood and severity of accidents involving leaking storage tanks, and impacts would be less than significant in this regard.

Off-Site Transport. Transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. As discussed, hazardous substance incidents could occur within the Study Area due to the transportation systems (major arterials and SR-241) that traverse the area. Accidental releases would most likely occur along Santa Margarita Parkway, Antonio Parkway, Aventura, and Arroyo Vista, where the majority of commercial properties within the City containing hazardous materials are located. Future developments would be subject to compliance with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including all applicable Caltrans protocols. Compliance with all applicable Federal, State, and local laws related to the transportation of hazardous materials would reduce the likelihood and severity of accidents during transit, and impacts would be less than significant in this regard.

Storage and Handling. Implementation of the General Plan Update would accommodate the future development of non-residential uses. Although unknown at this time, these future land uses could involve the storage and handling of hazardous materials. All hazardous materials would be required to be stored in designated areas in accordance with existing Federal, State, and local laws related to the storage of hazardous materials. Future development involving the storage and handling of hazardous materials would be required to maximize containment and provide for prompt and effective clean-up, if an accidental release occurs. As discussed above, the OCHCA EHD and OCFA would routinely inspect all hazardous materials or chemicals used by future commercial uses to ensure that these materials are being stored and handled in accordance with all applicable Federal, State, and local standards and regulations. Compliance with all applicable Federal, State, and local laws related to the storage and handling of hazardous materials would reduce the likelihood and severity of accidents, and impacts would be less than significant in this regard.



Proposed General Plan Update Goals and Policies:

SAFETY ELEMENT

Goal 5: Protect the community from hazards related to air pollution, hazardous materials and ground transportation.

Policy 5.3: Cooperate with responsible Federal, State, and county agencies to minimize the risk to the community from the use, transportation, disposal, and storage of hazardous materials through the City.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

HAZARDOUS MATERIALS IN PROXIMITY TO A SCHOOL

- **FUTURE DEVELOPMENT WITHIN THE CITY COULD EMIT OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL.**

Impact Analysis: The City of Rancho Santa Margarita is served by a variety of public and private schools; refer to Section 5.15, School Facilities. As noted above, construction activities associated with future development could expose the public to hazardous materials such as ACMs, LBPs, or other hazardous materials. Excavation and grading activities associated with future development could expose the public to unknown hazardous materials present in soil or groundwater, which would require remediation activities. Remediation, if any, would include potential transport of hazardous materials to an approved landfill facility. As a result, construction activities could emit or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Compliance with Mitigation Measures HAZ-1 through HAZ-3 and the established regulatory framework would reduce impacts related to the accidental release of hazardous materials during construction to a less than significant level.

Future commercial and business uses supported by implementation of the General Plan Update could utilize, transport, store, or dispose of hazardous materials during day to day business operations. As a result, future development within the City could potentially emit or handle hazardous materials within one-quarter mile of an existing or proposed school. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations, which would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the General Plan Update would be less than significant.



Proposed General Plan Update Goals and Policies:

SAFETY ELEMENT

Goal 5: Protect the community from hazards related to air pollution, hazardous materials and ground transportation.

Policy 5.3: Cooperate with responsible Federal, State, and county agencies to minimize the risk to the community from the use, transportation, disposal, and storage of hazardous materials through the City.

Mitigation Measures: Refer to Mitigation Measure HAZ-1.

Level of Significance After Mitigation: Less Than Significant Impact With Mitigation Incorporated.

HAZARDOUS MATERIAL SITES

- **FUTURE DEVELOPMENT WITHIN THE CITY COULD BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITE COMPILED PURSUANT TO GOVERNMENT CODE SECTION 65962.5 AND, AS A RESULT, CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT.**

Impact Analysis: GeoTracker search results indicate that there are the following eight hazardous materials sites within the City.¹⁰

- LUST Cleanup Sites
 - Fire Station #45 (T0605991308) at 30131 Aventura;
 - Mobil Gas Station (T0605966905) at 31421 Santa Margarita Parkway;
 - Plano Lift Station Force Main Sewage Spill (T10000002278) located along Antonio Parkway;
- Permitted UST Facilities
 - AT&T California – LER23 at 30161 Aventura;
 - Circle K Store #2709428 at 31521 Santa Margarita Parkway;
 - Del Mar Petroleum Inc. #2 at 30832 Santa Margarita Parkway;
 - Tesoro (Shell) #68592 at 30114 Santa Margarita Parkway; and

¹⁰ State of California Water Resources Control Board, *GeoTracker Database – Orange County*, <http://geotracker.waterboards.ca.gov/search?cmd=search&hidept=True&status=&reporttitle=Orange+County&county=Orange>, accessed on April 26, 2018.



