

## 3.9 HAZARDS AND HAZARDOUS MATERIALS

This section of the 2024 PEIR describes existing hazards and hazardous materials in the SCAG region, sets forth the regulatory framework that affects hazards and hazardous materials, and analyzes the potential impacts from hazards and hazardous materials that could result from implementation of Connect SoCal 2024. In addition, this 2024 PEIR provides regional-scale mitigation measures as well as project-level mitigation measures that can and should be considered and implemented by lead agencies for subsequent, site-specific environmental review to reduce identified impacts as appropriate and feasible. Hazards and hazardous materials issues relative to air quality are analyzed in Section 3.3, *Air Quality*. Wildfire impacts are analyzed in more detail in Section 3.20, *Wildfire*.

### 3.9.1 ENVIRONMENTAL SETTING

#### DEFINITIONS

Definitions of terms used in the regulatory framework, characterization of baseline conditions, and impact analysis for hazards and hazardous materials follow:

- *Hazard versus risk.* Workers' health and general public health are potentially at risk whenever hazardous materials have been used or where there could be an exposure to such materials. Inherent in the setting and analyses presented in this section are the concepts of the "hazard" of these materials and the "risk" they pose to human health. Exposure to certain chemical substances may harm internal organs or systems in the human body, ranging from temporary effects to permanent disability, or death. Hazardous materials that result in adverse effects are generally considered "toxic." Other chemical materials, however, may be corrosive, or react with other substances to form other hazardous materials, but they are not considered toxic because organs or systems are not affected. Because toxic materials can result in adverse health effects, they are considered hazardous materials, but not all hazardous materials are necessarily "toxic." For purposes of the information and analyses presented in this section, the terms hazardous substances or hazardous materials are used interchangeably and include materials that are considered toxic.

The risk to human health is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose. That is to say, the likelihood and means of exposure, in addition to the inherent toxicity of a material, are used to determine the degree of risk to human health. For example, a high probability of exposure to a low toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to high toxicity chemical might. Various regulatory agencies, such as the United States Environmental Protection Agency (USEPA), California Environmental Protection Agency's (CalEPA), State Water Resources Control Board (SWRCB), CalEPA Department of Toxic Substances Control (DTSC), United States Occupational Safety and Health Administration (OSHA), and California OSHA (Cal/OSHA) are responsible for developing and/or enforcing risk-based standards to protect the public and the environment.

- *Hazardous material:* A hazardous material is any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment [Health and Safety Code Chapter 6.95, Section 25501(n)]. The term "hazardous materials" refers to both hazardous substances and hazardous wastes. Under federal and state laws (listed below and further listed in Section 3.9.2, *Regulatory Framework*), any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is

toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases).

- *Hazardous waste:* Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been spent, discarded, discharged, spilled, contaminated, or are being stored until they can be disposed of properly (California Code of Regulations [CCR] Title 22, Division 4.5, Chapter 11, Article 2, Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific criteria for ignitability, corrosivity, reactivity, and toxicity (CCR Title 22, Division 4.5, Chapter 11, Article 3, Sections 66261.20 through 66261.24), exhibiting one or more of the characteristics identified below:
  - *Toxic substances:* Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or even death. For example, such substances can cause disorientation, acute allergic reactions, asphyxiation, skin irritation, or other adverse health effects if human exposure exceeds certain levels. The level depends on the substances involved and is chemical-specific. Carcinogens (substances that can cause cancer) are a special class of toxic substances. Examples of toxic substances include benzene (a component of gasoline and a suspected carcinogen) and methylene chloride (a common laboratory solvent and a suspected carcinogen).
  - *Ignitable substances:* Ignitable substances are hazardous because of their ability to burn. Gasoline, hexane, and natural gas are examples of ignitable substances.
  - *Corrosive materials:* Corrosive materials can cause severe burns. Corrosives include strong acids and bases such as sodium hydroxide (lye) or sulfuric acid (battery acid).
  - *Reactive materials:* Reactive materials are generally classified as those that are able to react by themselves when exposed to heat, pressure, shock, friction, air or water. Reactive interactions occur when two or more compounds are combined to cause a hazardous result, such as explosions or toxic gases.

While hazardous substances are regulated by multiple agencies, as described in Section 3.9.2, *Regulatory Framework*, below, cleanup requirements of hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the project.

- *Certified Unified Program Agencies:* The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), codified in California Health and Safety Code Sections 25404 et seq., requires the administrative consolidation of six hazardous materials and waste programs under one agency, a Certified Unified Program Agency (CUPA). CUPAs maintain records regarding location and status of sites that use hazardous materials within their areas of jurisdiction and administer programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. The following programs are consolidated under the unified program:
  - Hazardous Materials Release Response Plan and Inventory (Business Plans)
  - California Accidental Release Prevention (CalARP)
  - Hazardous Waste (including Tiered Permitting)
  - Underground Storage Tanks (USTs)
  - Aboveground Storage Tanks (Spill Prevention Control and Countermeasures [SPCC] requirements)
  - Uniform Fire Code (UFC) Article 80 Hazardous Material Management Program (HMMP) and Hazardous Material Identification System (HMIS)

CUPAs implement the hazardous waste and material standard including petroleum storage, areas plans for hazardous material emergencies, CalARP Program, hazardous materials release response plans and inventories, hazardous material management plan and inventory statements, onsite waste treatment program, and underground storage tank program. The CalARP program was implemented on 1997 to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. This is accomplished by requiring businesses that handled regulated substance above a threshold to develop a risk management plan with safety information, operating procedures, and training requirements, compliance audits, and other incident investigation measures to reduce accidental release potential.

- *Contaminated Sites:* A site at which hazardous substances occur at concentrations above background levels and where assessment indicates it poses, or is likely to pose, an immediate or long-term hazard to human health or the environment. SWRCB and DTSC maintain databases of properties in California where hazardous substances were released, see section further below titled *Properties Included on a List of Hazardous Materials Sites Pursuant to Government Code Section 65962.5*.
- *Radioactive materials:* Materials that emit radiation resulting from changes in the nuclei of atoms of the element.
- *Superfund sites:* Superfund sites refer to contaminated sites that have been designated by USEPA on the National Priorities List (NPL) that are eligible for funding from the trust fund (the "Superfund") established by USEPA for cleaning up abandoned or uncontrolled hazardous waste sites pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA was enacted in the wake of the discovery of toxic waste dumps such as Love Canal and Times Beach in the 1970s. It allows the USEPA to clean up such sites and to compel responsible parties to perform cleanups or reimburse the government for USEPA-led cleanups.
- *Voluntary cleanup program (VCP):* The VCP is a program administered by DTSC and was introduced as a streamlined program to protect human health, clean up the environment and get property back to productive use. Corporations, real estate developers, local and state agencies entering into VPC agreements are able to restore properties quickly and efficiently, rather than having their projects compete for DTSC's limited resources with other low-priority hazardous waste sites. State VCPs have played a major role in cleaning up brownfields since the 1990s. Through a nonbinding memorandum of agreement, the USEPA partnered with the state to provide resource and coordination of Superfund sites to meet Resource Conservation and Recovery Act of 1976 (RCRA) liabilities and provide corrective actions to provide "one cleanup" approaches. Selection of sites eligible for VCPs are provided under USEPA's March 2003 guidance that exclude sites from "eligible response site" when not meeting regional determinations under Section 101(41)(C)(i) of CERCLA.
- *Asbestos-containing materials (ACMs).* Asbestos is a naturally occurring fibrous material that was widely used in structures built between 1945 and 1978 for its fireproofing and insulating properties. ACMs were banned by USEPA between the early 1970s and 1991 under the authority of the federal Clean Air Act (CAA) and Toxic Substances Control Act (TSCA) as exposure to ACMs increases the risk of developing lung disease and cancers. Common ACMs include vinyl flooring and associated mastic, wallboard and associate joint compound, plaster, stucco, acoustic ceiling spray, ceiling tiles, heating system components, and roofing materials. Commercial/industrial structures are affected by asbestos regulations if damage occurs or if remodeling, renovation, or demolition activities disturb ACMs. Since many of the structures within the SCAG Region were constructed before 1978, there is a potential for the presence of ACMs to exist in a wide variety of building materials within the SCAG region.

- *Lead and lead-based paint (LBP)*. Lead is a naturally occurring metallic element. Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Children are particularly susceptible to potential lead-related health problems, because it is easily absorbed into developing systems and organs. Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with LBP. LBP was primarily used during the same time period as ACMs. Commercial/industrial structures are affected by LBP regulations if the paint is in a deteriorated condition or if remodeling, renovation, or demolition activities disturb LBP surfaces. Since many of the structures within the SCAG Region were constructed before 1978, there is potential for structures in the SCAG region to contain paints and coatings with detectable or elevated concentrations of lead.
- *Polychlorinated biphenyls (PCBs)*. PCBs are mixtures of up to 209 individual chlorinated compounds. There are no known natural sources of PCBs. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they do not burn easily and are good insulators. The manufacture of PCBs was stopped in the United States in 1977 because of evidence that they build up in the environment and can cause cancers and other harmful health effects, including to the immune system, reproductive system, nervous system, and endocrine system. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

## **ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS**

Throughout the SCAG region there are risks associated with the transportation-related use of hazardous materials. The transport of hazardous materials via truck, rail, and other modes involves the risk of accidental release during routine transportation. The use of hazardous materials and the generation of hazardous waste in the construction, maintenance, and operation of the transportation system are potential sources of risk and exposure. Finally, the disposal of hazardous materials may create residual contamination of soil or water and may be a source of risk when such sites are disturbed during the construction or operation of future transportation projects or associated development.

Hazardous materials are transported throughout the SCAG region by a variety of modes: truck, rail, air, ship, and pipeline. According to the Office of Hazardous Materials Safety (OHMS) in the U.S. Department of Transportation (USDOT), hazardous materials shipments can be regarded as equivalent to deliveries, but any given shipment may involve one or more movements, or trip segments, that may occur by different modes. For instance, a shipment might involve initial pickup by truck (one movement), a transfer to rail (a second movement), and a final delivery by truck again (for a total of three movements). Each movement creates risk of exposure to hazardous materials, depending on the hazardous material being moved, the mode of transport, and numerous other factors.

### **GOODS MOVEMENT**

Goods movement generally refers to the movement of raw, semi-finished, and finished materials and products used by businesses and residents across the transportation system. These goods move in myriad ways and through complex systems, often using multiple modes of transportation (e.g., ships, trucks, trains, planes, etc.). Goods may be manufactured within the United States or another country, and transported to a business, retail store, or directly to consumers versus traditional purchases by consumers at physical retail stores. The efficient movement of these goods is critical to maintain a strong economy and ensure improvements in the quality of life of regional residents.

Goods movement supports industries and activities that provide jobs, tax revenue, and resources that bolster innovation, creativity, and access to local and global markets. Goods movement depends directly on the infrastructure that comprises the transportation network such as highways, rail lines, ports, and networks of warehousing and other distribution facilities. Maintaining and improving existing infrastructure, and expanding infrastructure capacity where appropriate, is key to ensuring the competitiveness of a growing economy. However, goods movement activities may potentially affect the physical environment. Growing trade and increased volumes of goods moving across the transportation system have contributed to greater congestion, safety concerns, harmful emissions of dangerous pollutants, wear-and-tear on roadways and impacts on local neighborhoods. As the metropolitan planning organization (MPO) for the region, SCAG has adopted a vision for the region's goods movement system.

Federal law (23 United States Code [USC]. Sections 134–135) mandates that MPOs encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas. Specifically, MPOs should consider projects and strategies that will increase the accessibility and mobility of people and for freight and enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

At the state level, MPOS are required to perform regional transportation planning to prepare and provide for the region's mobility in a fiscally and environmentally responsible manner, consistent with the needs, preferences, and sensibilities of the community. This coincides with Government Code Section 65041.1 and identifies planning considerations for freight that are consistent with federal requirements.

### TREATMENT, STORAGE, AND DISPOSAL FACILITIES

A treatment, storage, and disposal facility (TSDF) means any area used to store hazardous wastes for more than 90 days, even if on the same site where the wastes were generated. Permits are required from the DTSC and/or the RWQCB to create and operate a TSDF of any kind. The terms "facility," "treat," "store," and "dispose" all have specific definitions found in 22 CCR Section 66260.10:

- A facility includes all contiguous land, structures, and appurtenances on or in the land used for treating, storing, or disposing of hazardous waste. A single facility may consist of several types or combinations of operational units.
- Treatment is defined as any method, technique, or process designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.
- Storage is defined as holding hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.
- Disposal is the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid or hazardous waste on or in the land or water. A disposal facility is any site where hazardous waste is intentionally placed and at which the waste will remain after closure.

