

4.6 HAZARDS AND HAZARDOUS MATERIALS

4.6.1 Introduction

This section evaluates the potential impacts of the proposed General Plan Update on human health and the environment due to exposure to hazardous materials or conditions within the City of Newport Beach. The information presented in this section is summarized from the Hazards Assessment Study prepared for the City in 2003 by Earth Consultants International as well as the proposed General Plan Update Safety Element. In addition, information was also obtained from the City's Emergency Management Plan. A hazardous material is defined as any material that, due to its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons, or harmful to the environment if released.

During the Initial Study process, it was determined that the proposed project would have potential impacts for seven of the eight hazards and hazardous materials that CEQA Guidelines include as criteria for determining significance. It was determined that no safety hazard associated private airstrips would occur upon implementation of the proposed General Plan Update because there are no existing private airstrips within the City. Therefore, this impact is not further analyzed in the EIR. Full bibliographic entries for all reference materials are provided in Section 4.6.6 (References) of this section.

Four comment letters associated with hazards and hazardous materials were received in response to the IS/NOP circulated for the proposed General Plan Update. The Environmental Quality Affairs Citizens Advisory Committee for the City of Newport Beach requested that the DEIR address potential impacts caused by the siting of school facilities or residential developments on hazardous materials sites, as well as the possible mitigation of these impacts. The Department of Toxic Substances Control requested that the DEIR identify and determine methods for adhering to all applicable Federal and State regulations governing hazards and hazardous materials. The John Wayne Airport (JWA) requests that the DEIR identify measures intended to minimize the safety impacts from aircraft operations on existing and proposed residences. The Airport Land Use Commission also requests that the DEIR address height restrictions for buildings located in the vicinity of the JWA imposed by the Federal Aviation Administration, and suggests that the density and intensity limitations be consistent with those provided by the Airport Environs Land Use Plan Height Restriction Zone Map for JWA. Section 4.6.5 (Project Impacts, Mitigation Measures, and Proposed Policies) provides such an analysis.

Potential impacts related to toxic air contaminants and water quality are discussed in Section 4.2 (Air Quality) and Section 4.7 (Hydrology and Water Quality).

4.6.2 Existing Conditions

■ Definitions

The United States Environmental Protection Agency (EPA) defines a hazardous waste as a substance that 1) may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; and 2) that poses a substantial present or potential future hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed. Hazardous waste is also defined as ignitable, corrosive, explosive, or reactive (Federal Code of Regulations—FCR—Title 40: Protection of the Environment, Part 261).

A material may also be classified as a hazardous material if it contains defined amounts of toxic chemicals. The EPA has developed a list of specific hazardous wastes that are in the forms of solids, semi-solids, liquids, and gases. Producers of such wastes include private businesses, and Federal, State, and local government agencies. The EPA regulates the production and distribution of commercial and industrial chemicals to protect human health and the environment. The EPA also prepares and distributes information to further the public's knowledge about these chemicals and their effects, and provides guidance to manufacturers in pollution prevention measures, such as more efficient manufacturing processes and recycling used materials.

The State of California defines hazardous materials as substances that are toxic, ignitable or flammable, reactive, and/or corrosive. The State also defines an extremely hazardous material as a substance that shows high acute or chronic toxicity, is carcinogenic (causes cancer), has bioaccumulative properties (accumulates in the body's tissues), is persistent in the environment, or is water reactive (California Code of Regulations, Title 22; California Health and Safety Code, Division 20, Chapter 6.5).

■ Hazardous Materials Use

Hazardous materials in the City are routinely used, stored, and transported in commercial/retail businesses as well as in educational facilities, hospitals, and households. Hazardous materials users and waste generators in the City include businesses, public and private institutions, and households. Federal, State, and local agency databases maintain comprehensive information on the locations of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require accidental release scenario modeling and risk management plans to protect surrounding land uses.

■ Transportation of Hazardous Materials

Newport Beach is closely bordered by the San Diego Freeway (I-405) to the north, the San Joaquin (73) Toll Road to the east, and Pacific Coast Highway (PCH) to the south. Newport Boulevard is a 6-lane primary arterial highway, which extends from the terminus of the Costa Mesa Freeway (SR 55), near the west side of the City. Many other four- and six-lane streets provide easy access to the north, northeast, and eastern portions of the City. Due to the volume of traffic and the nature of the materials transported

on these roadways, there is a heightened risk of a hazardous material leak or spill in the Newport Beach area. The transport of hazardous materials through the City of Newport Beach is regulated by the California Department of Transportation (Caltrans) and California Highway Patrol (CHP).

The EPA lists the following four transporters of hazardous waste in the City:

- Innovative Waste Control, Inc.—1300 Bristol Street N., Suite 100
- R.E. Mockett—1601 Antigua
- Roadway Construction Company Inc.—4101 Westerly Place, Suite 101
- WBR Transportation, LLC—2240 Newport Boulevard

Because Newport Beach has limited industrial land uses, most transportation of hazardous materials on the portions of the freeways and major roads that extend through the City is most likely conducted by companies that are not based out of Newport Beach.

■ Existing Hazardous Materials Sites

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

The *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) was developed to protect the water, air, and land resources from the risks created by past chemical disposal practices. This act is also referred to as the Superfund Act, and the sites listed under it are referred to as Superfund sites. Under CERCLA, the EPA maintains a list, known as CERCLIS, of all contaminated sites in the nation that have in the past or are currently undergoing clean-up activities. CERCLIS contains information on current hazardous waste sites, potential hazardous waste sites, and remedial activities. This includes sites that are on the National Priorities List (NPL) or being considered for the NPL.

According to the EPA, there are two CERCLIS sites in the City of Newport Beach (See Table 4.6-1), but neither of them is listed in the National Priority List (NPL). Furthermore, one of the sites is considered by the EPA as a “No Further Remedial Action Planned (NFRAP) site, while the other site has reportedly been cleaned up, although the EPA data is not yet reflecting this information. Given that both sites appear to no longer pose an environmental hazard to the area, they have not been included in the list of most significant hazardous sites in the City of Newport Beach.

<i>Facility Name</i>	<i>Facility Address</i>	<i>EPA ID</i>	<i>Status</i>
Cagney Trust	SW Corner of 32nd St. and Newport Blvd	CA0000187997	Not on NPL—NFRAP
Ford Aerospace Facility	3501 Jamboree Blvd. #500	CAD983623257	Not on NPL—PA Ongoing

SOURCES: www.epa.gov/superfund/sites/arcsites/index/htm, <http://www.epa.gov/superfund/sites/cursites/index.htm>, http://oaspub.epa.gov/enviro/multisys_web.report

Toxic Release Inventory

The Toxics Release Inventory (TRI) is an EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain industry groups as well as Federal facilities. TRI sites are known to release toxic chemicals into the air. The EPA closely monitors the emissions from these facilities to ensure that their annual limits are not exceeded. TRI reports provide accurate information about potentially hazardous chemicals and their uses to the public in an attempt to give communities more power to hold companies accountable for their actions and to make informed decisions about how such chemicals should be managed.

According to the EPA records, there are two facilities in the Newport Beach area that are listed for year 2004 TRI (the most recently available data), as shown below in Table 4.6-2.

Table 4.6-2 Toxic Release Inventory of Facilities in the Newport Beach Area

<i>Facility Name, Address</i>	<i>EPA ID</i>	<i>Chemicals</i>
Newport Fab LLC (DBA Jazz Semiconductor) 4321 Jamboree Road	CAR000113233	Ammonia, hydrogen fluoride, nitric acid. A formal enforcement action was filed by the EPA for this site on 1/29/2003.
Hixson Metal Finishing 829 Production Place	CAD008357295	Lead, nitric acid.

SOURCES: U.S. Environmental Protection Agency, 2004, TRI On-site and Off-site Reported Releases in Orange County, California; List of EPA-regulated Facilities in Envirofacts (<http://oaspub.gov/enviro/>). Accessed on 12/12/05.

Hazardous Waste Generators

Many types of businesses can be producers of hazardous waste. Small businesses such as 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. Generally, small-quantity generators are facilities that produce 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).

Larger businesses such as chemical manufacturers, large electroplating facilities, and petroleum refineries, can generate large quantities of hazardous waste. 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. As discussed later in the Regulatory Framework, large quantity generators are fully regulated under the Resources Conservation and Recovery Act (RCRA).

According to the most recent EPA and City data available (2003), and as shown in Table 4.6-3, there were eight large quantity generators in the Newport Beach area. In addition, as of December 2005, there were approximately 87 small quantity generators in the City.³⁷

³⁷ EPA Envirofacts RCRAInfo website, accessed January 9, 2006.