- Zapa Energy, Inc. at 29880 Santa Margarita Parkway.

Additionally, EnviroStor search results indicate that there is one State Response Site in the City: the Trabuco Bombing Range (J09CA020900).¹¹ Future development associated with implementation of the General Plan Update would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities occurring on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the DTSC and the San Diego RWQCB prior to construction. Impacts would be reduced to less than significant following compliance with existing Federal, State, and local regulations.

Proposed General Plan Update Goals and Policies:

SAFETY ELEMENT

Goal 5: Protect the community from hazards related to air pollution, hazardous materials and ground transportation.

Policy 5.3: Cooperate with responsible Federal, State, and county agencies to minimize the risk to the community from the use, transportation, disposal, and storage of hazardous materials through the City.

Mitigation Measures: Refer to Mitigation Measure HAZ-1.

Level of Significance After Mitigation: Less Than Significant Impact With Mitigation Incorporated.

WILDLAND FIRES

- **FUTURE DEVELOPMENT IN THE CITY WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING WILDLAND FIRES, INCLUDING WHERE WILDLANDS ARE ADJACENT TO URBANIZED AREAS OR WHERE RESIDENCES ARE INTERMIXED WITH WILDLANDS.**

Impact Analysis: As depicted on Exhibit 5.10-1, wildland fires within the City are a significant risk given the sizable portion of land that remains as open space within the Study Area, including rugged topography with highly flammable native vegetation. Almost all open space land within the City is identified as a VHFHSZ in addition to portions of several residential communities, including Rancho Trabuco, Robinson Ranch, and Dove Canyon. VHFHSZs are also present within the adjacent communities of Trabuco Oaks to the north and Coto de Caza to the south.

The City manages the risk of wildfire to people or structures through its land use planning practices, Municipal Code, and General Plan policies. Areas posing a significant risk to

¹¹ California Department of Toxic Substances Control, *EnviroStor*, https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM,COLUR&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29, accessed on April 27, 2018.



the City are subject to the Public Resources Code, Sections 4291-4299, which require property owners to conduct maintenance to reduce the fire danger. Required fire maintenance include, but are not limited to, maintaining 100 feet of defensible space along all sides of a structure or up to property line; removing dead or dying vegetative materials, trees, and/or shrubs; constructing fire breaks or other appropriate vegetation management techniques around fire-sensitive land uses (i.e., hospitals, adult residential care facilities, schools, storage tanks, and hazardous materials facilities); and maintaining vegetative clearings near electrical transmission or distribution lines. The OCFA has responsibility for wildfire suppression on all private land in the Study Area. Any proposed development plans are reviewed by the OCFA to determine if fuel modification plans or other preventative measures are required. The fire flow rates from the Uniform Fire Code are also implemented by the OCFA and reviewed for any new development.

The Rancho Santa Margarita Fire Code (Municipal Code Chapter 10.06, *Adoption of the Fire Code*, and Chapter 10.07, *Amendments to the Fire Code*) adopts the California Fire Code and relevant amendments and serves as the City's main ordinance to reduce the risk of structural fire hazards. The Rancho Santa Margarita Fire Code also includes specific site safety requirements for development within wildland-urban interface areas and vegetation management. Specifically, Municipal Code Section 10.07.090, *Chapter 49 – Requirements for Wildland-Urban Interface Fire Areas*, requires all new developments to prepare and implement a fuel modification plan that meets the criteria set forth in the Fuel Modification Section of OCFA Guideline C-05, *Vegetation Management Guideline - Technical Design for New Construction Fuel Modification Plans and Maintenance Program*.

In addition, several policies intended to reduce the risk of life and property from wildfire hazards are included in the General Plan Update. Safety Element Policy 4.3 and Safety Element Policy 4.4 would ensure new land uses avoid or minimize wildlife risk and essential public facilities are located outside of high fire hazard severity zones when feasible. Safety Element Policy 4.6 requires new development to be located, designed, and constructed to provide adequate defensibility and fuel modification zones, and minimize the risk of loss from fires through pre-development review by OCFA and on-going implementation of OCFA Fire Prevention Programs. Additionally, Safety Element Policies 4.7 and 4.8 encourage coordination with OCFA, Santa Margarita Water District, and Trabuco Canyon Water District to ensure new developments have adequate infrastructure for water supply and fire flow and incorporate fire safe design (e.g., sufficient ingress/egress, evacuation routes, emergency vehicle access, and defensible spaces). The City would also continue to coordinate with Homeowner Associations, Business Park Associations, and community foundations to maintain fire retardant landscaping and buffer zones in areas of high wildfire risk (Safety Element Policy 2.4). Future development would be sited in accordance with the Rancho Santa Margarita Land Use Map and would be subject to compliance with the Rancho Santa Margarita Fire Code to reduce the risk of wildfire to people or structures. As a result, project implementation would not expose people or structures to a significant risk involving wildland fires and a less than significant impact would occur in this regard.