There are currently 27 active hazardous material TSDFs in the SCAG region, as summarized on **Table 3.9-1, Hazardous Material Treatment Storage and Disposal Facilities in the SCAG Region.**

TABLE 3.9-1 Hazardous Material Treatment Storage and Disposal Facilities in the SCAG Region

FACILITY NAME	HANDLER ID	ADDRESS	CONTACT	OPERATOR
A & A Feros Non Feros Metal	CAL000098454	640 South Hill Street #743 Los Angeles, CA 90014		
Advanced Environmental Inc DBA World Oil Environmental Services	CAT080025711	13579 Whittram Avenue Fontana, CA 92335		
Agritec Int DBA Cleantech Environmental Inc	CAL000330453	5820 Martin Road Irwindale, CA 91706		
Chevron El Segundo Refinery	CAD008336901	324 West El Segundo Blvd. El Segundo, CA 90245		Chevron
Clean Harbors Westmorland, LLC	CAD000633164	5295 S Garvey Road Westmorland, CA 92281	Andrew M Yadvish, 7603449400 Ext. 4004	Clean Harbors Westmorland LLC
Crosby & Overton	CAD028409019	1610 West 17th Street Long Beach, CA 90813	Michael A Shlob, 5624325445 Ext. 228	Crosby And Overton INC
Demunno/Kerdoon	CAT080013352	2000 North Alameda Street Compton, CA 90222	Bonnie Booth, 3105377100 Ext. 224	Demunno/Kerdoon
World Oil Terminals - Vernon	CAT080033681	3650 East 26th Street Los Angeles, CA 90023	Rosemary Domino, 3232685056 Ext. 108	
Hazmat TSDF Inc.	CAD982444481	180 West Monte Avenue Rialto, CA 92376	Wade K Riddering, 9098734141	
Emerald Transformer Los Angeles, LLC	CAD050806850	5756 Alba Street Los Angeles, CA 90058	Roger R Fox, 3232772528	
Heraeus Precious Metals North America, Inc.	CAD060398229	15524 Carminita Road Santa Fe Springs, CA 90670	Peter Eckert, 5624831830	Heraeus Metal Processing, Inc.
Lighting Resources Inc	CAR000156125	805 Francis Street Ontario, CA 91761	Dan P Gillespie, 9099237252 Ext. 14	Dan Gillespie
Veolia ES Technical Solutions LLC Azusa	CAD008302903	1704 W First Street Azusa, CA 91702	Javed Hussain, 6268152220	
Pacific Resource Recovery Services	CAD008252405	3150 East Pico Blvd. Los Angeles, CA 90023	Mark Russell, 3232618114 Ext. 343	Pacific Resource Recovery
Phibro-Tech, Inc.	CAD008488025	8851 Dice Road Santa Fe Springs, CA 90670	Marty Voss, 5626988036 Ext. 120	Phibro-Tech, Inc.
Ecobat Resources California INC	CAD066233966	720 S. 7th Avenue City of Industry, CA 91746	Neal I Lyon, 6263302294 Ext. 242	
RHO-Chem Corp	CAD008364432	425 Isis Avenue Inglewood, CA 90301	Hector U Sanchez, 3237766233 Ext. 204	Philip Services Corporation
Safety-Kleen Systems Inc	CAT000613976	2120 South Yale Street Santa Ana, CA 92704	Nahid Toossi, 7144294355	Safety-Kleen Systems Inc
Safety-Kleen Systems Inc	CAT000613935	2918 Worthen Avenue Los Angeles, CA 90039	John Matthews, 6264010106	Safety-Kleen Systems Inc
Clean Harbors Wilmington LLC	CAD044429835	1737 E Denni Street Wilmington, CA 90744	Joe L Christopher, 3108359998 Ext. 499	Clean Harbors Wilmington LLC
US Ecology Vernon	CAD097030993	5375 South Boyle Avenue Vernon, CA 90058	Ingun Littorin, 3232771518 Ext. 1518	US Ecology

FACILITY NAME	HANDLER ID	ADDRESS	CONTACT	OPERATOR
General Electric International Inc.	CAD030584502	3601 East La Palma Avenue Anaheim, CA 9806		General Electric
Industrial Service Oil Co Inc.	CAD099452708	1700 South Soto Street Los Angeles, CA 90023		Industrial Service Oil Company Inc
Kinsbursky Brothers Supply Inc.	CAD088504881	1314 North Anaheim Blvd. Anaheim, CA 92801	7147388516	Kiburski Brothers International
Southern California Gas Company	CAD981422017	2424 East Olympic Blvd Los Angeles, CA 90021		Southern California Gas Company
Southern California Gas Company	CAT000625137	8101 South Rosemead Blvd Pico Rivera, CA 90660	8772380092	Southern California Gas Company

Source: DTSC 2023a

## HAZARDOUS MATERIALS SITES

The following sections discuss known sites or types of sites where hazardous materials have been spilled or released into the environment.

### PROPERTIES INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES PURSUANT TO GOVERNMENT CODE SECTION 65962.5

The provisions in Government Code Section 65962.5 are commonly referred to as the “Cortese List” (after the Legislator who authored the legislation that enacted it) (CalEPA 2023). The list, or a site’s presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA).

Government Code Section 65962.5 was originally enacted in 1985, and per subsection (g), the effective date of the changes called for under the amendments to this section was January 1, 1992. Because this statute was enacted over thirty years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information to be included in the Cortese List does not exist. While Government Code Section 65962.5 makes reference to the preparation of a “list,” many changes have occurred related to web-based information access since 1992 and this information is now largely available on the websites of the responsible organizations. Those requesting a copy of the Cortese “list” are now referred directly to the appropriate information resources contained on the websites of the boards or departments that are referenced in the statute. The Cortese List currently consist of the following five data resources, all of which can be accessed at <https://calepa.ca.gov/SiteCleanup/CorteseList/>:

- Hazardous waste and substances sites from DTSC EnviroStor database
- Leaking underground storage tank sites from the SWRCB GeoTracker database
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit.
- Active cease and desist orders (CDOs) and cleanup and abatement orders (CAOs) from SWRCB.
- Hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, as identified by DTSC.

Each of the five subsections below summarize the above-listed Cortese List data resources information for sites within the SCAG area.

### ENVIROSTOR DATABASE OF HAZARDOUS WASTE AND SUBSTANCES SITES

EnviroStor is the DTSC data management system for tracking cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further that are under the jurisdiction of DTSC (DTSC 2023b). EnviroStor includes identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. The types of sites within the SCAG area include the following:

- Federal Superfund (NPL): Identifies sites where the USEPA proposed, listed, or delisted a site on the NPL. The list of sites is developed and maintained by USEPA, which typically has primary regulatory oversight for the sites listed on the NPL.
- State Response: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high priority and high potential risk.
- Voluntary Cleanup: Identifies sites with either confirmed or unconfirmed releases, and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs.
- School: Identifies proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. School sites are further defined as "Cleanup" (remedial actions occurred) or "Evaluation" (no remedial action occurred) based on completed activities. All proposed school sites that will receive State funding for acquisition or construction are required to go through a rigorous environmental review and cleanup process under DTSC's oversight.
- Military Evaluation: Identifies military facilities that were Formerly Used Defense Sites (FUDS) with confirmed or unconfirmed releases and where DTSC is involved in investigation and/or remediation, either in a lead or support capacity. Facilities/sites with confirmed releases are generally considered high-priority and high potential risk. FUDS are further defined as State Response, Federal Superfund, or Military Evaluation sites.
- Corrective Action: Investigation or cleanup activities at RCRA or state-only hazardous waste facilities (that were required to obtain a permit or have received a hazardous waste facility permit from DTSC or USEPA) are called "corrective action."
- Evaluation/Investigation: Identifies suspected, but unconfirmed, contaminated sites that need or have gone through a limited investigation and assessment process. If a site is found to have confirmed contamination, it will change EnviroStor Help Desk: [envirostor@dtsc.ca.gov](mailto:envirostor@dtsc.ca.gov) 11 from Evaluation to either a State Response or Voluntary Cleanup site type. Sites found to have no contamination at the completion of the limited investigation and/or assessment process result in a No Action Required (for Phase I assessments) or No Further Action (for PEAs or Phase II assessments) determination.

The number of sites listed on EnviroStor that are within the SCAG area are listed below on **Table 3.9-2, Number of DTSC-Listed Sites by County**.



TABLE 3.9-2 Number of DTSC-Listed Sites by County

COUNTY	FEDERAL SUPERFUND (NPL)	SCHOOL CLEANUP	STATE RESPONSE	VOLUNTARY CLEANUP	CORRECTIVE ACTION SITES	MILITARY SITES	EVALUATION / INVESTIGATION SITES
Imperial	1	2	16	12	2	61	30
Los Angeles	26	157	169	468	230	261	1,039
Orange	4	14	50	115	47	47	283
Riverside	5	16	29	41	12	64	321
San Bernardino	7	23	35	63	39	126	224
Ventura	2	5	14	35	9	28	54
<b>Total</b>	<b>45</b>	<b>217</b>	<b>313</b>	<b>734</b>	<b>339</b>	<b>587</b>	<b>1,951</b>

Source: USEPA 2023; DTSC 2023c

### LEAKING UNDERGROUND STORAGE TANKS

A UST system is a tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground. The majority of USTs contain petroleum. Sites that contain USTs use marketers who sell gasoline to the public (such as service stations and convenience stores) and nonmarketers who use USTs solely for their own needs (such as fleet service operators and local governments).

The greatest potential hazard from a leaking underground storage tank (LUST) is that the petroleum or other hazardous substance can seep into the soil and contaminate groundwater. A LUST can present other health and environmental risks, including the potential for fire and explosion. Until the mid-1980s, most USTs were made of bare steel, which is likely to corrode over time and allow UST contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures also can cause USTs to release their contents into the environment. GeoTracker is the SWRCB data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, such as Leaking Underground Storage Tank (LUST) Sites, Department of Defense Sites, and Cleanup Program Sites (SWRCB 2023). Military and Cleanup Program Sites are discussed above in the DTSC EnviroStor section. GeoTracker also contains records for various unregulated projects as well as permitted facilities including Irrigated Lands, Oil and Gas Production, operating Permitted USTs, and Land Disposal Sites.

There are nearly 15,000 LUSTs in the SCAG region, with over half in Los Angeles County, and the least number, by an order of magnitude, in Imperial County, as listed below in **Table 3.9-3, Leaking Underground Storage Tank Cleanup Sites**.

TABLE 3.9-3 Leaking Underground Storage Tank Cleanup Sites

COUNTY	LEAKING UNDERGROUND STORAGE TANKS
Imperial	236
Los Angeles	7,591
Orange	3,023
Riverside	1,364
San Bernardino	1,086
Ventura	1,408

Source: SWRCB 2023

### SOLID WASTE MANAGEMENT UNITS WITH HAZARDOUS WASTE LEVELS OUTSIDE THE WASTE MANAGEMENT UNIT

A solid waste management unit is any discernible unit at which solid wastes have been placed at any time, for the management of solid waste, such as a transfer station, solid waste storage building, a solid waste processing system, a resource recovery system, an incinerator, a surface impoundment, a surface waste pile, a land treatment area, or a landfill. The following **Table 3.9-4, Solid Waste Management Units with Hazardous Waste Levels Outside the Waste Management Unit**, identifies solid waste disposal facilities within the SCAG area from which there is a migration of hazardous waste to areas outside of the waste management unit and for which the local RWQCB has notified the DTSC pursuant to subdivision (e) of Section 13273 of the Water Code.

TABLE 3.9-4 Solid Waste Management Units with Hazardous Waste Levels Outside the Waste Management Unit

COUNTY	LEAKING UNDERGROUND STORAGE TANK
Imperial	None
Los Angeles	Operating Industries Landfill, Monterey Park
Orange	McColl Site
Riverside	Stringfellow Quarry Acid Pits
San Bernardino	None
Ventura	None

Source: DTSC 2023c

### ACTIVE CEASE AND DESIST ORDERS AND CLEANUP AND ABATEMENT ORDERS FROM SWRCB

The active CDOs and CAOs from the SWRCB data resource website states that this list contains many CDOs and CAOs that do not concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials. However, the SWRCB database does not distinguish between these types of orders. For questions about whether a specific order concerns the discharge of wastes that are hazardous materials, the user must contact the local RWQCB. The number of CDO and CAO sites within the SCAG area are listed below in **Table 3.9-5, Active CDO and CAO Sites**.

TABLE 3.9-5 CDO and CAO Sites

COUNTY	ACTIVE CDO AND CAO SITES
Imperial	22
Los Angeles	18
Orange	29
Riverside	37
San Bernardino	86
Ventura	3

Source: DTSC 2023c

### HAZARDOUS WASTE FACILITIES SUBJECT TO CORRECTIVE ACTION

Hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, as identified by DTSC, are sites where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC Section 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is a very small and specific subgroup of facilities and they are not separately posted on the DTSC EnviroStor website (DTSC 2023c). The facilities in the SCAG region listed below fall under this category:

- AAD Distribution & Dry Cleaning Inc., 2306 East 38th Street, Vernon
- The Marquardt Company, 16555 Saticoy Street, Van Nuys

### FEDERAL SUPERFUND SITES

Hazardous materials may be released into the environment in a variety of ways, including permitted or illicit use and accidental or intentional disposal or spillage. Before the 1980s, most land disposal of chemicals was unregulated, resulting in numerous industrial properties and public landfills becoming the recipients of authorized and unauthorized hazardous materials. In general, the largest and most contaminated of these sites became federal Superfund sites in the early 1980s, so named for their eligibility to receive cleanup money from a federal fund established for that purpose under CERCLA. Sites are added to the NPL following a hazard ranking system. The USEPA maintains this list of federal Superfund sites, as well as a more extensive list of all sites with potential to be listed known as CERCLIS (USEPA 2023a). The SCAG area has 28 listed federal Superfund sites, as listed below in **Table 3.9-6, Federal Superfund Sites in the SCAG Region.**

TABLE 3.9-6 Federal Superfund Sites in the SCAG Region

SITE NAME	CITY	SITE EPA ID
Alark Hard Chrome	Riverside	CAD098229214
Cooper Drum Company	South Gate	CAD055753370
Del Amo	Los Angeles	CAD029544731
George Air Force Base	Victorville	CA2570024453
Halaco Engineering Company	Oxnard	CAD009688052
Jervis B. Webb Co.	South Gate	CAD008339467
Jet Propulsion Laboratory (NASA)	Pasadena	CA9800013030
March Air Force Base	Riverside	CA4570024527
McColl	Fullerton	CAD980498695
Montrose Chemical Corp.	Torrance	CAD008242711
Newmark Ground Water Contamination	San Bernardino	CAD981434517
Norton Air Force Base	San Bernardino	CA4570024345
Omega Chemical Corporation	Whittier	CAD042245001
Operating Industries, Inc., Landfill	Monterey Park	CAT080012024
Orange County North Basin	Orange County	CAN000900251
Pacific Coast Pipe Lines	Fillmore	CAD980636781
Pemaco Maywood	Maywood	CAD980737092
Rockets, Fireworks, and Flares (RFF)	Rialto	CAN000905945
San Fernando Valley (Area 1)	Los Angeles	CAD980894893
San Fernando Valley (Area 2)	Glendale, Los Angeles	CAD980894901
San Fernando Valley (Area 4)	Los Angeles	CAD980894976
San Gabriel Valley (Area 1)	El Monte	CAD980677355
San Gabriel Valley (Area 2)	Baldwin Park Area	CAD980818512
San Gabriel Valley (Area 3)	Alhambra	CAD980818579
San Gabriel Valley (Area 4)	La Puente	CAD980817985
Southern Avenue Industrial Area	South Gate	CAN000905902
Stringfellow	Glen Avon Heights	CAT080012826
Waste Disposal, Inc.	Santa Fe Springs	CAD980884357

Source: USEPA 2023a

## BROWNFIELD SITES

Brownfields sites are those areas that were previously used for *industrial* purposes or certain commercial uses. The land may be contaminated by low concentrations of *hazardous waste* or *pollution*, and has the potential to be reused once it is cleaned up. Both the USEPA and DTSC maintain lists of known brownfield sites. These sites are often difficult to inventory due to their owners' reluctance to publicly label their property as potentially

contaminated. In California, numerous regulatory barriers have blocked effective reuse of brownfields sites, including uncertainty as to cleanup levels and ultimate cleanup cost.