Table 4.6-3 EPA-Registered Large-Quantity Generator (LQG) Facilities in Newport Beach

<i>Facility Name, Address</i>	<i>EPA ID</i>
Hixson Metal Finishing 829 Production Place	CAD008357295
Hoag Memorial Hospital 301 Newport Boulevard	CAD981388408
Newport Fab LLC 4311 Jamboree Road, Bldg. 503	CAR000113233
Shell Service Station 1600 Jamboree Road	CAD983663865
Conexant Systems Incorporated 4311 Jamboree Road	CAD008371437
Ford Motor Company (now closed) 1000 Ford Road	CAD041330077
Jetronic Industries, Inc. – Transchem Division 3767 Birch Street	CAD044338945
The Koll Company KCN 4 4910 Birch Street	CAR000015842

SOURCES: List of Large Quantity Generators in the United States: The National Biennial RCRA Hazardous Waste Report (Based on 2003 Data);
List of EPA-Regulated Facilities in Envirofacts (<http://www.epa.gov/enviro/>);
Accessed 1/10/06.

In addition to the facilities listed in Table 4.6-3, Table 4.6-4 shows the businesses and facilities in Newport Beach that were reported as large quantity generators in years prior to 2003. However, some of these businesses, such as Loral Aeronutronics and Raytheon Systems Company, have ceased their operations in the City.

Table 4.6-4 Prior Large-Quantity Generator (LQG) Facilities in Newport Beach

<i>Facility Name, Address</i>	<i>Year Reported as LQG</i>
Loral Aeronutronic 1000 Ford Road Buildings 1, 2, 9, & 11	1996
Newport Enterprises DBA Land Rover 1540 Jamboree Road	1996
Raytheon Systems Company 500 Superior Avenue	1999
Sterling Motors Ltd., DBA Sterling BMW 3000 West Coast Hwy.	1996

SOURCES: Earth Consultants International, 2003. Hazards Assessment Study, City of Newport Beach, page 6-17

Leaking Underground Storage Tanks

Leaking underground storage tanks (LUSTs) are one of the greatest environmental concerns of the past several decades. According to data from the State Water Resources Control Board, 80 underground storage tank leaks have been reported in the Newport Beach area. Of these, 64 sites have been either cleaned up or deemed to be of no environmental consequence, leaving 16 cases that are still open and in various stages of the remediation process. These 16 sites are shown below in Table 4.6-5. None of the leaks that have been reported in the City have impacted a drinking source of ground water. However, several of the cases in Table 4.6-5 may be further along in the assessment and remediation process than the list indicates, and some of the cases may already be closed. The Orange County Environmental Health Department provides oversight and conducts inspections of all underground tank removals and installation of new tanks.

Table 4.6-5 LUSTs Reported in the Newport Beach Area

Site Name	Address	Case No.	Status, Contaminant	Report Date
Newport Beach Golf Course	3100 Irvine	083000295T	5R, G	5/20/1998
Newport Auto Center	445 Coast	n/a	8, **	12/22/2004
Chevron #20-1093	1240 Bison	083003036T	7, G	5/28/2004
Shell Oil (Former)	990 Coast	083002129T	8, G	6/29/2003
Shell Oil	1000 Irvine	083000358T	5R, G	6/25/1999
Ford Aerospace Corporation	3000 Ford Road	083001066T	5C, D	11/2/1988
Permalite Plastics Corporation	1537 Monrovia Avenue	083003609T	1, MEK	10/8/1999
Chevron #20-2016	2121 Bristol	083003460T	5R, **	7/23/2004
Beacon Bay Carwash	4200 Birch	083001459T	7, G	3/25/1997
Unocal #5310	3001 Newport	083000431T	7, G	8/19/1993
Shell Oil	1600 Jamboree	n/a	5C, G	12/22/2003
Hughes Aircraft Co-Solid Prod.	500 Superior Ave.	083000821T	5C, S	4/1/2005
Conexant Systems, Inc. (Former Rockwell Intl Semi-Conduct Div.)	4311 Jamboree Road	083001040T	5R, A	3/1/2001
Newport Auto Center	445 Coast	083001744T	5R, G	4/16/2002
Four Seasons Hotel	690 Newport Center	083003073T	5R, D	2/26/2003
Newport Beach Police Department	870 Santa Barbara	083002849T	3B, G	Unknown

SOURCE: Case Report For Santa Ana RWQCB (Region 8), 10/31/2005, <https://geotracker.swrcb.ca.gov/casereports/results>

Abbreviations Used for Contaminant: G = Gasoline, UG = Unleaded Gasoline; D = Diesel, MO = Motor Oil; WO = Waste Oil; MEK = Methyl ethyl ketone; S=Solvent; A = Acetone.

Abbreviations Used for Status: 0 = No action taken; 1 = Leak being confirmed; 3A = Preliminary site assessment workplan submitted; 3B = Preliminary site assessment underway; 5C = Pollution characterization underway; 5R = Remediation plan submitted; 7= Remedial action under way; 8 = Post-remedial monitoring; 9 = Case closed / Remediation completed.

** contaminants not available

Household Hazardous Waste

The EPA defines household hazardous waste as “leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive.” According to the EPA, Americans generate approximately 1.6 million tons of

household hazardous waste per year, while the average home can accumulate as much as 100 pounds of household hazardous waste in the basement and garage or in storage closets. Methods of improper disposal of household hazardous wastes commonly include pouring them down the drain, on the ground, into storm sewers, or in some cases putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

The County of Orange operates four household hazardous waste collection centers in accordance with the California Integrated Solid Waste Management Act of 1989 (AB 939). These centers are located in the cities of Anaheim, Huntington Beach, Irvine, and San Juan Capistrano. The two locations closest to the City are the Huntington Beach center at 17121 Nichols Street and the Irvine location at 6411 Oak Canyon.

Methane Gas

Methane gas occurs in the shallow subsurface of some areas of the City. Methane is a naturally occurring gas that typically forms as a by-product of bacterial digestion of organic matter, and therefore occurs ubiquitously, although generally at very low concentrations in the air. Methane is colorless and odorless and, under normal conditions, does not pose a health hazard, as it is not poisonous. However, at high concentrations, methane is flammable and can cause asphyxiation due to oxygen displacement at very high levels. Methane is not toxic below levels that would lead to asphyxiation. However, the fact that it is colorless and odorless makes it especially hazardous, as it cannot be readily detected without special sensors.

Generally, methane forms in areas such as swamps, landfills, or areas associated with petroleum deposits. Methane tends to migrate upwards and, under certain conditions, the gas can become trapped under an impermeable layer. As the gas accumulates under the impermeable layer, it can build up to high concentrations and pressures, which can lead to adverse physical effects. However, high concentrations of methane can be managed and mitigated effectively with the proper investigation and analysis so that development is protected from adverse impacts of methane.

Five methane gas mitigation districts have been identified in the City. Natural seepages of gas occur in the western and southwestern portions of the City. Special development regulations (City Code Chapter 15.55), intended to prevent gases from accumulating, apply to projects located in methane overlay districts. The Hazards Assessment Study prepared for the City also identifies the potential for methane gas seepage to be associated with the West Newport oil field even though it is not located within or next to a methane gas mitigation district. In addition, the City also associates methane gas seepage with an old abandoned landfill near the City's northwestern corner.

Oil Fields

Petroleum contains several components that are considered hazardous, such as benzene, a known carcinogen. Oil field activities often include the use of hazardous materials like fuels and solvents. In the past, day-to-day practices in oil fields were not environmentally sensitive. As a result, oil-stained soils and

other contaminants can often be found in and around oil fields. Remediation of these areas is generally required when the oil field is not longer economically productive. Comprehensive site investigations are required to accurately identify and characterize any soil and groundwater contamination.

■ Fire Hazards

Wildland Fires

The City of Newport Beach defines a wildland fire hazard area as any geographic area that contains the type and condition of vegetation, topography, weather, and structure density that potentially increases the possibility of wildland fires. The eastern portion of the City and surrounding areas to the north, east, and southeast include grass- and brush-covered hillsides with significant topographic relief that facilitate the rapid spread of fire, especially if fanned by coastal breezes or Santa Ana winds.

Urban Fires

Many factors contribute to an area being at risk of structural fire in terms of local fire departments' capabilities to control them, including the construction size and type, built-in protection, density of construction, street widths, and occupancy size. The City's daytime population levels may also add to the congestion and difficulty of ingress and egress of emergency response vehicles.