Proposed General Plan Update Goals and Policies:

SAFETY ELEMENT

Goal 2: Reduce the risk to the community from hazards related to geologic conditions and seismic activity.

Policy 2.4: Reduce the risk of wildfire hazards by working with Homeowner Associations, Business Park Associations, and community foundations to maintain fire retardant landscaping and buffer zones in areas of high wildfire risk.

Goal 4: Protect the community from loss of life or injury and damage to property due to wildfire hazards.

Policy 4.1: Reduce the risk of wildfire hazards by working with Homeowner Associations, Business Park Associations, and other property owners and Orange County Fire Authority (OCFA) to maintain fire retardant landscaping and buffer zones in areas of high wildfire risk.

Policy 4.2: Work with local, State, and Federal agencies to update, monitor, and maintain the most current fire hazard and fire protection information to disseminate to the public.

Policy 4.3: Identify methods to avoid or minimize wildfire risk and damage associated with new land uses.

Policy 4.4: Require essential public facilities to be located and designed to minimize potential wildfire risk, including locating outside of high fire hazard severity zones when feasible.

Policy 4.5: Reduce wildfire risks through adoption and implementation of triennial updates to the California Fire Code.

Policy 4.6: Require new development to be located, designed, and constructed to provide adequate defensibility and fuel modification zones, and minimize the risk of loss resulting from fires through pre-development review by OCFA and through on-going implementation of OCFA Fire Prevention Programs.

Policy 4.7: In coordination with OCFA, encourage all new developments to incorporate fire safe design, including sufficient ingress/egress, evacuation routes, emergency vehicle access, defensible space, visible home addressing and signage, and fuel modification zones.

Policy 4.8: Coordinate with OCFA, Santa Margarita Water District, and Trabuco Canyon Water District to ensure adequate infrastructure for water supply and fire flow in new and existing developments.

Mitigation Measures: No mitigation is required.



Level of Significance: Less Than Significant Impact.

5.10.6 CUMULATIVE IMPACTS

- **FUTURE DEVELOPMENT RESULTING FROM IMPLEMENTATION OF THE GENERAL PLAN UPDATE COULD RESULT IN CUMULATIVE IMPACTS RELATED TO HAZARDS AND HAZARDOUS MATERIALS.**

Impact Analysis: Future development accommodated through implementation of the General Plan Update would result in an increase in risk of exposure to hazardous materials, including through excavation, spills, or releases. The land uses allowed under the General Plan could also involve the routine use, storage, transport, or disposal of hazardous materials. In addition, new development may be located within areas classified as VHFHSZs. Potential short-term construction related impacts associated with future development involving accidental release of hazardous materials would be less than significant following compliance with Mitigation Measures HAZ-1 through HAZ-3, as well as SCAQMD Rule 1403. All future development activities requiring the routine use, storage, transport, or disposal of hazardous materials would be subject to all applicable Federal, State, and local standards in place for hazardous materials. Project implementation would not expose people or structures to a significant risk involving wildland fires following conformance with the Rancho Santa Margarita Fire Code.

As with projects resulting from implementation of the General Plan Update, cumulative development would be required to evaluate individual hazards and hazardous materials impacts at the project-level. Development occurring within the region would be required to comply with the Federal, State, and local regulatory framework regarding the use, disposal, and transport of hazardous materials. For this reason, implementation of the General Plan Update would not result in cumulatively considerable public health or safety impacts with implementation of recommended mitigation measures.

Proposed General Plan Update Goals and Policies: Refer to the General Plan Update goals and policies cited above.

Mitigation Measures: Refer to Mitigation Measure HAZ-1.

Level of Significance After Mitigation: Less Than Significant Impact With Mitigation Incorporated.

5.10.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Hazards and hazardous materials impacts associated with implementation of the General Plan Update would be less than significant with implementation of the identified mitigation measures. No significant unavoidable hazards and hazardous materials impacts would occur as a result of the General Plan Update.



5.10.8 SOURCES CITED

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State Water Resources Control Board, *San Diego Region – Underground Storage Tank (UST) Cleanup Program*, https://www.waterboards.ca.gov/sandiego/water_issues/programs/ground_water_basin/ust_program.html, accessed on April 26, 2018.



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