## **RADIOACTIVE MATERIALS – SAN ONOFRE NUCLEAR GENERATING STATION**

Although there are no nuclear power stations within the SCAG region, the retired San Onofre Nuclear Generating Station (SONGS) is located just south of Orange County near San Clemente, in the northwestern corner of San Diego County and is jointly owned by SCE, San Diego Gas & Electric, and the City of Riverside (California Energy Commission 2020). SONGS went offline in January 2012 and was ordered by the Nuclear Regulatory Commission to stay offline while tubing wear issues were investigated. Subsequently, plant owners announced in June 2013 that remaining Units 2 and 3 would be permanently retired. Since the decision to retire the facility, SCE has initiated the process of providing for final repository of radioactive materials from SONGS. Spent fuel storage from SONGS poses a risk to the SCAG region if cracks develop in the thin steel canisters that will store the waste, and radioactive waste material is released into the environment. In 2015, SCE provided an update to the public, stating that all nuclear fuel would be transferred into dry cask storage and will remain on-site until the federal government develops a program to dispose of the waste. On October 17, 2019, the California Coastal Commission approved a coastal development permit allowing dismantlement of plant structures and decontamination of the site (SONGS 2019).

## **PROXIMITY TO SCHOOLS**

As described in Section 3.15.3, *Public Services*, there are over 6,000 public and private schools in the SCAG region ranging from K–12 through the California State University and University of California university systems. Over half of the K–12 schools and community colleges in Los Angeles County, and the least number of the K–12 schools and community colleges are located in Imperial County, with comparable statistics for private schools. The California Education Code 17213(b) has minimum standards to minimize the potential for hazardous emissions within 0.25 miles of a school site, as discussed further below in Section 3.9.2, *Regulatory Framework*.

## **PROXIMITY TO PUBLIC, PUBLIC USE, OR PRIVATE AIRPORTS**

As discussed in Section 3.17, *Transportation*, the SCAG region contains seven commercial airports with scheduled passenger service, seven government/military airfields, and over 30 reliever and general aviation airports. The existing active commercial service airports handle the majority of passenger air traffic (see Map 2-6, Major Airports in SCAG Region).

## **INTELLIGENT TRANSPORTATION SYSTEMS**

Communities across the SCAG region are starting to incorporate intelligent transportation systems (ITS) into their transportation systems including both transit and roadway networks. ITS applications have the potential to significantly reduce road traffic accidents and their impacts in various ways that reduce the number, frequency and severity of incidents. ITS applications can smooth traffic flow on motorways using variable message speed signs; offer intersection signal control and dynamic traffic management; provide safe opportunities for pedestrians to cross busy roads; enhance safety support for drivers of vehicles to be aware of the presence of cyclists and others using the roads; activate automatic call-out of emergency services; and capture data for enforcement purposes (PIARC 2023). ITS technologies for improving road safety include speed enforcement, red light enforcement, driver assistance, intelligent speed adaptation, accident detection and response, and work zone safety management. Performance measures that can be used to assess ITS benefits can be direct or indirect. Direct

measures include overall crash rate, fatality and injury rates – for example, percentage reduction in collisions (but this is difficult to obtain empirically from operational tests since real accidents in field trials are infrequent). Indirect measures include vehicle speeds, speed variability, the number of traffic violations, percentage reduction in rescue response time and public perceptions (PIARC 2023).

One example of an ITS is in the City of Los Angeles where the Los Angeles Fire Department (LAFD) in collaboration with LADOT has developed a fire preemption system (FPS), a system that automatically turns traffic lights to green for emergency vehicles traveling on designated streets in the city (Los Angeles Fire Department 1988).

## **3.9.2 REGULATORY FRAMEWORK**

### **FEDERAL**

#### **OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970**

The Occupational Safety and Health Act (29 Code of Federal Regulations [CFR] Parts 70 to 2400), which is implemented by OSHA, contains provisions with respect to hazardous materials handling. OSHA was created to assure safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education, and assistance. OSHA provides standards for general industry and construction industry on hazardous waste operations and emergency response. OSHA requirements, as set forth in 29 CFR Section 1910, et. seq., are designed to promote worker safety, worker training, and a worker's right-to-know. The U.S. Department of Labor has delegated the authority to administer OSHA regulations to the State of California. The Cal/OSHA program (codified in the CCR Title 8 generally and in the Labor Code Sections 6300–6719) is administered and enforced by the Division of Occupational Safety and Health (DOSH). Cal/OSHA is very similar to the OSHA program. Among other provisions, Cal/OSHA requires employers to implement a comprehensive, written Injury and Illness Prevention Program for potential workplace hazards, including those associated with hazardous materials.

#### **RESPONSE CONSERVATION AND RECOVERY ACT**

RCRA (42 USC 2) was the first major federal act regulating the potential health and environmental problems associated with hazardous and nonhazardous solid waste. RCRA and the implementation regulations developed by the USEPA provide the general framework for the national hazardous and nonhazardous waste management systems. This framework includes the determination of whether hazardous wastes are being generated, techniques for tracking wastes to eventual disposal, and the design and permitting of hazardous waste management facilities.

RCRA amendments enacted in 1984 and 1986 began the process of eliminating land disposal as the principal hazardous waste disposal method. Hazardous waste regulations promulgated in 1991 address site selection, design, construction, operation, monitoring, corrective action, and closure of disposal facilities. Additional regulations addressing solid waste issues are contained in 40 CFR, Part 258.

#### **COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT**

CERCLA (1980; 42 USC Sections 1906 et seq.), also known as the Superfund Act, outlines the potential liability related to the cleanup of hazardous substances; available defenses to such liability; appropriate inquiry into site status under Superfund, which is the federal government's program to clean up the nation's uncontrolled hazardous waste sites; statutory definitions of hazardous substances and petroleum products; and the petroleum

product exclusion under CERCLA. CERCLA provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also establishes the National Contingency Plan (NCP), which provides guidelines and procedures necessary to respond to releases and threatened releases of hazardous substances. The SCAG region lies within USEPA Region 9, which has the responsibility for designation and oversight of Superfund sites on the NPL. As discussed in Section 3.9.1, *Environmental Setting, Federal Superfund Sites*, there are 28 Superfund sites on the NPL in the SCAG region.

### **EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA)**

EPCRA of 1986 (42 USC 116, Sections 9601 et seq.) was created to help communities plan for emergencies involving hazardous substances. EPCRA requires hazardous chemical emergency planning by federal, state, and local governments; Native American tribes; and industry. It also requires industry to report on the storage, use, and releases of hazardous chemicals to federal, state, and local governments.

### **SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (SARA), TITLE III**

SARA Title III of 1986 is the EPCRA (40 CFR Parts 350–372). Facilities are required to report the following items on USEPA Form R, the Toxic Chemical Release Inventory Reporting Form: facility identification, off-site locations where toxic chemicals are transferred in wastes, chemical-specific information, and supplemental information. Form R requires a facility to list the hazardous substances that are handled on-site and to account for the total aggregate releases of listed toxic chemicals for the calendar year. Releases to the environment include emissions to the air, discharges to surface water, and on-site releases to land and underground injection wells.

### **HAZARDOUS MATERIALS TRANSPORTATION ACT**

The Hazardous Materials Transportation Act of 1975 (Title 49 USC 51, Sections 5101–5127) is the principal federal law regulating the transportation of hazardous materials. Its purpose is to “protect against the risks to life, property, and the environment that are inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce” under the authority of the U.S. Secretary of Transportation. Regulations implementing the Hazardous Materials Transportation Act of 1975 specify additional requirements and regulations with respect to the transport of hazardous materials. For example, the Act requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in function and commodity specific requirements.

### **PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION HAZARDOUS MATERIALS REGULATIONS**

The Pipeline and Hazardous Materials Safety Administration (PHMSA) is a USDOT agency, created under the Norman Y. Mineta Research and Special Programs Improvement Act (P.L. 108-426) of 2004. PHMSA develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6-million-mile pipeline transportation system and the nearly 1 million daily shipments of hazardous materials by land, sea, and air. PHMSA comprises two safety offices, the Office of Pipeline Safety and OHMS. PHMSA's Office of Pipeline Safety monitors operator compliance through field inspections of pipeline facilities and construction projects; inspections of operator management systems, procedures, and processes; and incident investigations. PHMSA's Office of Hazardous Materials Enforcement assures compliance through field inspections and investigations of shipper and

carrier transportation facilities; packaging manufacturing, requalification, repair and reconditioning facilities; cargo vessel ports; rail freight yards; motor carrier and air cargo terminals; chemical and explosive manufacturing plants. In addition, the Office of Hazardous Materials Enforcement conducts civil and criminal enforcement investigations, accident and incident investigation and failure analysis, outreach and education elements with other agencies, industry and stakeholders, and emergency response.

### **CODE OF FEDERAL REGULATIONS TITLE 14, PART 77**

The Federal Aviation Administration's (FAA) primary role is to promote aviation safety and control the use of airspace. Public use airports that are subject to the FAA's grant assurances must comply with specific FAA design criteria, standards, and regulations. Land use safety compatibility guidance from the FAA is limited to the immediate vicinity of the runway, the runway protection zones at each end of the runway, and the protection of navigable airspace. The FAA enforces safety standards and investigates and corrects violations, as appropriate.

Title 14, Part 77 of the CFR, *Safe Efficient Use and Preservation of the Navigable Airspace*, establishes the federal review process for determining whether proposed development activities in the vicinity of an airport have the potential to result in a hazard to air navigation. 14 CFR Part 77 identifies criteria that govern which projects require notice to be filed with the FAA, as well as identifying standards for determining whether a proposed project would represent an obstruction "that may affect safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities." Objects that are identified as obstructions based on these standards are presumed to be hazards until an aeronautical study conducted by the FAA determines otherwise.

14 CFR Part 77.9, Construction or Alteration Requiring Notice, indicates that notice must be filed with the FAA for any construction or alteration of objects within 20,000 feet of a public use airport runway when the height of the objects exceeds (i.e., is taller than) an imaginary surface with a 100:1 (1 foot upward per 100 feet horizontally) slope from the nearest point of the nearest runway. This requirement applies when the airport has at least one runway that exceeds 3,200 feet in length; for shorter runways, the notification surface has a 50:1 slope and extends 10,000 feet from the runway. For heliports, the notification surface has a 25:1 slope and extends 5,000 feet from the helicopter takeoff and landing area, commonly referred to as final approach and takeoff area. The notification requirements apply to all public-use airports, military airports, and heliports. When FAA notification is required, it must be provided using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

### **SPILL PREVENTION, CONTROL, AND COUNTERMEASURE, 40 CFR PART 112**

Facilities with aboveground oil storage facilities greater than 1,320 gallons of oil and/or with total aggregate capacity of completely buried storage tanks greater than 42,000 gallons of oil are regulated under the SPCC rules under 40 CFR Part 112. These facilities need to be regulated to prevent discharge of oil into navigable waters or adjoining shorelines. Owners of a facility develop a response plan to prepare and respond to oil discharge or threats of discharge during drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil. The USEPA is the lead federal response agency for providing cleanup of oil spills to prevent, prepare for, and respond to spills that occur in and around inland waters of the United States.

### **INTERNATIONAL FIRE CODE**

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for



hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what protective measures are required for fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every three years and is the basis for the California Fire Code (CFC) (also updated triennially). Local jurisdictions then adopt the CFC, in some cases with local amendments.

### **PRESIDENTIAL POLICY DIRECTIVE 8: NATIONAL PREPAREDNESS**

The National Response Framework (NRF) is an essential component of the National Preparedness System mandated in Presidential Policy Directive 8: National Preparedness (PPD-8). PPD-8 is aimed at strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation. PPD-8 defines five mission areas—Prevention, Protection, Mitigation, Response, and Recovery—and mandates the development of a series of policy and planning documents to explain and guide the Nation’s collective approach to ensuring and enhancing national preparedness. The NRF presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies. It establishes a comprehensive, national, all-hazards approach to domestic incident response. The National Response Plan was replaced by the NRF effective March 22, 2008, and updated most recently in June 2016.

The NRF defines the principles, roles, and structures that organize response protocols as a nation. The NRF:

- Describes how communities, tribes, states, the federal government, private-sectors, and nongovernmental partners work together to coordinate national response;
- Describes specific authorities and best practices for managing incidents; and
- Builds upon the National Incident Management System, which provides a consistent template for managing incidents.

### **FEDERAL RAILROAD ADMINISTRATION OFFICE OF RAILROAD SAFETY**

The Federal Railroad Administration’s Office of Railroad Safety promotes and regulates safety throughout the Nation’s railroad industry. The regional offices enforce compliance with regulations related to hazardous materials, motive power equipment, operating practices, signal and train control, and tracks. California is in Region 7, which is headquartered in Sacramento, California. In addition, the Federal Railroad Administration conducts railroad safety and stakeholder training; accident and employee fatality investigations and reporting; partnerships between labor, management, and the agency that address systemic initiatives; and development and implementation of safety rules and standards.

### **FEDERAL EMERGENCY MANAGEMENT AGENCY**

In March 2003, the Federal Emergency Management Agency (FEMA) became a department of the U.S. Department of Homeland Security (DHS), pursuant to 44 CFR, Chapter 1 Part 201. The primary mission of FEMA is to reduce the loss of life and property and protect the nation from all hazards, including natural disasters, acts of terrorism, and other human-made disasters, by leading and supporting the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation. SCAG is under the jurisdiction of FEMA Region 9. In Southern California, FEMA Region 9 specifically plans for hazards such as major earthquakes and wildfires.

FEMA is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a one percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. It requires avoiding incompatible floodplain development, consistency with the standards and criteria of the National Flood Insurance Program, and restoration and preservation of natural and beneficial floodplain values.

## NATIONAL FIRE PLAN

The Department of the Interior's National Fire Plan is intended to ensure an appropriate federal response to severe wildland fires, reduce fire impacts to rural communities, and ensure sufficient firefighting capacity in the future. The Rural Fire Assistance program is funded to enhance the fire protection capabilities of rural fire districts and safe and effective fire suppression in the wildland/urban interface. The program promotes close coordination among local, state, tribal, and federal firefighting resources by conducting training, equipment purchase, and prevention activities on a cost-shared basis.

## STATE

### CALIFORNIA CONSTITUTION

As stated in California Constitution Article XIII – Taxation, Section 35 Subdivision (a)(2), “The protection of the public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services.” As such, it is incumbent upon local jurisdictions in California to prioritize the provision of adequate facilities, personnel, equipment, and services to meet the public safety demands of the community.