Many of the structures in the older portions of the City, some dating back to the 1930s, are susceptible to urban fires. These areas were built according to older building standards and fire codes, with no internal sprinklers and other fire safety systems in place, and made from non-fire-resistive construction materials. These areas include Balboa Peninsula, Balboa Island, and Corona del Mar. Newport Beach has over 30 high-rise buildings that were constructed since the 1960s. Four of these buildings do not have sprinklers in place: 3121 West Coast Highway; 601 Lido Park Drive; 400 Newport Center Drive; and 611 Lido Park Drive.

Geography is also a factor for fire safety issues in the City. Upper and Lower Newport Bay essentially divide the City into two regions, with approximately one-third of the Newport Beach Fire Department (NBFD) assets located west of the bay, and the remaining assets east of the bay. Connection between these two sides is provided by only a limited number of roadways (Coast Highway in the south, Bristol Street and the 73 Freeway on the north), making it difficult for fire stations on both sides of the bay to support each other during multiple alarm emergencies. Failure of the bridge connectors on any of these roadways as a result of an earthquake, for example, would hinder emergency response from fire stations in east Newport Beach and Newport Coast into the densely populated areas of the City west and south of the bay.

Earthquake-induced fires have the potential to be the worst-case fire-suppression scenarios for a community because an earthquake can cause multiple ignitions distributed over a broad geographic area. There are some older sections in Newport Beach where, due to ground failure, breaks in the gas mains and the water distribution system could lead to a significant fire-after-earthquake situation.

■ Aviation Hazards

John Wayne Airport (JWA) generates nearly all aviation traffic above the City of Newport Beach. On an average business day, approximately 150 commercial and 20 regional flights arrive at and depart from JWA. Newport Beach borders the southeastern portion of JWA. More than 95 percent of all airplanes take off and ascend over the City. Accidents resulting in one or more fatalities involving commercial aircraft are rare events. However, in the event of an aviation hazard, pilots are instructed to follow Newport Bay away from residential or developed areas. Potential impacts will be significantly reduced by coordinated response operations of all available emergency services. The airport is protected by an on-site airport fire service as required by the Federal Aviation Administration (FAA) regulations. This service is provided by Orange County Fire Station No. 33. In addition, the Orange County Fire Services Area Plan Annex contains a Marine (Air/Sea) Disaster Response Plan that establishes protocols for marine disasters in the harbor or ocean from either aircraft or boating accidents. This plan includes a county-wide mutual aid response to a disaster.

Three areas of increased vulnerability to aviation hazards in the City are Balboa Peninsula, Balboa Island, and Upper Newport Bay. As previously discussed under Urban Fires, Balboa Island and Balboa Peninsula is susceptible to fire hazards due to the fact that structures were built prior to implementation of stringent fire codes. In the event of a fire caused by an aviation accident, it could spread quickly. Additionally, ingress and egress is limited.

An aviation accident in Upper Newport Bay could create a significant ecological and economic hazard to the environment. The recreational value of the Newport Harbor with its more than 9,000 registered boats could be dramatically affected, and an aviation accident could significantly pollute the waterways.

■ Emergency Response

Any potential hazard in the City resulting from a manmade or natural disaster may result in the need for evacuation of few or thousands of citizens of Newport Beach. Homeland Security has brought disaster awareness to the forefront of the minds of the community, safety officials, and City staff. The City of Newport Beach is currently using the Standardized Emergency Management System (SEMS) for emergency response in the City, where depending on the type of incident, several different agencies and disciplines may be called upon to assist with emergency response. Agencies and disciplines that can be expected to be part of an emergency response team include medical, health, fire and rescue, police, public works, and coroner. Additionally, policies and plans from the Orange County Operational Area Mutual Aid Plan, the State's Mutual Aid Plan, and the State's Fire and Rescue Mutual Aid System would be implemented. The City is now also training its personnel in the National Incident Management System (NIMS), the Federal equivalent of SEMS.

Within the NBFDD, the Disaster Preparedness Coordinator has updated the City's Emergency Management Plan, including the development and implementation of disaster training for employees. The Emergency Management Plan describes the different levels of emergencies, the local emergency management organization, and the specific responsibilities of each participating agency, government

office, and City staff. A City-wide exercise, which involves implementation of the Plan, is conducted annually.

Currently, NBFD provides basic life support (BLS), advanced life support (ALS) and emergency transportation utilizing the fire engines and ladder trucks housed in the Department's eight fire stations, and utilizing the paramedics housed in three of those stations. While the NBFD has the immediate capability of providing ALS service at three simultaneous incidents, there is an occasional need for additional ALS units. Additional ALS service is provided by nearby and adjoining public agencies by means of cooperative automatic aid agreements. Emergency transportation beyond the capability of the department is provided by private ambulance companies.

Mass casualty incidents, which usually involve three or more critical patients, require the implementation of the Orange County Fire Services Operational Plan Annex "Multi-Casualty Incident Response Plan." This Plan is an organizational plan that aids in assigning treatment teams and quickly moving patients off-scene to appropriate receiving centers in an expeditious and organized manner. The multi-casualty plan is intended to be implemented during any multi-casualty incident, such as multiple vehicle accidents, aviation accidents, hazardous materials incidents, high-rise fires, and so forth. Although the system has been designed to be used with as few as three patients, it can be expanded as it becomes necessary.

Lastly, in the event of a disaster, the City's Emergency Operations Center can be opened. The center has undergone a series of upgrades and improvements. Training for residents and employees within the City continues through the Community Emergency Response Team (CERT) program.

4.6.3 Regulatory Framework

A number of Federal, State, and local laws have been enacted to regulate the management of hazardous materials. Implementation of these laws and the management of hazardous materials are regulated independently of the CEQA process through programs administered by various agencies at the Federal, State, and local levels. An overview of the key hazardous materials laws and regulations that apply to the proposed General Plan Update is provided below.

■ Federal

Several Federal agencies regulate hazardous materials. These include the EPA, the Occupational Safety and Health Administration (OSHA), and the DOT. Applicable Federal regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). In particular, Title 49 of the CFR governs the manufacture of packaging and transport containers, packing and repacking, labeling, and the marking of hazardous material transport. Some of the major Federal laws and issue areas include the following statutes (and regulations promulgated thereunder):

- Resources Conservation and Recovery Act (RCRA)—hazardous waste management
- Hazardous and Solid Waste Amendments Act (HSWA)—hazardous waste management
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—cleanup of contamination
- Superfund Amendments and Reauthorization Act (SARA)—cleanup of contamination

- Emergency Planning and Community Right-to-Know (SARA Title III)—business inventories and emergency response planning

The EPA is the primary Federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the Federal level is delegated to State and local environmental regulatory agencies.

In addition, with respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the Federal, State, and local levels. This includes the development of a national capability to mitigate against, prepare for, respond to and recover from a full range of emergencies.

■ State

Primary state agencies with jurisdiction over hazardous chemical materials management are the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB). Other State agencies involved in hazardous materials management are the Department of Industrial Relations (State OSHA implementation), Office of Emergency Services (OES—California Accidental Release Prevention implementation), Department of Fish and Game (DFG), Air Resources Board (ARB), Caltrans, State Office of Environmental Health Hazard Assessment (OEHHA—Proposition 65 implementation) and California Integrated Waste Management Board (CIWMB). The enforcement agencies for hazardous materials transportation regulations are the CHP and Caltrans. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Hazardous chemical and biohazardous materials management laws in California include the following statutes (and regulations promulgated thereunder):

- *Hazardous Materials Management Act*—business plan reporting
- *Hazardous Waste Control Act*—hazardous waste management
- *Safe Drinking Water and Toxic Enforcement Act of 1986* (Proposition 65)—releases of and exposure to carcinogenic chemicals
- *Hazardous Substances Act*—cleanup of contamination
- Hazardous Waste Management Planning and Facility Siting (*Tanner Act*)
- Hazardous Materials Storage and Emergency Response
- *California Medical Waste Management Act*—medical and biohazardous wastes

State regulations and agencies pertaining to hazardous materials management and worker safety which are applicable to the City and proposed General Plan Update are described below.

California Environmental Protection Agency

The California EPA (Cal/EPA) has broad jurisdiction over hazardous materials management in the state. Within Cal/EPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements

with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Department of Toxic Substances Control

RCRA of 1976 is the principal Federal law that regulates the generation, management, and transportation of hazardous materials and other wastes.

The DTSC regulates hazardous waste in California primarily under the authority of the Federal RCRA, and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that the position reflects the DTSC's goals. From these laws, DTSC's major program areas develop regulations and consistent program policies and procedures. The regulations spell out what those who handle hazardous waste must do to comply with the laws. Under RCRA, DTSC has the authority to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow State and Federal requirements. As such, the management of hazardous waste in the Planning Area would be under regulation by the DTSC to ensure compliance with State and Federal requirements pertaining to hazardous waste.

California law provides the general framework for regulation of hazardous wastes by the Hazardous Waste Control Law (HWCL) passed in 1972. DTSC is the State's lead agency in implementing the HWCL. The HWCL provides for State regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage and disposal of hazardous wastes.

Tanner Act

Although there are numerous State policies dealing with hazardous waste materials, the most comprehensive is the *Tanner Act* (AB 2948) that was adopted in 1986. The *Tanner Act* governs the preparation of hazardous waste management plans and the siting of hazardous waste facilities in the State of California. The act also mandates that each county adopt a Hazardous Waste Management Plan. To be in compliance with the *Tanner Act*, local or regional hazardous waste management plans need to include provisions that define (1) the planning process for waste management, (2) the permit process for new and expanded facilities, and (3) the appeal process to the State available for certain local decision.

Hazardous Materials Management Plans

In January 1996, Cal EPA adopted regulations implementing a “Unified Hazardous Waste and Hazardous Materials Management Regulatory Program” (Unified Program). The six program elements of the Unified Program are hazardous waste generators and hazardous waste on-site treatment, underground storage tanks, above-ground storage tanks, hazardous material release response plans and inventories, risk management and prevention program, and Uniform Fire Code hazardous materials management plans and inventories. The program is implemented at the local level by a local agency—the Certified Unified Program Agency (CUPA). The CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. The CUPA that has jurisdiction in the City of Newport Beach is the Orange County CUPA.

State and Federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and, in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. California’s Hazardous Materials Release Response Plans and Inventory Law, sometimes called the “Business Plan Act,” aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on site, to prepare an emergency response plan, and to train employees to use the materials safely.

California Accidental Release Prevention Program (CalARP)

The CalARP program (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The CalARP program regulations became effective on January 1, 1997, and include the provisions of the Federal Accidental Release Prevention program (Title 40, CFR Part 68) with certain additions specific to the State pursuant to Article 2, Chapter 6.95, of the Health and Safety Code.

The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of a RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist in Federal and State laws 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 obligates 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. For example, manufacturers are to appropriately label containers, Material Safety Data Sheets are to be available in the workplace, and employers are to properly train workers.

Hazardous Materials Transportation

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Transporters of hazardous materials and waste are responsible for complying with all applicable packaging, labeling, and shipping regulations. The Office of Emergency Services (OES) also provides emergency response services involving hazardous materials incidents.

Investigation and Cleanup of Contaminated Sites

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and RWQCB are the two primary State agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to Federal and State laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine if a release of hazardous wastes/substances exists at a site and delineates the general extent of contamination; estimates the potential threat to public health and/or the environment from the release and provides an indicator of relative risk; determines if an expedited response action is required to reduce an existing or potential threat; and completes preliminary project scoping activities to determine data gaps and identifies possible remedial action strategies to form the basis for development of a site strategy.

Siting of Schools

The California Education Code (Section 17210 *et seq.*) outlines the requirements of siting school facilities near or on known or suspected hazardous materials sites, or near facilities that emit hazardous air emissions, handle hazardous or acutely hazardous materials, substances, or waste. The code requires that, prior to commencing the acquisition of property for a new school site, an environmental site investigation be completed to determine the health and safety risks (if any) associated with a site. Recent

legislation and changes to the Education Code identify DTSC’s role in the assessment, investigation, and cleanup of proposed school sites. All proposed school sites that will receive state funding for acquisition and/or construction must go through a comprehensive investigation and cleanup process under DTSC oversight. DTSC is required to be involved in the environmental review process to ensure that selected properties are free of contamination, or if the property is contaminated, that it is cleaned up to a level that is protective of students and faculty who will occupy the new school. All proposed school sites must be suitable for residential land use, which is DTSC’s most protective standard for children.

■ Local

Airport Environs Land Use Plan for John Wayne Airport

Land use within the planning area boundaries of the AELUP must conform to noise, safety, and height restriction standards. The General Policy identified below outlines the land use standards for the planning areas.

General Policy

The General Land Use policy of the Airport Land Use Commission for Orange County shall be:

Within the boundaries of the AELUP, any land use may be found to be inconsistent with the AELUP which:

- Places people so that they are affected adversely by aircraft noise;
- Concentrates people in areas susceptible to aircraft accidents;
- Permits structures of excessive height in areas which would affect adversely the continued operation of the airport; or
- Permits activities or facilities that would affect adversely aeronautical operations.

In addition, although not listed here, the AELUP also contains Specific Policies, which further clarify the General Policy.

Newport Beach Municipal Code

Chapter 2.20 (Emergency Services)

This chapter provides for the preparation and implementation of plans to provide services within the City in the event of an emergency, to empower certain City officials to promulgate orders and regulations necessary to provide for the protection of life and property or to preserve public order and safety, and to provide for the coordination of the emergency service functions of the City with all other public agencies and affected private persons, corporations, and organizations.

Chapter 9.04 (Fire Code)

The City of Newport Beach has adopted the 2001 California Fire Code with City amendments and some exceptions. Chapter 9.04 of the City’s Municipal Code, also known as the Fire Code, establishes a variety

of regulations related to hazards such as: recommendations for development on land containing or emitting toxic substances, hazardous materials documentation procedures, hazardous materials management plan, storage tank regulations, etc. In addition, the Nbfd enforces locally developed regulations which reduce the amount and continuity of fuel (vegetation) available, firewood storage, debris clearing, proximity of vegetation to structures and other measures aimed at “Hazard Reduction.” Additional provisions include construction standards for 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.

Chapter 15.55 (Methane Overlay Zone)

This chapter establishes a methane gas mitigation district that requires property owners to test for and mitigate the presence of methane gas prior to significant new construction. The methane gas mitigation district may be applied to those areas of the City where studies have shown there is a distinct possibility of high concentrations of methane gas in soil close to ground surface.

4.6.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2005 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact to the public or the environment through hazards and hazardous materials if it would result in any of the following:

- 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 site 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 developed, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

4.6.5 Project Impacts, Mitigation Measures, and Proposed Policies

■ Effects Found Not to Be Significant

Threshold	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
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As discussed in the Initial Study, there are no existing private airstrips within the City. As a result, no safety hazard associated with location near a private airstrip would occur for the proposed General Plan Update. Consequently, implementation of the proposed project would have *no impact*, and no further analysis of this issue is required in this EIR.

■ Project Impacts

Threshold	Would the project create a significant hazard to the public or the environment through the routine transport, use, storage, or disposal of hazardous materials?
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Impact 4.6-1 Implementation of the proposed General Plan Update could result in an increase in commercial development that could increase the overall routine transport, use, storage, and disposal of hazardous materials within the City.

Given the mixed-use character of Newport Beach, residential and commercial uses reside relatively close to one another or often co-exist. Implementation of the proposed General Plan Update could result in an overall increase (approximately 1.8 million sf) in citywide commercial uses. Other increases that could occur under the proposed General Plan Update include increases for office, single- and multiple-family residential, visitor-serving, and institutional uses. However, in contrast, the proposed General Plan Update also calls for a reduction in City-wide industrial uses over the next 20 years. Specifically, existing industrial uses are anticipated to decrease from existing uses of approximately 1,569,229 sf to approximately 1,163,460 sf at build-out (a reduction of approximately 405,769 sf).

Although the overall industrial uses would decrease within the City, at least one subarea (West Newport Mesa Area) may actually observe an increase of these uses, as the proposed General Plan Update would allow an increase of industrial use square footage in this area over what currently exists. Similarly, commercial uses could decrease within West Newport Mesa (a small area with small parcels), and Balboa Village, but could increase within the remaining subareas and in other commercial areas throughout the Planning Area. The introduction of new city-wide commercial and industrial uses may result in the use of hazardous materials and/or the generation of hazardous materials.

While there is a possibility that the new commercial and industrial uses that are proposed within the above-mentioned areas could transport, use, store, or dispose of hazardous materials, specific development projects are not associated with the proposed General Plan Update, and it is impossible to quantify the potential future amount of hazardous materials. However, with additional development, an

increase in the potential for hazards associated with hazardous materials and waste would likely occur in throughout the City. The following analysis provides generalized information on the potential for hazards through the routine transport, use, storage, or disposal of hazardous materials associated with the future commercial and industrial uses in these subareas.