### SENATE BILL 158

Senate Bill (SB) 158, which Governor Newsom signed into law in 2021, made several significant changes to the funding and governance of DTSC (DTSC 2023f). In addition to restructuring and increasing the fees that fund DTSC's operations, the bill established a new Board of Environmental Safety (BES) and imposed new reporting and planning requirements on DTSC. Specifically, DTSC is now required to issue a report on the management of hazardous waste in the state every three years, beginning in 2023, and a triennial Hazardous Waste Management Plan based on these reports, beginning in 2025. A draft version of DTSC's first triennial Hazardous Waste Management Report, which was prepared pursuant to California Health and Safety Code Section 25135, was recently released in 2023. The 2023 Draft Hazardous Waste Management Report is the starting point of a continuous process of research and development of Hazardous Waste Management Plans. As such, the Report:

- Establishes a baseline understanding of the management of hazardous waste in the state of California.
- Identifies data gaps and items that require additional research.
- Begins to develop plans to fill data gaps and complete additional research.

Specifically, the Report provides available information about the types and quantities of hazardous wastes generated in the state as well as the destinations and ultimate dispositions of these wastes. DTSC will use information from this and subsequent Reports to inform the triennial Hazardous Waste Management Plan (Plan). The Plans will recommend strategies for reductions in hazardous waste generation and strategies for managing

more waste within the borders of California, and they will also provide insight into issues of concern, such as the impacts of hazardous waste on disadvantaged communities.

## HAZARDOUS WASTE CONTROL LAW

The Hazardous Waste Control Act (Health and Safety Code Sections 25100 et seq.) created the state hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The Act is implemented by regulations contained in CCR Title 26, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements. These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

## DTSC VAPOR INTRUSION GUIDANCE

The Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (State Water Board) developed the *Final Draft Supplemental Guidance: Screening and Evaluating Vapor Intrusion* (Supplemental VI Guidance) for use with existing State guidance in conducting vapor intrusion evaluations in California (DTSC 2023e).

The Supplemental VI Guidance provides a screening process to determine if buildings near known or suspected subsurface contamination by vapor-forming chemicals are potentially affected by vapor intrusion. The process focuses the investigation and sampling for early assessment of potential vapor intrusion health risks for building occupants. The Supplemental VI Guidance is meant to promote Statewide consistency in site investigation and cleanup at sites where contaminants in soil gas and groundwater pose an unacceptable risk to current and future building occupants. The four-step process for screening buildings for vapor intrusion and assessing potential health risk includes:

- Identifying buildings near contamination to evaluate first for vapor intrusion and plan for public outreach and participation.
- Collecting soil gas samples outside buildings to determine the potential for VI and use a vapor attenuation factor to estimate human health risks.
- Collecting indoor air, subslab soil gas, and outdoor air samples and assess health risks.
- Evaluating the need to manage current and future VI risk based on indoor air data, subsurface data, and other lines of evidence.

The Supplemental VI Guidance also provides information and recommendations on:

- Using the USEPA 2015 vapor attenuation factors for soil gas and groundwater.
- Considering sewers as a potential vapor intrusion migration route when sewers intersect contamination in the subsurface.
- Using the State Water Board's GeoTracker for building a California-specific VI database.

## HAZARDOUS MATERIALS RELEASE RESPONSE PLANS AND INVENTORY LAW AND UNIFIED HAZARDOUS WASTE AND HAZARDOUS MATERIALS MANAGEMENT REGULATORY PROGRAM

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act; HSC Division 20 Chapter 6.95 [25500–25547.8]) governs hazardous materials handling, reporting requirements, and local jurisdiction surveillance programs. The Business Plan Act requires that businesses that store hazardous materials onsite prepare a hazardous materials business plan (HMBP) and submit it to the local CUPA. CalEPA adopted regulations in January 1996 that implemented the Unified Program at the local level (Health and Safety Code Sections 25404 et seq). The agency responsible for implementation of the Unified Program is called the CUPA.

The Unified Program, codified in California Health and Safety Code Sections 25404 et seq., requires the administrative consolidation of six hazardous materials and waste programs under one agency, a CUPA. The following programs are consolidated under the unified program:

- Hazardous Materials Release Response Plans, and Inventory (also referred to as HMBPs)
- California Accidental Release Program
- USTs
- Aboveground Petroleum Storage SPCCs
- Hazardous Waste Generation and Onsite Treatment
- UFC Plans and Inventory Requirements

The CUPA is charged with the responsibility of conducting compliance inspections of over hazardous materials facilities within its area of jurisdiction. These facilities and businesses handle hazardous materials, generate or treat a hazardous waste, and/or operate underground storage tanks. The CUPA uses education and enforcement to minimize the risk of chemical exposure to human health and the environment. The CUPA forwards important facility information to local fire prevention agencies that enables them to take appropriate protective action in the event of an emergency at regulated facilities. In order to legally store and use hazardous materials above the trigger quantities, users must apply for permits and demonstrate satisfactory compliance with regulations. The quantities that trigger disclosure are based on the maximum quantity on site at any time:

- 55 gallons, 500 pounds, or 200 cubic feet for 30 days or more at any time in the course of a year
- Any amount of hazardous waste
- Category I or II pesticides
- Explosives
- Extremely hazardous substances above the threshold planning quantity

The CUPAs within the SCAG area are listed below. Some cities within counties established their own CUPAs.

- Imperial County: DTSC
- Los Angeles County except for the cities listed below: Los Angeles County Fire Department
  - El Segundo City Fire Department
  - Glendale City Fire Department

- Long Beach: Long Beach Bureau of Environmental Health and Fire Department
- Los Angeles City Fire Department
- Santa Fe Springs Fire-Rescue
- Santa Monica Fire Departments
- Vernon Health & Environmental Control Department
- Orange County except for Anaheim: Orange County Environmental Health
  - Anaheim City Fire Department
- Riverside County: Riverside County Hazardous Materials Management Branch
- San Bernardino County: San Bernardino County Fire Department
- Ventura County except for Oxnard: Ventura County Environmental Health Division
  - Oxnard Fire Department

### **LEMPERT-KEENE-SEASTRAND OIL SPILL PREVENTION AND RESPONSE ACT**

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 granted the Office of Spill Prevention and Response (OSPR) the authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in marine waters of California. OSPR implements the California Oil Spill Contingency Plan, consistent with the NCP, which pays special attention to marine oil spills and impacts to environmentally- and ecologically-sensitive areas. In 2014, the OSPR program was expanded to cover all statewide surface waters at risk of oil spills from any source, including pipelines and the increasing shipments of oil transported by railroads.

### **CALIFORNIA DISASTER ASSISTANCE ACT**

The California Disaster Assistance Act (CCR Title 19, Chapter 6) authorizes the Director of the California Governor's Office of Emergency Services (Cal OES) to administer a disaster assistance program that provides financial assistance from the state for costs incurred by local governments as a result of a disaster event. Funding for the repair, restoration, or replacement of public real property damaged or destroyed by a disaster is made available when the Director concurs with a local emergency proclamation requesting state disaster assistance.

### **CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES**

In 2009, the State passed legislation creating Cal OES and authorized it to prepare a Standard Emergency Management System (SEMS) program (Title 19 CCR Section 2401 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. In California, SEMS provides the mechanism by which local governments request assistance. The OES is an agency responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities, in cooperation with fire and law and other enforcement agencies. Each county within the SCAG region has an OES that is responsible for coordinating and maintaining resources necessary for first responders to protect the community. In addition to maintaining a material safety data sheets, notifications to the OES must be made when there is a hazardous material incident or spill that may require clean-up. OES is responsible for preparing, and gathering information on incident, participate in offering guidance to residents and communities affected by incident, coordinating with FEMA, state, and

county/city agencies for other needed resource, and implement a reduction of risk program to prevent future accidents causing physical and natural or human casualties.

The Cal OES mission statement is “Protect lives and property, build capabilities, and support our communities for a resilient California.” Cal OES goals include:

- **Goal 1:** Anticipate and enhance prevention and detection capabilities to protect our State from all hazards and threats.
- **Goal 2:** Strengthen California’s ability to plan, prepare for, and provide resources to mitigate the impacts of disasters, emergencies, crimes, and terrorist events.
- **Goal 3:** Effectively respond to and recover from both human-caused and natural disasters.
- **Goal 4:** Enhance the administration and delivery of all state and federal funding and maintain fiscal and program integrity.
- **Goal 5:** Develop a united and innovative workforce that is trained, experienced, knowledgeable, and ready to adapt and respond.
- **Goal 6:** Strengthen capabilities in public safety communication services and technology enhancements.

### LOCAL COMMUNITY RAIL SECURITY ACT

The Local Community Rail Security Act of 2006 (Public Utilities Code Sections 7665–7667) requires all rail operators to provide security risk assessments to CPUC, the Director of Homeland Security, and the Catastrophic Event Memorandum Account that describe the following:

- Location and function of each rail facility
- Types of cargo stored at or typically moved through the facility
- Hazardous cargo stored at or moved through the facility
- Frequency of hazardous movements or storage
- A description of sabotage-terrorism countermeasures
- Employee training programs
- Emergency response procedures
- Emergency response communication protocols

### HAZARDOUS SUBSTANCES ACCOUNT ACT (STATE SUPERFUND) (HSC SECTIONS 25300-25301)

DTSC’s Site Mitigation and Restoration Program, promulgated under California Health and Safety Code Chapters 6.5 and 6.8, oversees the cleanup of State Superfund Sites. State Superfund sites include both responsible party-lead enforcement sites (i.e., sites where DTSC has issued enforcement orders) and orphan sites. DTSC works directly with the responsible party or parties on the enforcement sites, while orphan sites are ones where DTSC is unable to identify a viable responsible party or parties. These projects are located throughout California, in small and large urban areas, in small and large suburban communities, and in the rural heartland of California. Some of the projects are former dry cleaners, metal plating shops, abandoned mines, old wood treating sites, and several types of former manufacturing facilities.

## EMERGENCY MANAGED MUTUAL AID SYSTEM

Cal OES developed the Emergency Managed Mutual Aid (EMMA) System in response to the 1994 Northridge Earthquake. The EMMA System coordinates emergency response and recovery efforts along the coastal, inland, and southern regions of California. The purpose of EMMA is to provide emergency management personnel and technical specialists to afflicted jurisdictions in support of disaster operations during emergency events. Objectives of the EMMA Plan is to provide a system to coordinate and mobilize assigned personnel, formal requests, assignment, training, and demobilization of assigned personnel; establish structure to maintain the EMMA Plan and its procedures; provide the coordination of training for EMMA resources, including SEMS training, coursework, exercises, and disaster response procedures; and to promote professionalism in emergency management and response. The EMMA Plan was updated in November 2012 and supersedes the 1997 EMMA Plan and November 2001 EMMA Guidance.

## HAZARDOUS MATERIALS RELEASE CLEANUP (ASSEMBLY BILL 440 CHAPTER 588)

Assembly Bill (AB) 440 Chapter 588, passed into law in 2013, authorizes a local jurisdiction to take clean up action similar to that under the Polanco Redevelopment Act that the local jurisdiction determines is necessary, consistent with other state and federal laws, to remedy or remove a release of hazardous substances within the boundaries of the local jurisdiction. AB 440 allows the local jurisdiction to designate another agency, in lieu of the department or the regional board, to review and approve a cleanup plan and to oversee the cleanup of hazardous material from a hazardous material release site, under certain conditions. It also provides immunity to the local jurisdiction as long as the action is in accordance with a cleanup plan prepared by a qualified independent contractor, and approved by the department, a regional board, or the designated agency, and the cleanup is undertaken and properly completed. Finally, AB 440 authorizes the local jurisdiction to recover cleanup costs from the responsible party.

## ASBESTOS REGULATIONS

**Naturally Occurring Asbestos Regulations.** In 1990, ARB issued an Airborne Toxic Control Measure (ATCM), which prohibited the use of serpentine aggregate for surfacing if the asbestos content was 5 percent or more. In July 2000, ARB adopted amendments to the existing ATCM prohibiting the use or application of serpentine, serpentine-bearing materials and asbestos-containing ultramafic rock for covering unpaved surfaces unless it has been tested using an approved asbestos bulk test method and determined to have an asbestos content that is less than 0.25 percent. In July 2001, ARB adopted a new ATCM for construction, grading, quarrying, and surface mining operations in areas with serpentine or ultramafic rocks. These regulations are codified in Title 17, Section 93105 of the CCR. The regulations require preparation and implementation of an Asbestos Dust Mitigation Plan for construction or grading activities on sites greater than 1 acre in size with known Naturally Occurring Asbestos (NOA) soils. The air districts enforce this regulation.

[Joel Abbreviations Continue Here] In October 2000, the Governor's Office of Planning and Research issued a memorandum providing guidance to lead agencies in analyzing the impacts of NOA on the environment through CEQA review process. In November 2000, the California Department of Real Estate added a section to subdivision forms that includes questions related to NOA on property proposed for development. In 2004, as part of its school-site review program, the DTSC's School Property Evaluation and Cleanup Division released interim guidance on evaluating NOA at school sites.

In addition, HSC Section 19827.5 prohibits the issuance of demolition permits by local and State agencies for any building or structure that has not submitted all required asbestos notifications to USEPA, pursuant to Part 61 of CFR Title 40.

**Cal OSHA Regulations.** Cal/OSHA sets forth regulations for the disturbance of ACMs including removal operations for all types of ACMs. The following regulations apply to the removal and disposal of ACM: CFR Title 40, Part 61, Subpart M (Asbestos National Emission Standards for Hazardous Air Pollutants [NESHAP]); CCR Title 8, Sections 1529 and 5208. Cal/OSHA requires contractors and employers that remove ACMs to be registered and consultants and technicians who conduct sampling and/or removal to be certified. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response. Cal/OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous materials, an informational program describing any exposure during operations and the inspection of drums and containers prior to removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations.

**CCR Title 8 Section 1529.** This section of the CCR regulates asbestos exposure for work identified in Section 1502, including demolition or salvage of structures where asbestos is present; removal or encapsulation of materials containing asbestos; construction, alteration, repair, maintenance, or renovation of structures, substrates, or portions thereof, that contain asbestos, installation of products containing asbestos; asbestos spill/emergency cleanup; transportation, disposal, storage, containment of and housekeeping activities involving asbestos or products containing asbestos, on the site or location at which construction activities are performed; and excavation that may involve exposure to asbestos as a natural constituent which is not related to asbestos mining and milling activities.