Exposure of persons to hazardous materials could occur in the following manners: improper handling or use of hazardous materials or hazardous wastes during construction or operation of future developments, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion or other emergencies. The types and amounts of hazardous materials would vary according to the nature of the activity. In some cases, it is the type of hazardous material that is potentially hazardous; in others, it is the amount of hazardous material that could present a hazard.

Whether a person exposed to a hazardous substance would suffer adverse health effects depends upon a complex interaction of factors that determine the effects of exposure to hazardous materials: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form (e.g., liquid, vapor) and characteristics (e.g., toxicity) of the material; the frequency and duration of exposure; and the individual's unique biological characteristics such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer. Implementation of existing hazardous materials regulations were established at the State level to ensure compliance with Federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances.

Although the overall quantity of hazardous materials and waste generated in the City could increase as a result of implementation of the proposed General Plan Update, all new developments that handle or use hazardous materials would be required to comply with the regulations, standards, and guidelines established by the EPA, State, Orange County, and City of Newport Beach related to storage, use, and disposal of hazardous materials.

Both the Federal and State governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to a regulating agency. Specifically, any new business that meets the specified criteria must submit a full hazardous materials disclosure report that includes an inventory of the hazardous materials generated, used, stored, handled, or emitted; and emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. The plan needs to identify the procedures to follow for immediate notification to all appropriate agencies and personnel in the event of a release, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company 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. The Nbfd conducts yearly inspections of all these businesses to confirm that their business plan is in order and up to date.

In addition, the Safety Element of the proposed General Plan Update has identified a variety of policies to reduce the potential exposure of people and the environment to hazardous materials. For example, Policy S 7.3 would educate residents and businesses about how to reduce or eliminate their use of hazardous materials, including using safer non-toxic equivalents. Policy S 7.6 requires that all users, producers, and transporters of hazardous materials and wastes clearly identify the materials that they store, use, or transport, and to notify the appropriate City, County, State and Federal agencies in the event of a violation. Oversight by the appropriate Federal, State, and local agencies and compliance by new development with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these substances. Therefore, this impact would be *less than significant*.

Threshold	Would the project 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?
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Impact 4.6-2 Construction activities associated with implementation of the proposed General Plan Update could result in the release of hazardous materials to the environment through reasonably foreseeable upset and accident conditions.

As implementation of the proposed General Plan Update would primarily result in urban infill and redevelopment along with the intensification of development within the City, existing structures may need to be demolished prior to the construction of new buildings. Demolition of existing structures in the City could result in exposure of construction personnel and the public to hazardous substances such as asbestos or lead-based paints. In addition, the disturbance of soils and the demolition of existing structures could result in the exposure of construction workers or employees to health or safety risks if contaminated structures and/or soils are encountered during construction or maintenance activities. Exposure to contaminated structures or soil could occur from any of the following:

- Possible asbestos-containing materials and lead-based paints associated with the existing on-site structures, pipes, and/or debris
- Unknown contaminants that have not previously been identified

Exposure to hazardous materials during construction activities could occur through any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

While specific development projects are not associated with approval of the proposed General Plan Update, it is assumed that older buildings could be demolished as uses are redeveloped according to the land use plan. With that activity, construction workers and nearby residents and/or workers could potentially be exposed to airborne lead-based paint dust, asbestos fibers, and/or other contaminants. In addition, there is the possibility that future development may also uncover previously undiscovered soil contamination as well as result in the release of potential contaminants that may be present in building materials (e.g., mold, lead, etc.). This could result in a significant impact. However, compliance with

existing regulations and proposed General Plan Update policies would reduce impacts to *less than significant*.

Lead and Asbestos

Federal and State regulations govern the renovation and demolition of structures where materials containing lead and asbestos are present. These requirements include: SCAQMD Rules and Regulations pertaining to asbestos abatement (including Rule 1403), Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations, Part 61, Subpart M of the Code of Federal Regulations (pertaining to asbestos), and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the State Department of Health Services. In addition, Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Adherence to existing regulations, which require appropriate testing and abatement actions for hazardous materials, would ensure that impacts are *less than significant*.

Soil and Groundwater Contamination

Unknown Contaminated Sites

Aside from the potential release of hazardous materials from demolition of existing structures within the City, grading and excavation of sites for future development in the City resulting from implementation of the proposed General Plan Update may also expose construction workers and the public to potentially unknown hazardous substances present in the soil or groundwater. If any unidentified sources of contamination are encountered during grading or excavation, the removal activities required could pose health and safety risks such as the exposure of workers, materials handling personnel, and the public to hazardous materials or vapors. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In addition, exposure to contaminants could occur if the contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by future development at the contaminated location. If exposed to hazardous substances, this would result in a significant hazard to the public.

In order to address the potential for encountering unidentified contamination within the City, Policy S 7.4 of the proposed General Plan Update Safety Element would minimize the potential risk of contamination to surface water and groundwater resources by implementing remediation efforts to any resources adversely impacted by urban activities. As such, the potential impacts associated with unknown contamination would be reduced to a *less-than-significant* level.

Existing Contaminated Sites

Another potential hazard to construction workers and the public could involve construction activities on existing land uses that may potentially be contaminated. Existing sites that may potentially contain hazardous land uses in the City include oil fields, landfills, and large and small-quantity generators of hazardous waste. As discussed previously, there are also two identified sites within the City that are listed in the CERCLIS database. There are eight large-quantity and approximately 87 small-quantity generators of hazardous materials in the City. There are two active sites that are known to release toxic chemicals into the air – the EPA monitors these facilities closely to reduce the potential of future emissions at concentrations above the acceptable limits. The two other significant hazardous materials sites are located at or near the City’s boundaries. Existing hazardous sites associated with oil and gas districts within the City are discussed below in Impact 4.6-4. These sites represent potential health hazards, and have experienced contamination from the release of hazardous substances into the soil. However, any new development occurring on these documented hazardous materials sites would have to be preceded by remediation and cleanup under the supervision of the State Department of Toxic Substance Control (DTSC) before construction activities could begin.

Additionally, it is also possible that old underground storage tanks (USTs) that were in use prior to permitting and record keeping requirements may be present in the City. If an unidentified UST were uncovered or disturbed during construction activities, it would be closed in place or removed. Removal activities could pose both health and safety risks, such as the exposure of workers, tank handling personnel, and the public to tank contents or vapors. Potential risks, if any, posed by USTs would be minimized by managing the tank according to existing Orange County standards as enforced and monitored by the Department of Environmental Health. The extent to which groundwater may be affected, if at all, depends on the type of contaminant, the amount released, and depth to groundwater at the time of the release. If groundwater contamination is identified, remediation activities would be required by the Santa Ana Regional Water Quality Control Board (SARWQCB) prior to the commencement of any new construction activities.

Policy S 7.1 in the Safety Element of the proposed General Plan Update would require proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments in accordance with American Society for Testing and Materials standards, and if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination). Therefore, with implementation of existing State and local regulations as well as General Plan Policy S 7.1, impacts associated with known contamination at sites within the City would be *less than significant*.

Summary

Compliance with existing regulations and proposed General Plan Update policies would ensure that construction workers and the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction activities. As such, impacts associated with the

exposure of construction workers and the public to hazardous materials during construction activities would be *less than significant*.

Threshold	Would the project 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?
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Impact 4.6-3 Operation of future land uses that could be developed under the proposed project 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 precise potential future increase in the amount of hazardous materials transported within the Newport Beach area as a result of implementation of the proposed General Plan Update cannot be predicted because specific development projects are not specified in the General Plan Update. The following discussion focuses on the potential nature and magnitude of risks associated with the accidental release of hazardous materials often used during operations of typical retail-commercial development projects.

Off-Site Transportation of Hazardous Materials

The United States Department of Transportation (USDOT) Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials, as described in Title 49 of the *Code of Federal Regulations*, and implemented by Title 13 of the CCR.

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. It is possible that licensed vendors could bring some hazardous materials to and from new retail-commercial sites in the Newport Beach area as a result of the projects constructed pursuant to the proposed General Plan Update. However, appropriate documentation for all hazardous waste that is transported in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in Titles 8, 22, and 26 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the *California Health and Safety Code*. In addition, specific project-site developers shall comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to, Title 49 of the *Code of Federal Regulations*.

Compliance with all applicable Federal and State laws related to the transportation of hazardous materials, would reduce the likelihood and severity of accidents during transit, thereby ensuring that a *less-than-significant* impact would occur. No mitigation is required.