## LEAD REGULATIONS

Among its numerous uses and sources, lead can be found in paint, water pipes, solder in plumbing systems, and in soils around buildings and structures painted with LBP. Old peeling paint can contaminate near surface soil, and exposure to residual lead can have adverse health effects, especially in children. The USEPA banned the use of lead in paint in 1971 (Public law 91-695). The U.S. Consumer Product Safety Commission followed with implementing regulations, effective in 1978 (42 FR 44199 and 16 CFR 1303). Cal/OSHA's Lead in Construction Standard is contained in CCR Title 8, Section 1532.1. The regulations address all of the following areas: permissible exposure limits (PELs); exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification. The following regulations apply to the removal and disposal of LBP: Title IV, Toxic Substances Control Act, Sections 402, 403, and 404; and Title 8 CCR Section 1532.1. In addition, the California Department of Public Health (CDPH) requires that LBP removal actions prepare and submit CDPH Form 8551: Abatement of Lead Hazards Notification and CDPH Form 8552: Lead Hazard Evaluation Report to the CDPH.

**CCR Title 8 Section 1532.1.** This section of the CCR applies to all construction work where employees could be occupationally exposed to lead, including demolition or salvage of structures where lead or materials containing lead are present; removal or encapsulation of materials containing lead; new construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead or materials containing lead; installation of products containing lead; lead contamination/emergency clean-up; transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and maintenance operations associated with construction activities. This section sets a maximum



exposure limit; requires an assessment to determine whether employees may be exposed to lead; requires employees to create a compliance program to ensure that employee exposure to lead are at or below the permissible exposure limit to the extent feasible; and requires that employees with exposure to lead are provided with respiratory protection, protective work clothing and equipment.

Other state laws that address lead include:

- Hazardous Waste Control Law
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)
- Carpenter-Presley-Tanner Hazardous Substances Account Act
- Hazardous Waste Management Planning and Facility Siting (Tanner Act)
- Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act)

## POLYCHLORINATED BIPHENYLS

PCBs are mixtures of 200-plus individual chlorinated compounds (known as congeners) (DTSC 2023d). PCBs were used in many applications such as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs ended in the U.S. in the late 1970s because they can cause harmful effects to human health and the environment. PCBs can be found in sources such as electrical transformers, fluorescent light ballasts and electrical devices with PCB capacitors, hydraulic oils, and building materials. PCBs are toxic, highly persistent in the environment, and bioaccumulate. There are no known natural sources of PCBs.

The USEPA prohibited the use of PCBs in the majority of new electrical equipment and fluorescent light ballasts starting in 1979 and initiated a phase-out for much of the existing PCB containing equipment (USEPA 2021). The inclusion of PCBs in electrical equipment and the handling of those PCBs are regulated by the provisions of the Toxic Substances Control Act, 15 USC Section 2601 et seq. (TSCA). Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal. The State of California likewise regulates PCB-laden electrical equipment and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed of accordingly. At lower concentrations for non-liquids, the RWQCB may exercise discretion over the classification of such wastes. The following regulations apply to the removal and disposal of PCBs: RCRA: 4 CFR 761; Toxic Substances Control Act: USC Title 15, Section 2695; and 22 CCR Section 66261.24.

## MERCURY

Mercury may be present in mercury switches and compact fluorescent light bulbs (CFLs) and other tubes (DTSC 2005, 2010). A mercury switch is an electrical switch that opens and closes a circuit when a small amount of the liquid metal mercury connects metal electrodes to close the circuit. Since mercury is a toxic heavy metal, devices containing mercury switches must be treated as hazardous waste for disposal. Because of current regulations, most modern applications have eliminated mercury in switches. In the United States, the USEPA regulates the disposition and release of mercury. Individual states and localities may enact further regulations on the use or disposition of mercury. The following regulations apply to the removal and disposal of mercury switches: 22 CCR Sections 66262.11, 66273 et seq., and 67426.1 through 67428.1.

## UNIVERSAL WASTE

Universal waste is hazardous waste that has less stringent requirements for management and disposal (DTSC 2010). Common examples of universal waste include televisions, computers, computer monitors, batteries, and fluorescent lamps. Universal wastes are hazardous upon disposal but pose a lower risk to people and the environment than other hazardous wastes. State and federal regulations identify which unwanted products are universal wastes and provide simple rules for handling and recycling of them. Universal waste must be disposed of in accordance with the DTSC Universal Waste Rule. These regulations are found in the CCR, Title 22, Division 4.5, Chapter 23. Universal wastes, including those that contain mercury, must either be sent directly to an authorized recycling facility or to a universal waste consolidator for shipment to an authorized recycling facility. If the wastes are not to be recycled, then the waste must be managed as hazardous waste rather than as universal waste. This includes notifying DTSC, using a manifest and a registered hazardous waste hauler, complying with shorter accumulation times, and shipping only to an authorized hazardous waste disposal facility.

## CALIFORNIA EDUCATION CODE 17213(B)

The California Education Code 17213(b) has minimum standards to minimize the potential for hazardous emissions within 0.25 miles of a school site:

- The property line of the school site, even if it is operated pursuant to a joint use agreement, shall be sited as specified distances from the edge of respective power line easements:
  - 1,100 feet for 50 to 133 kV line
  - 2,150 feet for 220 to 230 kV line
  - 3,350 feet for 500 to 550 kV line
- If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossings, presence of high pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified.
- The site shall not be located near an above-ground water or fuel storage tank or within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission.
- Existing or proposed zoning of the surrounding properties shall be compatible with schools in that it would not pose a potential health or safety risk to students or staff in accordance with Education Code Section 17213 and Government Code Section 65402 and available studies of traffic surrounding the site.
- The district is required to consider environmental factor of light, wind, noise, aesthetics, and air pollution in its site selection process.
- If the proposed site is on or within 2,000 feet of a significant disposal of hazardous waste, the school district shall contact the Department of Toxic Substance Control for a determination of whether the property should be considered a Hazardous Waste Property or Border Zone Property.

## CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM

The CalARP Program (CCR Title 19, Division 2, Chapter 4.5) was implemented on January 1, 1997, and replaced the California Risk Management and Prevention Program (RMPP). The CalARP program encompasses both the federal “Risk Management Program,” established in the CFR Title 40, Part 68, and the State of California program, in accordance with the CCR Title 19, Division 2, Chapter 4.5.

The main objective of the CalARP program is to prevent accidental releases of those substances determined to potentially pose the greatest risk of immediate harm to the public and the environment, and to minimize the consequences if releases do occur. These substances are called regulated substances and include both flammable and toxic hazardous materials listed on the Federal Regulated Substances for Accidental Release Prevention and on the State of California Regulated Substances lists. Businesses that handle regulated substances in industrial processes above threshold quantity levels are subject to CalARP program requirements.

The CalARP program requires businesses to have planning activities that are intended to minimize the possibility of an accidental release by encouraging engineering and administrative controls. It is further intended to mitigate the consequences of an accidental release, by requiring owners or operators of facilities to develop and implement an accident prevention program.

## CALIFORNIA FIRE CODE

The CFC is Chapter 9 of CCR Title 24. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years.

## 2017 STATE OF CALIFORNIA EMERGENCY PLAN

The 2017 State of California Emergency Plan, also referred to as the State Emergency Plan (SEP), addresses the state’s response to extraordinary emergency situations associated with natural disasters or human-caused emergencies. The California Emergency Services Act provides the basic authorities for conducting emergency operations following the proclamation of emergencies by appropriate local officials and/or the Governor. The provisions of this act are further reflected and expanded upon by local emergency ordinances. In accordance with this act, the SEP describes the methods for carrying out emergency operations, the process for rendering mutual aid, the emergency services of governmental agencies, how resources are mobilized, how the public will be informed and the process to ensure continuity of government during an emergency or disaster. The SEP emphasizes mitigation programs to reduce the vulnerabilities to disaster and preparedness activities to ensure the capabilities and resources are available for an effective response. To assist communities and governments to recover from the disaster, the SEP outlines programs that establish a consistent, statewide framework to enable state, local, tribal governments, federal government, and the private sector to work together to mitigate, prepare for, respond to and recover from the effects of emergencies regardless of cause, size, location, or complexity.

## **EMERGENCY RESPONSE PLAN/EMERGENCY EVACUATION PLAN**

The state is required to adopt a federally approved State Multi-Hazard Mitigation Plan to be eligible for certain disaster assistance and mitigation funding (Disaster Mitigation Act of 2000; Public Law 106-390 and 44 CFR Part 201). California updated its State of California Multi-Hazard Mitigation Plan in 2018 (Cal OES 2018). The State Multi-Hazard Mitigation Plan is an evaluation of the hazards California faces and the strategies, goals, and activities the state will pursue to address these hazards. It:

- Documents statewide hazard mitigation planning in California,
- Describes strategies and priorities for future mitigation activities,
- Facilitates the integration of local and tribal hazard mitigation planning activities into statewide efforts, and
- Meets state and federal statutory and regulatory requirements.

All six SCAG counties and a number of cities within the SCAG region have completed Hazard Mitigation Plans.

## **2018 STATE HAZARD MITIGATION PLAN (SHMP)**

Approved by FEMA in September 2018, as an Enhanced State Mitigation Plan, the 2018 SHMP update continues to build upon California's commitment to reduce or eliminate the impacts of disasters caused by natural, technological, accidental, and adversarial/human-caused hazards, and further identifies and documents progress made in hazard mitigation efforts, new or revised state and federal statutes and regulations, and emerging hazard conditions and risks that affect the State of California. Resilience depends on the whole community and is a shared responsibility for all levels of government, private and nonprofit sectors, and individuals.

## **CALIFORNIA VEHICLE CODE SECTION 21806**

California state law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed.

## **LOCAL**

### **COUNTY GENERAL PLANS AND OTHER COUNTYWIDE PLANNING**

In addition to federal and state requirements, general plans and municipal codes of counties and cities in the SCAG region may include safety elements that goals and policies related protecting people and property from risks from hazards and hazardous materials.

### **IMPERIAL COUNTY GENERAL PLAN**

The Land Use Planning and Public Safety and Emergency Preparedness Elements of the Imperial County General Plan have established goals related to protection of public health and safety for consideration in the land use planning process. The specified goals and objectives are intended to minimize potential hazards to public health and safety and prevent the loss of life and damage to properties and rely heavily on ensuring conformance with established applicable state codes. The General Plan has specific goals related protecting the public from exposure to hazardous materials and wastes, by discouraging the transport of hazardous materials/waste near or through residential areas and critical facilities, measures to minimize the possibility of hazardous materials/waste spills, land use planning policies to discourage incompatible development adjacent to sites and facilities for the

production, storage, disposal, and transport of hazardous materials/waste as identified in the County General Plan and other regulations, and an established objective of adopting and ordinances, policies, and guidelines that assure the safety of Imperial County ground and surface waters from toxic or hazardous materials and wastes.

### LOS ANGELES COUNTY GENERAL PLAN

The Safety Element of the Los Angeles County General Plan 2035 Update, in conjunction with the All Hazard Mitigation Plan prepared by the Chief Executive Office, Office of Emergency Management (CEO OEM), sets strategies for natural and man-made hazards in Los Angeles County. The All-Hazard Mitigation Plan, which has been approved by FEMA and the California Emergency Management Agency (CalEMA), includes a compilation of known and projected hazards in Los Angeles County.

### LOS ANGELES COUNTY OPERATIONAL AREA EMERGENCY RESPONSE PLAN (ERP)

The County of Los Angeles developed the ERP to ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency. The ERP does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with them. Instead, the operational concepts reflected in this plan focus on potential large-scale disasters like extraordinary emergency situations associated with natural and man-made disasters and technological incidents which can generate unique situations requiring an unusual or extraordinary emergency response. The purpose of the plan is to incorporate and coordinate all the facilities and personnel of County government, along with the jurisdictional resources of the cities and special districts within the County, into an efficient Operational Area organization capable of responding to any emergency using a SEMS, mutual aid, and other appropriate response procedures. The goal of the plan is to take effective life-safety measures and reduce property loss, provide for the rapid resumption of impacted businesses and community services, and provide accurate documentation and records required for cost-recovery.

### ORANGE COUNTY GENERAL PLAN

The Safety Element of the Orange County General Plan provides for the protection of people and property from risks associated with hazards and hazardous materials through the implementation of mitigation measures as outlined in the California Emergency Plan, the California Master Mutual Aid Agreement, the Orange County Emergency Plan, the Orange County Operational Area Plan, S.O.N.G.S. Plan, County of Orange and Orange County Fire Authority Hazard Mitigation Plan, and other emergency management plans. The Safety Element of the Orange County General Plan focuses primarily upon the County's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, intentional acts of terrorism and nuclear protection operations. To reduce the County's susceptibility and vulnerability to extraordinary emergency situations, the Safety Element recommends continued emphasis is placed on several coordinated efforts:

- Mitigation
- Emergency planning
- Training of full-time, auxiliary, and reserve personnel
- Public awareness and education; and assuring the adequacy and availability of sufficient resources to cope with such emergencies

In November 2015, the Board of Supervisors adopted a new County of Orange and Orange County Fire Authority Hazard Mitigation Plan (HMP) in compliance with federal and state regulations.

### RIVERSIDSE COUNTY GENERAL PLAN

The Safety Element of the Riverside County General Plan contains specific goals to minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment and disposal of hazardous materials and hazardous wastes. Additionally specific goals are identified to locate potentially hazardous facilities and operations in areas that would not expose the public to a significant risk of injury, loss of life, or property damage. The plan identifies nine hazardous materials policies and 32 policies related to disaster preparedness, critical facilities and lifelines, disaster recovery plans, and public information and outreach.

### SAN BERNARDINO COUNTY GENERAL PLAN

The San Bernardino County General Plan contains an entire element regarding household hazardous waste, which includes reduction implementation programs. The Safety Element was amended in 2014 with goals such as the County providing a Hazard Mitigation Plan which will become part of the Safety Element.

### VENTURA COUNTY GENERAL PLAN

The Safety Element of the Ventura County General Plan contains specific goals to minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment and disposal of hazardous materials and hazardous wastes. Additionally specific goals are identified to locate potentially hazardous facilities and operations in areas that would not expose the public to a significant risk of injury, loss of life, or property damage. The plan identifies five policies and 13 programs related to the management of hazards and hazardous materials.

### CITY GENERAL PLANS

The SCAG region spans six counties and 191 cities, each of which has a general plan containing policies related to hazards and hazardous materials. Additional plans and ordinances at the master plan level, city-level, and specific plan level may also apply within the SCAG region, such as the City of Los Angeles Local Hazard Mitigation Plan. The Local Hazard Mitigation Plan meets the planning requirements of FEMA's Community Rating System. Furthermore, fire departments and other agencies in the SCAG region have a variety of local laws that regulate reporting, storage, handling, and transporting hazardous substances and materials. See Section 3.20, *Wildfire*, for an additional discussion on hazards in relation to wildland fires.