Hazardous Materials Storage

Hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment. *California Building Code* (CBC) requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards.

Compliance with all applicable Federal and State laws related to the storage of hazardous materials would be implemented to maximize containment (through safe handling and storage practices described above) and to provide for prompt and effective clean-up if an accidental release occurs, thereby ensuring that a *less-than-significant* impact would occur. No mitigation is required.

Hazardous Materials Use

Hazardous materials use would present a slightly greater risk of accident than hazardous materials storage. However, for those employees who would work with hazardous materials, the amount of hazardous materials that are handled at any one time are generally relatively small, reducing the potential consequences of an accident during handling. Further, specific project-site activities would be required to comply with Federal and State laws to eliminate or reduce the consequence of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment, and safety equipment is routinely available in all areas where hazardous materials are used.

The Orange County Fire Authority Hazardous Materials Section personnel responds to hazardous materials incidents. Major hazardous materials accidents associated with retail-commercial uses are extremely infrequent, and additional emergency response capabilities are not anticipated to be necessary to respond to the potential incremental increase in the number of incidents that could result from implementation of the proposed project. Further, adherence to applicable regulations as discussed above would be required to reduce any potential consequences of a hazardous materials operational accident. Thus, impacts related to the use of hazardous materials would be *less than significant*.

Summary

Compliance with Titles 8, 22, 26, and 49 of the California Code of Regulations, and their enabling legislation set forth in Chapter 6.95 of the *California Health and Safety Code*, would ensure that this impact is *less than significant* by requiring compliance with applicable laws and regulations that would reduce the risk of hazardous materials use, transportation, and handling through the implementation of established safety practices, procedures, and reporting requirements. No mitigation is required.

Threshold	Would the project 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?
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Impact 4.6-4 Implementation of the proposed General Plan Update could result in a safety hazard as a result of existing oil wells or methane gas areas within the City.

Oil and gas seeps are common occurrences in many parts of California. Presently, there are two oil fields located in the Planning Area: Newport Oil Field, located in the western portion of the Planning Area, and West Newport Oil Field, located to the west of Newport Oil Field in the City’s SOI. The City also recognizes five identified methane gas mitigation districts where gas can be encountered at the surface, or in the shallow subsurface. Man-made structures, such as pavement or building foundations can prevent

gas from venting to the atmosphere. Methane can accumulate in the upper reaches of poorly ventilated building components, such as basements, crawl-spaces, and attics, sometimes with catastrophic results. Given the potential for combustible gases to accumulate in or under buildings or structures in these areas, the City of Newport Beach has established guidelines to reduce the hazard posed by these gases. The objective of these guidelines is to prevent gases from accumulating to potentially hazardous concentrations.

Although the West Newport Oil Field is not located within or next to a methane gas mitigation district, if and when this field is developed for residential uses or other purposes, methane gas associated with the oil wells and any oil-stained soils may be encountered. The Orange County Fire Authority (OCFA) has guidelines regarding mitigation of gas leakage from abandoned wells, and mitigation procedures for buildings located near abandoned wells. The California Division of Oil, Gas and Geothermal Resources (DOGGR), as well as the OCFA, does not approve of placing buildings directly on top of an abandoned well.

All methane reports, work plans, mitigation plans, and monitoring plans are subject to the review and approval of the City of Newport Beach. An independent third party review could be required at the discretion of the City. Policy S 7.2 of the proposed General Plan Update also would ensure that any development within identified methane gas districts be designed for consistency with the requirements of the Newport Beach Municipal Code.

Under the proposed General Plan Update, future growth and development could occur in the City's methane gas districts. Thus, the potential for possible leakage to occur in the existing active oil wells exists, in which case soils adjacent to these oil wells could become contaminated. However, soil contamination resulting from existing active oil wells could also spread from the contaminated zone to surrounding areas either before or after the surrounding areas are developed. As such, workers may be exposed to contaminated soil during construction operations for new development. Additionally, there is the potential for existing active oil wells to experience blowouts, where an uncontrolled discharge of gas, liquid, solids, or a mixture thereof occurs from a well into the atmosphere.

Although the potential exists for new development within the City to be subject to health and/or safety hazards associated with existing oil wells and methane gas, any future development associated in the identified areas of the City would be subject to the provisions of Chapter 9.04.170 of the City's Fire Code, which regulates the development on or near land containing or emitting toxic, combustible or flammable liquids, gases, or vapors. In addition, Policy S 7.2 of the proposed General Plan Update would ensure that any development within identified methane gas districts be designed consistent with the Newport Beach Municipal Code.

Therefore, adherence to Policy S 7.2 of the proposed General Plan Update and provisions of the City's Municipal Code would ensure that potential health and/or safety hazards associated with oil wells and methane gas in the City would be minimized. Thus, this impact would be *less than significant*.

Threshold	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
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Impact 4.6-5 Implementation of the proposed General Plan Update could emit hazardous emissions or handle acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Under the proposed General Plan Update, the increase of residential and mixed-use land uses, as well as the potential increase in commercial uses, could increase the quantity of sensitive receptors (including schools) in areas adjacent to industrial and commercial land uses, thereby potentially increasing the risk of exposure to hazardous materials, waste, or emissions. Consequently, hazardous materials sites may be located within 1/4-mile from school sites. However, overall city-wide industrial land uses would decrease in the City.

Since the proposed General Plan Update does not include any specific development projects, the quantity of hazardous materials used by the existing and proposed commercial and industrial developments within the City is currently unknown. Accidental release or combustion of hazardous materials at new commercial and/or industrial developments in the City could endanger residents or students in the surrounding community.

As discussed in the TBR prepared for the General Plan Update, the City of Newport Beach has approximately nineteen schools. Two schools are located within approximately one mile of an existing hazardous materials site in the northwest portion of the City. One existing TRI site (Hixson Metal Finishing) is of greatest concern, since emissions into the air have the potential to impact a large geographical area. If any of the chemicals used at this facility is toxic when released into the atmosphere, evacuation of the surrounding area may be required. The TRI for the Hixson Metal Finishing facility reports the use of tetrachloroethylene (PERC). This is a manufactured chemical that is widely used in the dry-cleaning industry, for metal degreasing, and in the manufacturing of other chemicals and consumer products. In a poorly ventilated area, release of this chemical onto the air can pose a health hazard, but when released into a ventilated area, such as the surrounding neighborhood, the chemical is broken down by sunlight, or brought back to the soil and water by rain, greatly reducing its health hazard.

A greater concern was posed by the chlorine gas used at Big Canyon Reservoir, especially given that there are three schools located very close to the reservoir. However, the potential impact to the surrounding community was greatly reduced in 2004 when the reservoir was covered, and liquid chlorine, instead of chlorine gas, is now used as the water disinfectant. Liquid chlorine is also used at San Joaquin Reservoir, utilized by the Irvine Ranch Water District as a reclaimed water storage facility. There are two schools located near this facility.

Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, all businesses that handle or have on-site transportation of hazardous materials would be required to comply with the provisions of the City's Fire Code and any additional elements as required in the California Health and Safety Code Article 1 Chapter 6.95 for Business Emergency Plan. As described in Impact 4.6-1 above, both the Federal and State governments require all businesses that handle more

than a specified amount of hazardous materials to submit a business plan to a regulating agency. The City’s Safety Element of the proposed General Plan Update includes Policy S 7.5, which requires that strict land use controls, performance standards, and structure design standards, including development setbacks from sensitive uses such as schools, hospitals, day care facilities, elder care facilities, residential uses, and other sensitive uses, be developed and implemented for uses which generate or use hazardous materials.

As such, compliance with the provisions of the City’s Fire Code and implementation of Policy S 7.5 in the Safety Element of the proposed General Plan Update would minimize the risks associated with the exposure of sensitive receptors to hazardous materials. This impact would be *less than significant*.

Threshold	Would the project 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?
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Impact 4.6-6 The proposed General Plan Update includes sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, could create a significant hazard to the public or the environment.

As discussed under Existing Conditions and Impact 4.6-2 above, the City contains sites that have been identified as being contaminated from the release of hazardous substances in the soil, including oil fields, landfills, sites containing leaking underground storage tanks, and large and small-quantity generators of hazardous waste. Implementation of the proposed General Plan Update could lead to development of these sites that could create a significant hazard to the public or environment. However, as further discussed under Impact 4.6.2, development of these sites would be required to undergo remediation and cleanup under DTSC and the SARWQCB before construction activities can begin. If contamination at any specific project are were to exceed regulatory action levels, the proponent would be required to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination). Furthermore, implementation of proposed Policy S 7.1, which requires proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments in accordance with American Society for Testing and Materials standards, would reduce potential impacts to a *less-than-significant* level.