### EMERGENCY EVACUATION/DISASTER ROUTES

Some counties and cities have identified disaster routes as well as other resources to facilitate response to large-scale emergencies including large-scale evacuations. For example, the County of Los Angeles has designated disaster routes (County of Los Angeles County Department of Public Works 2023). Note that disaster routes are not necessarily evacuation routes. Although an emergency may warrant a road be used as both a disaster and evacuation route, they are completely different. An evacuation route is used to move the affected population out of an impacted area.

### LOCAL EMERGENCY RESPONDER PLANS

Some jurisdictions emergency responders have comprehensive plans that address emergency response. The City of Los Angeles is one such jurisdiction which has a particularly high call volume. The LAFD is the nation's second

busiest provider of Emergency Medical Services (EMS); more than 85% of LAFD's daily responses are related to EMS. The types of medical response calls received range from minor cuts to trauma and heart attacks. The call volume for structure and brush fires is less frequent. Applicable portions of LAFD's Strategic Plan that apply to emergency response planning are summarized as follows:

**LAFD Strategic Plan 2023–2026.** The Strategic Plan focuses on seven key goals and corresponding strategies, tactics, and benchmarks for goal achievement. The primary goal that applies to land use planning and emergency response is Goal 1) delivering exceptional public safety and emergency service. Some of the key strategies associated with this goal include:

Strategy 1.1: Ensure optimal emergency resource deployment to meet the evolving needs of the City.

Strategy 1.2: Elevate the delivery of Emergency Medical Services (EMS) to ensure all patients receive the highest quality of care possible.

Strategy 1.3: Strengthen the Department's fire suppression and rescue capabilities.

Strategy 1.4: Expand and enhance the Department's Special Operations capabilities (Disaster Response & Rescue, Hazardous Materials, Swiftwater, Wildland Fire Management, Marine Operations).

Strategy 1.5: Partner with Federal, State, and Local Agencies to ensure the delivery of exceptional public safety and emergency services to People Experiencing Homelessness (PEH).

Strategy 1.6: Provide an optimal state of readiness with respect to homeland security and terrorism preparedness.

Strategy 1.7: Reduce life-safety risk and improve customer experiences through robust and innovative fire and prevention services.

Strategy 1.8: Maintain a highly capable, mission-ready fleet and staffing the Department's Air Operations Section.

Strategy 1.9: Enhance the quality of life in Los Angeles by supporting large sporting, entertainment, and cultural events.

### 3.9.3 ENVIRONMENTAL IMPACTS

#### THRESHOLDS OF SIGNIFICANCE

For the purposes of this 2024 PEIR, SCAG has determined that implementation of Connect SoCal 2024 could result in significant impacts related to hazards and hazardous materials if the Plan would exceed the following significance criteria, in accordance with California Environmental Quality Act (CEQA) Guidelines Appendix G:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (this criterion is addressed in Section 3.20, *Wildfire*, Impact WF-2).

## METHODOLOGY

Chapter 2, *Project Description*, describes the Plan's vision, goals, policies, forecasted regional development pattern, policies and strategies, and individual transportation projects and investments. The Plan aims to increase mobility, promote sustainability, and improve the regional economy. Although land use development is anticipated to occur within the region even without the Plan, the Plan could influence growth, including distribution patterns. To address this, the 2024 PEIR includes an analysis on the implementation of policies and strategies as well as potential projects and evaluates how conditions in 2050 under the Plan would differ from existing conditions. The analysis of hazards and hazardous materials considered public comments received on the NOP and feedback and discussions at the various public and stakeholder outreach meetings.

The potential impacts related to hazards and hazardous materials from Plan implementation is based on a review of literature and database information (e.g., SWRCB's GeoTracker and DTSC EnviroStor websites). The frequency and location of hazardous material shipments are an indicator of potential risk. The impact of hazardous materials transportation throughout the SCAG region can be assessed by examining the Plan's effect on shipments of hazardous materials. Projects implemented as a result of the Plan would be regulated by the various laws, regulations, and policies summarized above in Section 3.9.2, *Regulatory Framework*. Compliance by projects implemented under the Plan with applicable federal, state, and local laws and regulations is assumed in this analysis and federal, state, and local jurisdictions would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with hazards and hazardous materials regulations are generally a condition of permit approval.

The methodology for determining the significance of hazardous material impacts compares the existing conditions (2022) to the future 2050 conditions under the Plan, as required in CEQA Section 15126.2(a). Implementation of the Plan has the potential to affect the transportation and handling of hazardous materials in the SCAG region by improving and increasing transportation routes in proximity to sensitive receptors such as educational and residential uses.

In 2015, the California Supreme Court in *CBIA v. BAAQMD* held that CEQA does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on future residents and users of a project, as well as other impacted individuals. The



following discussion focuses on a programmatic regional evaluation on the risk of exposure to hazards from transportation projects and implementation of policies and strategies identified in the Plan.<sup>1</sup>

As discussed in Chapter 2, *Project Description*, and Section 3.0, *Introduction to the Analysis*, Connect SoCal 2024 includes Regional Planning Policies and Implementation Strategies some of which will effectively reduce impacts in the various resource areas. Furthermore, compliance with all applicable laws and regulations (as set forth in the Regulatory Framework) would be reasonably expected to reduce impacts of the Plan. See CEQA Guidelines Section 15126.4(a)(1)(B). As discussed in Section 3.0, where remaining potentially significant impacts are identified, SCAG mitigation measures are incorporated to reduce these impacts. If SCAG cannot mitigate impacts of the Plan to less than significant, project-level mitigation measures are identified which can and should be considered and implemented by lead agencies as applicable and feasible.

## IMPACTS AND MITIGATION MEASURES

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**IMPACT HAZ-1     Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

**IMPACT HAZ-2     Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.**

### ***Significant and Unavoidable Impact – Mitigation Required***

As discussed in Section 3.0, *Introduction to the Analysis*, due to the similarities of the topic areas, Impacts HAZ-1 and HAZ-2 are addressed together. Implementation of Connect SoCal 2024 may create significant hazards to the public or the environment through the transportation, use, and/or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, constituting significant impacts. Goods movement activities can facilitate the movement of hazardous materials throughout the transportation network. Proposed freight rail enhancements and other goods movement capacity enhancements identified in the Plan could result in increased or new transport of hazardous materials or wastes. In addition, construction and maintenance of projects could result in use of equipment that contain or use routine hazardous materials [e.g., diesel fuels, alternative fuels such as liquefied natural gas (LNG), lithium-ion batteries, paint and coatings, and cleaning agents such as solvents and ammonia], and/or the transportation of excavated soil and/or groundwater containing contaminants from previously contaminated areas. The fraction of containers that include hazardous materials is not known, but assuming that it remains constant, transport of hazardous materials would be expected to triple along with other container traffic. In addition to container traffic, hazardous materials are transported via company trucks (for example gas companies transport gasoline, diesel and other flammable substances) and various industrial users transport materials for their businesses (raw materials and waste products).

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<sup>1</sup> Note that as discussed in Section 3.15.1, *Public Services*, under the schools discussion, CEQA review of school construction generally does require an evaluation of the effects of existing air quality exposure on pupils, and to the extent the health risk is unacceptable, the school would not be built. CEQA also provides limited protection and requires analysis of impacts of the existing environment on certain housing development projects exercising exemptions under PRC Section 21096.

Reducing conflicts between goods movement and people movement is critical to realize a safer system for users. In 2019, there were approximately 4,140 truck-involved accidents in the SCAG region, an increase of 35.9 percent versus 2012, and more than 180 of them resulted in fatalities (UC Berkeley 2023). A greater separation of passenger and goods movement is envisioned in the Plan to make the system safer for all users.

The construction, maintenance, and operation of projects implemented as a result of the Plan could involve the use of hazardous materials such as lithium-ion batteries in battery-electric material delivery trucks and construction equipment, fuels (e.g., diesel and alternative fuels), oils and lubricants, solvents and cleaning solutions (e.g., ammonia), paints and thinners, cements and adhesives, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. Additionally, increased transport and handling of hazardous materials particularly by goods movement facilities could result in increased risk of accidental releases reaching neighborhoods and communities adjacent to the transportation facilities.

To accommodate the region's new growth (over 2 million additional people by 2050), the Plan encourages growth adjacent to transit and transportation facilities in order to reduce trips and trip lengths. However, with increasing growth adjacent to such transportation facilities, there would be greater potential risk for exposure of people and property to hazardous materials from the routine transport, use, and disposal of hazardous materials and foreseeable upset and accident conditions involving the release of hazardous materials into the environment. While projects implemented under the Plan would be required to comply with all existing applicable regulations (discussed above), due to the volume of projects and large amount of growth, at a regional level incremental releases could accumulate and accidents could occur. As such, impacts are considered significant and mitigation measures are required.

## CONSTRUCTION

### DEMOLITION OF EXISTING STRUCTURES

Implementation of the Plan may require demolition and removal of existing structures. Existing structures that predate the late 1970s regulatory bans on the use of hazardous building materials may contain such materials (e.g., ACM, LBP, PCBs, and mercury). Demolition of existing structures could expose construction workers and the environment to hazardous building materials if not managed in accordance with applicable regulations.

As described in Section 3.9.2, *Regulatory Framework*, the handling, storage, removal, transportation, and disposal of hazardous building materials would be conducted in accordance with existing federal, state, and local regulations. Demolition activities that may disturb or require the removal of hazardous building materials are required to be inspected and/or tested for the presence of hazardous building materials. If hazardous building materials are present at concentrations above regulatory action levels, they must be managed and disposed of in accordance with the existing laws and regulations described in Section 3.9.2, *Regulatory Framework*. Required compliance with laws and regulations that govern the routine transport, use, handling, and disposal of hazardous building materials would reduce the potential to create hazardous conditions due to the routine use or accidental release of hazardous materials. However, given the size of the SCAG region and variations in site conditions, size of projects and regulatory enforcement, it is possible that incidental impacts associated with releases of hazardous materials during construction activities could occur frequently enough that they would collectively constitute a significant adverse effect at a regional scale. Accordingly, despite compliance with applicable regulatory requirements for most future projects, impacts are considered significant and mitigation measures are required.

## EXCAVATION

The excavation of soil, dewatering of excavations (if needed), and construction of new structures on sites known to have past or current contamination is analyzed under Impact HAZ-4 below.

As summarized in Section 3.10, *Hydrology and Water Quality*, Subsection 3.10.2, *Regulatory Framework*, NPDES Construction General Permit, for projects that disturb one or more acres, construction contractors would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) for construction activities in compliance with the Permit. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; establish protocols for responding immediately to spills; and describe BMPs for controlling site runoff. The management of stormwater during construction in accordance with the State Construction General Permit during construction would control runoff, and the migration of sediment and other pollutants from project sites under most circumstances. However, as noted above for construction activities, there could be limited instances in which certain smaller projects are not subject to stormwater permit requirements, thereby increasing the potential for adverse erosion and siltation to occur during storm events. Such circumstances are considered reasonably foreseeable given the size of the SCAG region and variation in site conditions, project sizes and regulatory enforcement, and thus could occur frequently enough that they would collectively constitute a significant adverse effect as a result of hazardous materials leaching in to groundwater.

## CONSTRUCTION OF NEW STRUCTURES

During the construction phase for projects implemented as a result of the Plan, construction equipment and materials would include use of fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures. The routine use or an accidental spill of hazardous materials could result in inadvertent releases or incremental small releases over time and/or accidents, which could adversely affect construction workers, the public, and the environment.

Construction activities would be required to comply with numerous hazardous materials regulations described in in Section 3.9.2, *Regulatory Framework*, designed to ensure that hazardous materials would be transported, used, stored, and disposed of in a safe manner to protect worker and public safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment. Contractors would be required to prepare and implement HMBPs that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment to contain a potential release. The CFC would also require measures for the safe storage and handling of hazardous materials. In addition, the transportation of hazardous materials would be regulated by the USDOT, Caltrans, and the CHP. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release. In the event of an accidental spill that could release hazardous materials at a project site, a coordinated response would occur at the federal, state, and local levels, including, but not limited to city and county fire departments, to respond to and assess the situation, as needed.

The required compliance with the numerous laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials would generally limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials. Nonetheless, as discussed above, comprehensive and complete compliance with applicable laws and regulations cannot be guaranteed given the size and complexity of the region and potential for incidental occurrences to collectively constitute a significant impact at a regional scale. As such, impacts are considered significant and mitigation measures are required.

## OPERATION

Implementation of the Plan could result in the routine transport, use, storage and disposal of various chemicals, some of which may be hazardous. Routine use or accidental spills of hazardous materials could adversely affect workers, the public, and the environment.

As required by the State's HMBP program, the commercial, industrial, and residential property management companies that use reportable quantities of hazardous materials would be required to prepare and submit HMBPs to the local CUPAs before beginning to operate any facility that would manage hazardous materials subject to the requirement. HMBPs include information about the handling and storage of hazardous materials, including site layout, storage in appropriate containers with secondary containment to contain a potential release, and emergency response and notification procedures in the event of a spill or release. In addition, the HMBPs require annual employee health and safety training.

The HMBPs must be approved by the CUPA before the start of operations, and the various facilities would be subject to periodic compliance inspections. The HMBPs would also provide local jurisdictions with the information needed to plan appropriately for a chemical release, fire, or other incident, reducing the potential for an accidental release to harm the health of workers or the public or substantially degrade the environment. All hazardous materials must be stored and handled according to manufacturers' directions and federal, state, and local regulations.

The CFC would also require measures for the safe storage and handling of hazardous materials. As a part of the CUPA program, all hazardous materials must be used, stored, transported, and disposed of in compliance with the federal, State, and local code requirements. Transportation and disposal of wastes, such as spent cleaning solutions, would also be subject to regulations for safe handling, transportation, and disposal. These regulations would include appropriate containerization and labeling, transportation by licensed hazardous materials haulers, and disposal at licensed facilities permitted to accept the waste.

In addition, individual projects would be required to comply with the development standards of regional municipal stormwater permits for municipal separate storm sewer systems, as discussed in Section 3.10, *Hydrology and Water Quality*, Subsection 3.10.2, *Regulatory Framework*. Compliance with these regulations would reduce hazardous materials in runoff from new development and redevelopment through BMPs and Low Impact Development/post-construction standards.

Residential and commercial projects implemented as a result of the Plan, would use and store small quantities of chemicals typical in these land uses, such as cleaning solutions, paints, and thinners. A few of the chemicals would be considered hazardous materials (e.g., bleach) and the anticipated volumes would be small (i.e., less than 5 gallons).