Threshold	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?
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Impact 4.6-7 Implementation of the proposed General Plan Update could result in a safety hazard for people residing or working in the Planning Area as a result of the proximity of a public airport.

Newport Beach borders the southeastern portion of John Wayne Airport (JWA). In addition, the City lies beneath the arrival traffic pattern of Long Beach Airport. Between the two airports, JWA generates nearly all aviation traffic directly above the City of Newport Beach because the descent pattern for Long Beach air traffic generally takes place over the ocean rather than over the City.

According to the City's Emergency Management Plan, the highest probability of an air crash incident would occur between two light aircraft or helicopters in a mid-air crash. The probability of this type of an air crash is higher along the coast because of training flights, sight seeing, and banner towing taking place over the beach area. Such an incident would result in moderate ground damage. A worst case scenario would be a mid-air collision, at night, between two commercial airliners over a densely populated area of the City. Although accidents with one or more fatalities involving commercial aircraft are rare events, the potential growth and development that could occur through implementation of the proposed General Plan Update could place people at risk for an aviation hazard.

Three areas found to be of increased vulnerability to aviation hazards in the City are Balboa Peninsula, Balboa Island, and Upper Newport Bay. Balboa Island's access and egress is limited to a small bridge. Many of the two-story buildings, including shops, small restaurants, and residences, are wood-frame structures, and very close to one another. In the event of a fire caused by an aviation accident, it could spread quickly. The only fire station located on Balboa Island, No. 4, might either be impacted by the incident or suffer a response time hampered by traffic congestion, residents evacuating the area, debris, and narrow streets. With implementation of the proposed General Plan Update, increased growth in the City may further impact the ability of fire facilities to maintain response times in the event of an aviation disaster. The same problem of limited access may hinder reinforcements by other fire and rescue services.

An aviation accident in Upper Newport Bay could create a significant ecological and economic hazard to the environment. The City of Newport Beach contains more than 9,000 registered boats which could be dramatically affected by an aviation accident on the Bay, considerably impacting the recreational value of the City. An aviation accident could also significantly pollute the waterways, which would indirectly impact the health and safety of people in the City.

In the event of an aviation hazard, pilots are instructed to follow Newport Bay away from residential or developed area. Any potential impact will be significantly reduced by fast, coordinated, and skilled response operations of all available emergency services. In the event of an aviation hazard, Mutual Aid would most likely be required for law enforcement, coroner, fire suppression, and medical operations. In addition, JWA is protected by an on-site airport fire service as required by the Federal Aviation

Administration (FAA) regulations. This service is provided by Orange County Fire Station No. 33, which is staffed 24 hours a day, seven days a week, with a minimum of seven firefighters at any given time.

Implementation of the proposed General Plan Update would result in maintenance and limited expansion of the currently developed mix of uses within the Airport Area, in the vicinity of JWA, including office, airport-supporting retail and industrial, hotel, and public uses (as defined by the existing General Plan). Additionally, implementation of the proposed General Plan Update provides the opportunity for the development of new residential neighborhoods. The operation of JWA could represent a potential hazard to future employees and residents within this area.

However, all land uses surrounding JWA would be required to comply and be compatible with the land use standards established in the City's Municipal Code and the Airport Land Use Commission's (ALUC) JWA "Airport Environs Land Use Plan" (AELUP). According to the City's Municipal Code (Title 20, Section 20.44.025), projects within the project area pertinent to the AELUP shall be referred to ALUC until such time as the City becomes a "Conforming Local Agency" as defined by ALUC. The northern inland portions of the City extending south just past Fashion Island, are included within the AELUP's height restriction zone for JWA.

The City's Emergency Management Plan also establishes safety procedures with respect to aviation hazards to promote the safety of persons on the ground while reducing the risks of serious harm to aircraft crews and passengers that may need to make emergency landings in the immediate airport vicinity. The AELUP vicinity height guidelines would protect public safety, health, and welfare by ensuring that aircraft could fly safely in the airspace around the airport.

In addition to existing regulations, the proposed General Plan Update identifies a goal to protect residents, property, and the environment from aviation-related hazards, and lists policies S 8.1 through S 8.4 to ensure preparation and minimize risk in the case of an aviation accident. For example, Policies S 8.1 and S 8.2 would require aircraft rescue firefighting training programs as well as awareness training for emergency personnel on a regular basis. Policy S 8.3 would implement policies outlined in the Orange County Fire Services Operational Area Mutual Aid Plan and the California Fire Service and Rescue Emergency Mutual Aid Plan.

In addition, the California Airport Land Use Planning Handbook would also be utilized in the preparation of environmental documents for all new development projects located within the AELUP boundaries. The Handbook establishes statewide requirements for the conduct of airport land use compatibility planning, and provides compatibility planning guidance to ALUCs, their staffs and consultants, the counties and cities having jurisdiction over airport area land uses, and airport proprietors. LU Policy 6.15.24 requires that all development be constructed within the height limits and residential be located outside of areas exposed to the 65 dBA CNEL noise contour specified by the AELUP, unless the City Council makes appropriate findings for an override in accordance with applicable law. As such, the possibility exists for residential development to occur within the 65 dBA CNEL noise contour. Thus, if residential development is constructed within the 65 dBA CNEL noise contour, the potential increase for safety hazards associated with the airport would be *significant*.

However, where new development occurs outside of the 65 dBA CNEL noise contour, compliance with existing regulations, the proposed General Plan Update policies, and utilization of the California Airport Land Use Planning Handbook for new development within JWA land use boundaries would minimize impacts associated with operation of the JWA on surrounding land uses. Impacts on new uses outside of the 65 dBA CNEL noise contour would, therefore, be *less than significant*.

Threshold	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
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Impact 4.6-8 Implementation of the proposed General Plan Update could result in interference with an adopted emergency response plan or emergency evacuation plan.

With additional growth in the City's population that could result from implementation of the proposed General Plan Update, traffic conditions could become more congested. In the event of an accident or natural disaster, the increase in traffic in the City may impede the rate of evacuation for the residents. Concurrently, the response times for emergency medical or containment services could also be adversely affected by the increased traffic conditions in the City.

The Nbfd Emergency Services Office published the City of Newport Beach Emergency Management Plan in 2004. The Emergency Management Plan provides guidance for the City of Newport Beach's response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear defense operations in both war and peacetime. The plan concentrates on management concepts and response procedures relative to large-scale disasters. Such disasters pose major threats to life, the environment and property, and can impact the well being of a large number of people. The Basic Plan is updated every three years. In addition, the Newport Beach City Manager, with assistance from the Nbfd, is responsible for ensuring necessary changes and revisions to this plan are prepared, coordinated, published, and distributed.

In addition, the proposed General Plan Update Safety Element also contains Policies S 9.1, S 9.2, and S 9.3 to ensure that the City's Emergency Management Plan is regularly updated, provides for efficient and orderly citywide evacuation, and also ensures that emergency services personnel are familiar with the relevant response plans applicable to the City. Further, Policy S 9.5 of the Safety Plan calls for the distribution of information about emergency planning to community groups, schools, religious institutions, business associations, and residents. Implementation of these policies would reduce impacts associated with emergency response and evacuation in the City to a *less-than-significant* level.

Threshold	Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
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Impact 4.6-9 Implementation of the proposed General Plan Update could result in development in urbanized areas adjacent to or intermixed with wildlands.

Implementation of the General Plan could lead to an increase in residential or commercial development in areas that are susceptible to wildland fires. In those susceptible areas, particularly in the eastern portions of the City, as well as surrounding areas to the north, east, and southeast, land development is governed by special State and local codes, and property owners are required to follow maintenance guidelines aimed at reducing the amount and continuity of the fuel (vegetation) available. The City also maintains hazard reduction standards which regulate landscaping, firewood storage, debris clearing from rooftops, and other fire hazard reduction techniques.

In addition, Policies S 6.1 through S 6.9 of the City’s proposed Safety Element of the General Plan Update are directly related to reducing the threat of fire hazards within the City. For example, Policy S 6.2 would implement hazard reduction, fuel modification, and other methods to reduce wildfire hazards, while Policy S 6.4 entails the use of fire-resistive, native plant species in fuel modification zones abutting sensitive habitats. Policy S 6.8 would continue to regularly update building and fire codes to provide for fire safety and design, and Policy S 6.9 encourages owners of non-sprinklered properties, especially high- and mid-rise structures, to retrofit their buildings and include internal fire sprinklers. With the implementation of the existing hazard reduction standards as well as the fire hazard policies of the Safety Element, this impact would be *less than significant*.