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, storage, handling, and disposal of hazardous materials would, for the most part, limit the potential for projects to create hazardous conditions from the use or accidental release of hazardous materials. As noted above for construction activities, however, there could be limited instances in which certain small projects are not subject to regulatory requirements, thereby increasing the potential for releases of hazardous materials and wastes into the environment. Such circumstances are considered reasonably foreseeable given the size of the SCAG region and variation in site conditions, project size, and regulatory enforcement, and thus could occur frequently enough that they would collectively constitute a significant adverse effect at a regional scale. Accordingly, despite compliance

with applicable regulatory requirements for projects implemented as a result of the Plan, incremental and/or larger accidental releases of hazardous materials could occur as a result of the routine transport, use, or disposal of hazardous materials. As such, impacts are considered significant and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See SMM-GEN-1.

**SMM-HAZ-1** SCAG shall work with the Caltrans and the California Highway Patrol to continue to reduce risks associated with the transport of hazardous materials in the SCAG region, through its Consultation role assisting in the development of routes designated for hazardous materials, specifically related to radioactive materials.

### PROJECT-LEVEL MITIGATION MEASURES

**PMM-HAZ-1** In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the routine transport, use, or disposal of hazardous materials and hazardous materials releases, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:

- a) Reduce train speeds when train cars contain hazardous material to 40 miles per hour when passing through urbanized areas of any size.
- b) Limit storage of crude oil tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments.
- c) Notify in advance county and city emergency operations offices of all crude oil rail transports, including a contact number that can provide real-time information in the event of an oil train derailment or accident.
- d) Report quarterly hazardous commodity flow information, including classification and characterization of materials being transported, to all first response agencies (49 Code Fed. Regs. 15.5) along the mainline rail routes used by trains carrying crude oil identified.
- e) Fund training and outfitting emergency response crews that includes the cost of backfilling personnel while in training.
- f) Undertake annual emergency responses scenario/field based training including Emergency Operations Center Training activations with local emergency response agencies.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2, *Project Description*, and Section 3.0, *Introduction to the Analysis*), and compliance with existing laws and regulations would reduce impacts but given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible.

While the mitigation measures will reduce the impacts related to the routine transport, use, or disposal of hazardous materials or the release of hazardous materials into the environment, due to the regional nature of the analysis, unknown site conditions and project-specific details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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IMPACT HAZ-3 **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

***Significant and Unavoidable Impact – Mitigation Required***

### DEMOLITION, EXCAVATION, AND CONSTRUCTION

As discussed in Section 3.9.2, *Environmental Setting*, in the *Proximity to Schools* subsection, there are over 6,000 schools located within the SCAG area. As discussed above in Impacts HAZ-1/HAZ-2, demolition, excavation, and construction activities for projects implemented as a result of the Plan would include the transportation, handling, use, and offsite disposal of hazardous materials which could result in accidental spills. Construction of projects would involve the use of hazardous substances in the form of fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The demolition of existing structures may encounter hazardous building materials (e.g., ACM LBP, PCBs, and/or mercury).

As discussed above in Impacts HAZ-1/HAZ-2, demolition, excavation, and construction activities would be required to comply with applicable hazardous materials regulations. These regulations are designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including the transportation of hazardous materials and hazardous waste on public streets. As previously discussed, contractors would be required to prepare and implement HMBPs that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment to contain a potential release. Under typical conditions, all materials would be used, stored, and disposed of in accordance with applicable laws and regulations and manufacturers' instructions. Notwithstanding anticipated compliance with applicable regulatory requirements for construction activities near schools in the region, the potential exists for incidental releases of hazardous materials that could adversely affect school facilities given the number of anticipated construction projects expected to occur in the region through the 2050 Plan horizon. Such incidental releases, when considered collectively at a regional scale, are considered significant impact and mitigation measures are required.

### OPERATION

Implementation of the Plan could result in the routine transport, use, storage, and disposal of various chemicals, some of which may be hazardous and used in large volumes. Routine use or an accidental spill of a hazardous materials within one-quarter mile of a school could adversely affect children, school staff, and the public.

See discussion above under Impacts HAZ-1/HAZ-2 regarding potential for release of hazardous materials into the environment; these impacts could occur in the vicinity of schools.

The required compliance with the numerous laws and regulations discussed above that govern the transportation, use, storage, handling, and disposal of hazardous materials would limit the potential for projects to create hazardous conditions in the vicinity of schools. However, as discussed above in Impacts HAZ-1/HAZ-2 there is a reasonably foreseeable potential for incidental releases of hazardous materials during long-term operation of projects implemented as a result of the Plan, including those in proximity to schools. As such, operational impacts are considered significant and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See SMM-HAZ-1.

### PROJECT-LEVEL MITIGATION MEASURES

See PMM-HAZ-1.

**PMM-HAZ-2** In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to the release of hazardous materials within 0.25 miles of schools, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:

- a) Where the construction and operation of projects involves the transport of hazardous materials, avoid transport of such materials within 0.25 miles of schools, when school is in session, wherever feasible.
- b) Where it is not feasible to avoid transport of hazardous materials, within 0.25 miles of schools on local streets, provide notifications of the anticipated schedule of transport of such materials.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2, *Project Description*, and Section 3.0, *Introduction to the Analysis*) and compliance with existing laws and regulations would reduce impacts but given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to hazardous materials emissions or handling near schools, due to the regional nature of the analysis, unknown site conditions and project-specific details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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**IMPACT HAZ-4 Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.**

***Significant and Unavoidable Impact – Mitigation Required***

Projects implemented as a result of the Plan may be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (the Cortese List). The Plan includes transportation system improvements to close critical gaps in the transportation network that currently hinder access to certain parts of the region. Construction related to projects implemented under the Plan could involve construction on or adjacent to sites that are contaminated (buildings and/or soil and/or groundwater) due to past use or disposal of hazardous materials.

Federal, state, and local laws regulate the remediation of these sites, and it is likely that the majority of contaminated sites have been identified or are easily identifiable from existing information. Given the intensity of past use of land, there are a substantial number of contaminated sites on the Cortese List in the SCAG region (see Section 3.9.1, *Environmental Setting*, in the *Hazardous Materials Sites* subsection). In urban as well as rural areas, many projects, both transportation and land use development, would need to address at least the potential to encounter contamination. Because of the large number of contaminated sites and the risk associated with encountering and cleaning up of these sites, this impact could be significant.

Policies, strategies and investments included in the Plan are intended to increase mobility and improve accessibility would potentially influence population distribution, resulting in a potentially significant impact related to disturbance of contaminated sites by new urban development, most of which would be in existing urban areas. Plan policies and strategies generally aim to direct future population growth toward Priority Development Areas (PDAs) many of which are in close proximity to transit. Consequently, the redevelopment and reuse of urban infill lands, some of which are contaminated, is anticipated to become more common as the region grows.

Projects implemented as a result of the Plan to be located on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such impacts are considered significant and mitigation measures are required.

**MITIGATION MEASURES**

**SCAG MITIGATION MEASURES**

See SMM-HAZ-1.

**PROJECT-LEVEL MITIGATION MEASURES**

**PMM-HAZ-3** In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the State CEQA Guidelines, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to projects that are located on a site which is included on the



Cortese List, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:

- a) For any listed sites or sites that have the potential for residual hazardous materials as a result of historic land uses, complete a Phase I Environmental Site Assessment, including a review and consideration of data from all known databases of contaminated sites, during the process of planning, environmental clearance, and construction for projects.
- b) If warranted by the Phase I report, submit to the appropriate agency responsible for hazardous materials/wastes oversight a Phase II Environmental Site Assessment report for the project site. The reports should make recommendations for remedial action, if appropriate, and be signed by a Professional Geologist or Professional Engineer.
- c) Implement the recommendations provided in the Phase II Environmental Site Assessment report, where such a report was determined to be necessary for the construction or operation of the project, for remedial action.
- d) Submit a copy of all applicable documentation required by local, state, and federal environmental regulatory agencies, including but not limited to permit applications, Phase I and II Environmental Site Assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.
- e) Conduct soil sampling and chemical analyses of samples, consistent with the protocols established by the USEPA to determine the extent of potential contamination beneath all underground storage tanks, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition or construction activities would potentially affect a particular development or building.
- f) Consult with the appropriate local, state, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination (including dewatering effluent), or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.
- g) Obtain and submit written evidence of approval for any remedial action if required by a local, state, or federal environmental regulatory agency.
- h) Cease work if soil, groundwater (including dewatering effluent), or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums, or other hazardous materials or wastes are encountered), in the vicinity of the suspect material. Secure the area as necessary and take all appropriate measures to protect human health and the environment, including but not limited to, notification of regulatory agencies and identification of the nature and extent of contamination. Stop work in the areas affected until the measures have been implemented consistent with the guidance of the appropriate regulatory oversight authority.
- i) Soil generated by construction activities should be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site

facility. Complete sampling and handling and transport procedures for reuse or disposal, in accordance with applicable local, state, and federal laws and policies.

- j) Groundwater (including dewatering effluent) pumped from the subsurface should be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Utilize engineering controls, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.
- k) As needed and appropriate, prior to issuance of any demolition, grading, or building permit, submit for review and approval by the Lead Agency (or other appropriate government agency) written verification that the appropriate federal, state and/or local oversight authorities, including but not limited to the Regional Water Quality Control Board, have granted all required clearances and confirmed that the all applicable standards, regulations, and conditions have been met for previous contamination at the site.
- l) Develop, train, and implement appropriate worker awareness and protective measures to assure that worker and public exposure is minimized to an acceptable level and to prevent any further environmental contamination as a result of construction.
- m) If asbestos-containing materials (ACM) are found to be present in building materials to be removed, submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations Title 8; Business and Professions Code; Division 3; California Health and Safety Code Section 25915–25919.7; and other local regulations.
- n) Where projects include the demolitions or modification of buildings constructed prior to 1978, complete an assessment for the potential presence or lack thereof of ACM, LBP, and any other building materials or stored materials classified as hazardous waste by state or federal law.
- o) Where the remediation of LBP has been determined to be required, provide specifications to the appropriate agency, signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: California Occupational Safety and Health Administration’s Construction Lead Standard, CCR Title 8 Section 1532.1 and Department of Health Services Regulation 17 CCR Sections 35001–36100, as may be amended. If other materials classified as hazardous waste by state or federal law are present, the project sponsor should submit written confirmation to the appropriate local agency that all state and federal laws and regulations should be followed when profiling, handling, treating, transporting, and/or disposing of such materials.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan’s Regional Planning Policies and Implementation Strategies (see Chapter 2, *Project Description*, and Section 3.0, *Introduction to the Analysis*) and compliance with existing laws and regulations would reduce impacts but given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level

mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to listed hazardous materials sites, due to the regional nature of the analysis, unknown site conditions and project-specific details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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**IMPACT HAZ-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.**

***Significant and Unavoidable Impact – Mitigation Required***

As discussed in Section 3.17, *Transportation*, the SCAG region contains eight commercial airports with scheduled passenger service, seven government/military airfields, and over 30 reliever and general aviation airports. As noted in Section 3.13, *Noise*, regional air passenger transportation is anticipated to grow by an average of 1.9 percent annually from 116.53 million annual passengers (MAP) in 2019 to 182.44 MAP in 2050; regional air cargo transportation is anticipated to grow by an average of 3.2 percent annually, from 3.53 million tons in 2019 to 11.41 million tons in 2050; and regional aircraft operations are anticipated to grow by an average of 0.47 percent annually, from 3.79 million operations in 2019 to 4.76 million operations in 2050. The overall increase in MAP, cargo transportation, and regional aircraft operations would incrementally increase the potential for aircraft-related safety hazards and noise in the region by 2050.

Portions or all of a project's site could be located within an Airport Influence Area as delineated in the airport's Airport Land Use Compatibility Plan (ALUCP). Accordingly, the ALUCP's noise compatibility and height compatibility policies would be applicable to a project located in an Airport Influence Area.

The applicability of ALUCP noise policies is discussed in Section 3.13, *Noise*, which identifies federal, State, and local regulations. These measures would require that structures located within a given airport's relevant noise contour for operation include noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the ALUCP.

As discussed above in Section 3.9.2, *Regulatory Framework*, airports have established Maximum Structure Heights as defined by the elevation of the Airport's FAR Part 77 imaginary surfaces that extend from each airport at specific heights above grade. The height of structures would be required to not conflict with Maximum Structure Heights and not exceed the FAR Part 77 imaginary airspace surfaces.

Despite anticipated compliance with FAR Part 77, incidental adverse impacts relative to proximity to airports could occur given the size of the region, the number of airports and aircraft operations, and anticipated amount of development near airports that could occur through 2050. As such, impacts are considered significant and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See SMM-NOI-1.

**SMM-HAZ-2** SCAG shall continue to collaborate with stakeholders on regional aviation planning issues through the Aviation Technical Advisory Committee (ATAC). The ATAC is a partnership between the airports, transportation agencies and commissions, experts, and other community members within the SCAG region.

### PROJECT-LEVEL MITIGATION MEASURES

See PMM-NOI-1.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2, *Project Description*, and Section 3.0, *Introduction to the Analysis*), and compliance with existing laws and regulations would reduce impacts but given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to airport-related noise and safety hazards, due to the regional nature of the analysis, unknown site conditions and project-specific details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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- IMPACT HAZ-6    **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**
- IMPACT WF-1    **Substantially impair an adopted emergency response plan or emergency evacuation plan.**
- IMPACT TRA-4    **Result in inadequate emergency access.**

#### ***Significant and Unavoidable Impacts – Mitigation Required***

As discussed in Section 3.0, *Introduction to the Analysis*, due to the similarities of the topic areas, Impacts HAZ-6, WF-1, and TRA-4 are addressed together.

## EMERGENCY RESPONSE PLAN AND EMERGENCY EVACUATION PLANS

Implementation of the Plan has the potential to result in significant impacts to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

Section 3.15, *Public Services*, addresses the potential for the Plan to result in substantial physical impacts associated with the construction of new or physically alter fire stations that would be required to maintain acceptable service ratios and response time for fire protective services. Additionally, the county general plans include Safety Elements that discuss critical infrastructure systems and services to assure adequate circulation, communications, and transportation services. Depending upon the timing, location, and duration of construction activities from projects implemented as a result of the Plan, traffic and/or road closures in grade crossings, arterials, interchanges, and auxiliary lanes, could delay emergency vehicle response times or otherwise disrupt delivery of emergency response services. By closing off one or more lanes of a roadway during project construction, emergency routes could be impaired. The closure of these lanes could potentially cause traffic delays and ultimately prevent access to calls for service.

Section 3.20, *Wildfire*, discusses the county general plans and specific policies or goals within each to minimize the potential for personal risk and property damage from natural or manmade disasters. For example, the Ventura County General Plan includes a policy that requires the County to “ensure that all new discretionary projects are fully evaluated for potential impacts to emergency access.”