■ Cumulative Impacts

Impacts associated with hazardous materials are often site-specific and localized. However, for purposes of this cumulative analysis, the geographic context for cumulative hazards impacts would be the Planning Area (encompassing the City and SOI).

Since the proposed General Plan Update takes into account all projected future growth and development within the Planning Area, the impacts that are discussed in this section pertaining to hazardous materials also analyze all cumulative impacts within the Planning Area. As such, compliance with all applicable Federal, State, and local regulations related to hazardous materials on a project-by-project basis would ensure that the routine transport, use, or disposal of hazardous materials would not result in adverse impacts. All demolition activities in the Planning Area that would involve asbestos or lead based paint would also occur in compliance with SCAQMD Rule 1403 and OSHA Construction Safety Orders, which would ensure that hazardous materials impacts would be less than significant. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers and the public to hazardous substances. With adherence to applicable Federal, State, and local regulations governing hazardous materials and compliance with the proposed General Plan Update policies indicated below, the potential risks associated with hazardous

wastes in the Planning Area would be *less than significant*. As such, cumulative impacts would be *less than significant*.

■ Proposed General Plan Update Policies

Airport Compatibility

Goal LU 6.15 A mixed-use community that provides jobs, residential, and supporting services in close proximity, with pedestrian-oriented amenities that facilitates walking and enhance livability.

LU 6.15.24 **Airport Compatibility**

Require that all development be constructed within the height limits and residential be located outside of areas exposed to the 65 dBA CNEL noise contour specified by the Airport Environs Land Use Plan (AELUP), unless the City Council makes appropriate findings for an override in accordance with applicable law.

Safety Element

The Safety Element of the proposed General Plan Update includes policies that would address issues related to Hazards and Hazardous Materials. The policies that are applicable to the project are included below.

Fire Hazards

Goal S 6 **Protection of human life and property from the risks of wildfires and urban fires.**

Policy S 6.1 **Review Adequacy of Infrastructure**

Review the adequacy of the water storage capacity and distribution network, in the event of a natural disaster, on a regular basis.

Policy S 6.2 **Development in Interface Areas**

Apply hazard reduction, fuel modification, and other methods to reduce wildfire hazards to existing and new development in urban wildland interface areas.

Policy S 6.3 **New Development Design**

Site and design new development to avoid the need to extend fuel modification zones into sensitive habitats.

Policy S 6.4 Use of City-Approved Plant List

Use fire-resistive, native plant species from the City-approved plant list in fuel modification zones abutting sensitive habitats.

Policy S 6.5 Invasive Ornamental Plant Species

Prohibit invasive ornamental plant species in fuel modification zones abutting sensitive habitats.

Policy S 6.6 Database Maintenance of Interface Areas

Continue to maintain a database of parcels in urban wildland interface areas.

Policy S 6.7 Properties within Interface Areas

Continue regular inspections of parcels in the urban wildland interface areas and direct property owners to bring their property into compliance with fire inspection standards.

Policy S 6.8 Update Building and Fire Codes

Continue to regularly update building and fire codes to provide for fire safety design.

Policy S 6.9 Retrofitting of Nonsprinklered Buildings

Encourage owners of nonsprinklered properties, especially high- and mid-rise structures, to retrofit their buildings and include internal fire sprinklers.

Hazardous Materials

Goal S 7 Exposure of people and the environment to hazardous materials associated with methane gas extraction, oil operations, leaking underground storage tanks, and hazardous waste generators is minimized.

Policy S 7.1 Known Areas of Contamination

Require proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments in accordance with American Society for Testing and Materials standards, and if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination).

- Policy S 7.2 Development Design within Methane Gas Districts**
Ensure that any development within identified methane gas districts be designed consistent with the requirements of the Newport Beach Municipal Code.
- Policy S 7.3 Education**
Educate residents and businesses about how to reduce or eliminate the use of hazardous materials, including using safer non-toxic equivalents.
- Policy S 7.4 Implementation of Remediation Efforts**
Minimize the potential risk of contamination to surface water and groundwater resources and implement remediation efforts to any resources adversely impacted by urban activities.
- Policy S 7.5 Siting of Sensitive Uses**
Develop and implement strict land use controls, performance standards, and structure design standards including development setbacks from sensitive uses such as schools, hospitals, day care facilities, elder care facilities, residential uses, and other sensitive uses that generate or use hazardous materials.
- Policy S 7.6 Regulation of Companies Involved with Hazardous Materials**
Require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport, and to notify the appropriate City, County, State and Federal agencies in the event of a violation.

Aviation Hazards

- Goal S 8 Residents, property, and the environment are protected from aviation-related hazards.**
- Policy S 8.1 Firefighter Training Program**
Provide a formalized Aircraft Rescue Fire Fighting training program (including airport and aircraft familiarization, fuel fire extinguishment, hazards associated with airplanes and aircraft cargo, safety procedure, aviation communications, evacuation, and rescue operations) for all firefighters and Chief Fire Officers in Newport Beach.
- Policy S 8.2 Emergency Personnel Awareness Training**
Provide Aircraft Rescue Fire Fighting awareness training for all Newport Beach emergency personnel on a regular basis.

Policy S 8.3 Implementation of Interagency Policies

Implement policies outlined in the Orange County Fire Services Operational Area Mutual Aid Plan, and the California Fire Service and Rescue Emergency Mutual Aid Plan.

Policy S 8.4 Mutual Aid Agreements

Develop clear mutual aid agreements and Memoranda of Understanding with the airport fire service, county emergency and law enforcement agencies, United States Coast Guard, private ferry providers, and other potential resources.

Disaster Planning

Goal S 9 Effective emergency response to natural or human-induced disasters that minimizes the loss of life and damage to property, while also reducing disruptions in the delivery of vital public and private services during and following a disaster.

Policy S 9.1 Review and Update Emergency Plans

Review and update, as necessary, the City’s Emergency Management Plan on an annual basis.

Policy S 9.2 Emergency Management System Training

Conduct annual training sessions using adopted emergency management systems. Coordinate with other urban area jurisdictions to execute a variety of exercises to test operational and emergency plans.

Policy S 9.3 Participation in Mutual Aid Systems

Maintain participation in local, regional, state and national mutual aid systems to ensure appropriate resources are available for response and recovery during and following a disaster.

Policy S 9.4 Familiarity with National and State Response Plans

Ensure that all Newport Beach personnel are familiar with the National Incident Management System, the National Response Plan, the State of California Master Mutual Aid Agreement, the Orange County Operational Area Mutual Aid Plan, and any other relevant response plans consistent with their position in the City’s Emergency Management Plan.

Policy S 9.5 Emergency and Disaster Education Programs

Sponsor and support education programs pertaining to emergency/disaster preparedness and response protocols and procedures. Distribute information about emergency preparedness to community groups, schools, religious institutions, transient occupancy establishments, and business associations.

- Policy S 9.6 Hazard Mitigation Plan**
Develop and maintain a hazard mitigation plan that advocates the use of programs and projects that, when implemented, will reduce the impacts on the community from a natural or human-induced disaster.
- Policy S 9.7 Existing Development within 100-year Flood Zones**
Implement flood warning systems and evacuation plans for areas that are already developed within 100-year flood zones.
- Policy S 9.8 Emergency Use of Coastal Facilities**
Establish procedures and public/private cooperation and communication for the emergency use of coastal facilities and equipment in advance of flood, storm, pollution, dredging, vessel sinking, and other events, supplementing other safety and rescue bases and equipment.

■ Impacts and Mitigation Measures

No mitigation measures are necessary, as the proposed General Plan Update policies fully mitigate the impacts. However, if residential development occurs within the 65 dBA CNEL noise contour in the Airport Area, no mitigation measures would be feasible to reduce impacts.

Level of Significance After Policies/Mitigation Measures

The majority of impacts associated with hazards and hazardous materials within the Planning Area would be ***less than significant*** upon implementation of the identified proposed General Plan Update policies. However, if residential development occurs within the 65 dBA CNEL noise contour in the Airport Area, this would present a ***significant and unavoidable*** impact.

4.6.6 References

- Earth Consultants International. 2003. *Hazards Assessment Study, City of Newport Beach, California*.
- EIP Associates. 2004. *General Plan Update Technical Background Report*.
- Newport Beach, City of. 2004. Emergency Management Plan, 2004. <http://www.city.newport-beach.ca.us/EmergManagementPlan/BasicPlan1.pdf>