Goals, objectives, and policies of the Safety Elements of local general plans and other plans such as the Los Angeles County Operational Area Emergency Response Plan (ERP) provide guidance during unique situations requiring an unusual or extraordinary emergency response. In Los Angeles County, the most populous county in the SCAG region, implementation of the ERP would incorporate and coordinate all the facilities and personnel of County government, along with the jurisdictional resources of the cities and special districts within the County, into an efficient Operational Area organization capable of responding to any emergency using a SEMS, mutual aid, and other appropriate response procedures.

Cities generally provide procedures for coordination among neighboring City agencies and other jurisdictions to provide mutual assistance in the event of an emergency or natural disaster and establishment of disaster recovery programs. Compliance with these policies and plans would minimize potential interference with City and County emergency response plans from construction and operational activities resulting from implementing the Plan.

Larger cities (such as the City of Los Angeles, the largest city in the SCAG region) have an Emergency Operations Organization (EOO). The City of Los Angeles EOO implements the goals and policies of the City’s Safety Element. The Safety Element outlines the scope of the EOO’s on-going efforts to use experiences and new information to improve the City’s hazard program. The City of Los Angeles EOO Master Plan and individual agency Emergency Response Plans set forth procedures for City personnel to follow in the event of an emergency situation stemming from natural disasters, technological incidents and nuclear defense operations, and other unforeseeable disasters or crises. The City of Los Angeles Department of Transportation and LAFD are responsible for ensuring that future development does not impair or physically interfere with an adopted emergency response or evacuation plan.

Plan policies and strategies generally aim to focus new growth in PDAs, which are areas well-served by transit and/or in proximity to employment centers and services, which allows residents to be closer to jobs and recreational and active transportation amenities and opportunities, to increase mobility and accessibility, and to shift growth away from GRRAs such as high value habitat areas. Thus, if the Plan is implemented, population density in urbanized areas would increase which may improve emergency response by eliminating the need to travel to more rural and dispersed locations in the region. Alternatively, large concentrations of people could also cause adverse effects related to implementation of emergency plans because the increased population may overburden adopted evacuation routes and other emergency response resources during emergency conditions. It

is not possible to precisely predict the Plan impacts at the street level, as responses to incidents would be tailored to the specific incident requiring an emergency response.

Projects implemented as a result of the Plan would generally increase mobility and circulation capacity and may therefore have the potential to improve response times for police, fire and emergency service providers. As discussed in Section 3.17, *Transportation*, total hours of vehicle delay would substantially decrease, while the percentage of automobile (non-transit) trips completed within 45 minutes would notably increase by 2050 under the Plan compared to 2019 conditions (see Table 3.17-16, *Total Daily Vehicle Hours of Delay (2019 and 2050)*, and Table 3.17-17, *Percent of PM Work Trips Completed within 45 Minutes*, in Section 3.17). As such, it is anticipated that at a regional scale, overall vehicular congestion would decrease with Plan implementation. However, while overall congestion conditions in the region would improve under the Plan, localized congestion could occur in existing urban centers where the street network is physically constrained and improvements to alleviate acute congestion are not available, which could adversely affect emergency access in denser urban settings, thus resulting in potentially increased emergency response times under these circumstances.

As part of standard development procedures in most cities, plans are submitted for review and approval to ensure all new development has adequate emergency access and escape routes (clearly marked and delineated) in compliance with existing regulations. The Plan would not introduce any features that would preclude implementation of or alter these policies or procedures in any way, or impair implementation of, or physically interfere with the SEP or the ERP (and similar countywide plans).

While the Plan would generally decrease hours of delay at the regional level compared to existing conditions, as noted above, localized congestion in urban areas could occur. However, there is no direct relationship between increased travel delay and emergency response times as California State law requires that drivers yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicles have passed. The impact on response times and overall fire service is not proportional to increasing traffic (see Section 3.17, *Transportation*, of this 2024 PEIR, for additional discussion about how the Plan would affect traffic). Generally, multi-lane arterial roadways allow emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. On congested roadways, multi-lane arterial roadways with continuous center left-turn lanes facilitate emergency access when the through lanes experience delays. Nonetheless, the potential exists for the Plan to interfere with emergency response plans, and thus this impact is considered significant and mitigation is required.

## EMERGENCY ACCESS

Natural or manmade disasters can have devastating impacts on the region's livelihood and infrastructure. Transportation infrastructure in particular is critical to preserving life as it allows residents and goods to reach necessary destinations. Compromised infrastructure due to disaster may have impacts beyond the immediate SCAG region. Additionally, failure of multiple infrastructure components may result in a catastrophic impact to the mobility needs of the region.

Numerous agencies participate in the response to incidents and assist with hazard preparedness for individual jurisdictions. Collaboration occurs between many of these agencies. At the federal level, FEMA oversees coordination. However, FEMA defines metropolitan areas and coordination different than the USDOT, limiting SCAG's ability to participate at an agency level.

The relationship between emergency access and traffic and potential impacts associated with emergency access is complex and involves factors such as the following:

- The proximity of emergency provider facilities (primarily police and fire) to those they serve
- The staffing and equipment of emergency provider facilities
- The opportunity for emergency responders to use alternative routes in a given area
- The specific street configuration

Fire departments frequently actively participate in the design of specific roadway changes to ensure adequate fire/emergency access is maintained. As part of building permit reviews, fire departments are frequently required to comment and often indicate project-specific requirements, such as requiring fire retardant landscaping, prohibiting construction in fire hazard areas, requiring design features that reduce fire potential, and developing site-specific emergency response plans. The changing demand for emergency services is complex. For example, with increasing population there may be more density and more construction, though new buildings are constructed in accordance with increasingly stringent building and fire codes making them safer and more resistant to fires, such as requiring fire sprinklers. The population is aging, which may increase demand for service. But it is also feasible that the population may not need additional service, as healthcare and other technologies evolve and are improved. Future factors that could increase efficiencies in response, including improvements in technology and management, such as changes in deployment of equipment and staff and mutual aid agreements.

As discussed in Section 3.9.2, *Regulatory Framework*, communities are mandated under the State Constitution to provide emergency services as, “the protection of the public safety is the first responsibility of local government.” Cal. Const. Art. XIII, Sec. 35, subd. (a)(2). As an example, the City of Los Angeles LAFD Strategic Plan prioritizes:

- Improving response times by utilizing data and metrics to identify gaps in LAFD’s response strategies and exploring response time improvements through dialogue, cognitive inquiry, innovation, and follow-up;
- Delivery of emergency medical services by expanding LAFD EMS response capabilities for special events and addressing periods of high vehicle traffic; and
- Identifying and implementing advanced technologies to support and improve performance metrics, tracking standards, data collection, analysis and reporting procedures (FireStatLA).

The LAFD Strategic Plan also focuses on the development of an even more professional workforce, promotion of a positive work environment to address risk management issues and strengthening community relationships to improve preparedness and enhance resiliency during emergency events. LAFD planning efforts account for congestion as they plan to maintain public safety and emergency services as required.

LAFD has goals for response times that are consistent with the response times stated in the National Fire Protection Association (NFPA) guidelines, including call processing, turnout for EMS and non-EMS calls, and travel. LAFD holds regular FireStat meetings to review response times throughout the City of Los Angeles. These meetings include battalion chiefs and captains from the four Geographic Bureaus (Central, South, Valley, and West) and the Administrative Bureaus in the City and uses the FireStat data to exercise performance management and spot trends to adjust practices, methods or identify other solutions to maintain response times. Metrics are compared between stations and even across shifts or platoons to determine if there is an issue and to continue to always work on reducing all response times to get closer to the NFPA guidelines. If response times are shown to be increasing, battalion chiefs and captains will be tasked with identifying the reason and put in place measures to resolve the

issue. For example, if it is shown that one platoon is regularly achieving a four-minute average response and another platoon at the same station in similar conditions has an average response time of four and a half minutes, the responsible officers for the station will need to determine why one platoon is doing better than another, such as whether one platoon is taking a different route, and resolve the differences to improve the slower numbers. If the factors are external to LAFD, LAFD will coordinate with other City departments, such as LADOT or the City's Information Technology Agency to adjust street light timing, or look for completely new solutions, in order to improve response times. In general, LAFD is constantly monitoring FireStat and utilizing all available resources so that appropriate and feasible response times are being maintained.

Many members of the public focus on response times as operational measures to assess system performance or believe that faster response times mean better patient outcome (Fitch 2005; Blanchard et al 2012). Nationwide, the most widely referenced response time standard for advanced life support (ALS) incidents in urban settings has been for emergency responders to respond within 8 minutes and 59 seconds, when including call processing time, for 90 percent of incidents. The National Fire Protection Association *1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments* is for an ALS unit to respond within 8 minutes to 90 percent of incidents, without including call processing time (Fitch 2005). This response goal time has been commonly cited since Dr. Mickey Eisenberg published a study in 1979, which concluded that survival from cardiac arrest is maximized if the time between collapse to receiving CPR is four minutes and the time from collapse to receiving definitive care (e.g., defibrillation) is 8 minutes, which has led to a widespread goal of an 8-minute response for ALS units responding to life-threatening emergencies (Blanchard et al. 2012).

While the Plan would incrementally reduce the overall vehicle delay in the region compared to existing conditions, there is not a direct relationship between travel delay and response times as California state law requires drivers to yield the right-of-way to emergency vehicles and even permits emergency vehicles to use opposing lane of travel, the center turn lanes, or bus-only lanes. In some instances, roadway reconfigurations with the implementation of transportation improvements could improve emergency access. For example, a roadway reconfiguration project could improve emergency access where a bus-only lane or a contiguous center left-turn lane is introduced where it did not previously exist. Emergency vehicles are permitted to use bus-only lanes for local access to emergency destinations. People traveling by bicycle are required to pull to the side of the road to yield access to emergency providers regardless of if they are traveling in a bus-only lane or in a standard travel lane. It is more likely that when traveling to an emergency incident, general traffic will be expected to merge into the bus-only lane, permitting the emergency vehicle to pass in the through lane to the left. Emergency responders also routinely use the center left-turn lanes, or even travel in opposing travel lanes if needed. Generally, multi-lane roadways allow emergency vehicles to travel at higher speeds and permit other traffic to maneuver out of the path of the emergency vehicle. The Plan includes policies and strategies to improve emergency response services. These include using ITS to improve response times to and from collision sites and the development of guidance documents to share with EMS responders to increase crash scene safety. As noted above in the Regulatory Framework, ITS can facilitate emergency vehicle access and response times through applications such as automated intersection controls to prioritize emergency vehicles, adaptive traffic management, and even automatic call-out of emergency services following vehicle crashes.

Depending on the timing, location, and duration of construction activities, several of the proposed transportation projects (including grade crossings, arterials, interchanges, and auxiliary lanes) could result in delayed emergency vehicle response times or otherwise disrupt delivery of emergency response services. For example, closing off one or more lanes of a roadway, emergency routes could be impaired. The closure of these lanes could potentially



cause traffic delays and ultimately prevent access to calls for service. Construction of other projects as a result of Plan policies and strategies may also interfere with the use of existing transportation facilities (such as roadways) by potentially blocking travel lanes with construction equipment and through increasing congestion as a result. Coordination with local jurisdictions is generally required by local jurisdictions in order to maintain adequate emergency access for ambulance and emergency services.

The Plan encourages more compact development. As discussed in Section 3.15.1, *Public Services*, under the fire protection and police protection discussions, compact land uses are generally more efficient at serving the public for emergency response. This is often because urban areas tend to be well served with these facilities and because the more compact land use pattern better facilitates access to specific sites.

However, while regulations (especially in urban areas) generally ameliorate potential impacts with respect to emergency access, due to potential increased traffic congestion associated with construction of projects anticipated as a result of the Plan, there is the potential for the Plan to result in interference with emergency access. Therefore, the Plan would have the potential to result in inadequate emergency access. As such, impacts are considered significant impact and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See SMM-HAZ-1, SMM-HAZ-2, SMM-WF-1, and SMM-TRA-1.

### PROJECT-LEVEL MITIGATION MEASURES

See PMM-HAZ-1 through PMM-HAZ-3.

**PMM-HAZ-4** In accordance with provisions of Sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects which may substantially impair implementation of an adopted emergency response plan or emergency evacuation plan, as applicable and feasible. Such measures may include the following or other comparable measures identified by the lead agency:

- Continue to coordinate locally and regionally based on ongoing review and integration of projected transportation and circulation conditions.
- Develop new methods of conveying projected and real time information to citizens using emerging electronic communication tools including social media and cellular networks;
- Continue to evaluate lifeline routes for movement of emergency supplies and evacuation.
- Prior to construction, project implementation agencies can and should ensure that all necessary local and state road and railroad encroachment permits are obtained. The project implementation agency can and should also comply with all applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits may require the contractor to prepare a traffic control plan in accordance with professional

engineering standards prior to construction. Traffic control plans can and should include the following requirements:

- Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.
- Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.
- Scheduling of truck trips outside of peak morning and evening commute hours.
- Limiting of lane closures during peak hours to the maximum extent feasible.
- Usage of designated haul routes to minimize truck traffic on local roadways to the maximum extent feasible.
- Inclusion of detours for bicycles and pedestrians in all areas potentially affected by project construction.
- Installation of traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.
- Development and implementation of access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, affected jurisdictions can and should be asked to identify detours for emergency vehicles, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures.
- Storage of construction materials only in designated areas.
- Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary.
- Ensure the rapid repair of transportation infrastructure in the event of an emergency through cooperation among public agencies and by identifying critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities.
- Enhance emergency preparedness awareness among public agencies and with the public at large.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2, *Project Description*, and Section 3.0, *Introduction to the Analysis*) and compliance with existing laws and regulations would reduce impacts but given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to emergency response plans, emergency evacuation plans, and emergency access, due to the regional nature of the analysis, unknown site conditions and

project-specific details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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**IMPACT HAZ-7    Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

As discussed in Section 3.0, *Introduction to the Analysis*, due to the similarities of the topic areas, Impact HAZ-7 is addressed together with Impact WF-2 in Section 3.20, *Wildfire*, of this 2024 PEIR.

## **CUMULATIVE IMPACTS**

Connect SoCal 2024 is a regional-scale Plan comprised of policies and strategies, a regional growth forecast and land use pattern, and individual projects and investments. At this regional-scale, a cumulative or related project to the Plan is another regional-scale plan (such as Air Quality Management Plans within the region) and similar regional plans for adjacent regions. Because the Plan, in of itself, would result in significant adverse environmental impacts with respect to hazards and hazardous materials, these impacts would add to the environmental impacts of other cumulative or related projects. Mitigation measures that reduce the Plan's impacts would similarly reduce the Plan's contribution to cumulative impacts.

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