

## 3.9 HAZARDS AND HAZARDOUS MATERIALS

---

### 3.9.1 ENVIRONMENTAL SETTING

This section of the Program Environmental Impact Report (PEIR) describes the hazards and hazardous materials in the SCAG region, identifies the regulatory framework with respect to laws and regulations that govern hazards and hazardous materials, and analyzes the significance of the potential impacts from hazards and hazardous materials that could result from development of the Connect SoCal Plan (“Connect SoCal”; “Plan”). In addition, this PEIR provides regional-scale mitigation measures as well as project-level mitigation measures to be considered by lead agencies for subsequent, site-specific environmental review to reduce identified impacts as appropriate and feasible. **Section 3.17, Transportation, Traffic, and Safety**, also addresses emergency response and evacuation plans.

#### 3.9.1.1 Definitions

Definitions of terms used in the regulatory framework, characterization of baseline conditions, and impact analysis for hazards and hazardous materials are provided.

**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 some 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 a very high toxicity chemical might. Various regulatory agencies, such as the U.S. Environmental Protection

Agency (USEPA), California Environmental Protection Agency's (Cal/EPA), State Water Resources Control Board (SWRCB), Cal/EPA Department of Toxic Substances Control (DTSC), and state and federal Occupational Safety and Health Administration (OSHA) are responsible for developing and/or enforcing risk-based standards to protect the public and the environment.

**Hazardous Material:** The term “hazardous material” can have varying definitions depending on the regulatory programs. For the purposes of this PEIR, the term refers to both hazardous materials and hazardous wastes. The California Health and Safety Code Section 25501(n)(1)<sup>1</sup> defines hazardous material as follows:

*Hazardous material means any material that because of its quantity, concentrations, 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. Hazardous materials include but are not limited to hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.*

Soil and groundwater can become contaminated by hazardous material released 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 dumping grounds for unwanted chemicals. In general, the largest and most contaminated of these sites became federal Superfund (see definition below) sites in the early 1980s, so named for their eligibility to receive cleanup money from a federal fund established for that purpose under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).<sup>2</sup> Sites are added to the National Priorities List (NPL) following a hazard ranking system.<sup>3</sup> The U.S. EPA maintains a list of federal Superfund sites, as well as a more extensive list of all sites with potential to be listed as contaminated, this list is maintained in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).<sup>4</sup>

<sup>1</sup> California Legislative Information. *ARTICLE 1. Business and Area Plan [25500-25519]*.

<sup>2</sup> U.S. Environmental Protection Agency. 2019. *Summary of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)*. Available online at: <https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act>, accessed August 19, 2019.

<sup>3</sup> U.S. Environmental Protection Agency. 2018. *Superfund: National Priorities List (NPL)*. Available online at: <https://www.epa.gov/superfund/superfund-national-priorities-list-npl>, accessed August 19, 2019.

<sup>4</sup> U.S. Environmental Protection Agency. 2019. *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*. Available online at: [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=&dirEntryId=2785](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=&dirEntryId=2785), accessed August 19, 2019.

Numerous smaller properties also have been designated as contaminated sites. Often, these are gas station sites, where leaking underground storage tanks were upgraded under a federal requirement in the late 1980s. Another category of sites, which may have some overlap with the types already mentioned, is brownfields 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 U.S. EPA and DTSC maintain lists of known brownfield sites.<sup>5,6</sup> 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. Senate Bill (SB) 32, adopted in 2001, establishes a locally based program to help speed the cleanup and reuse of brownfields sites.<sup>7</sup>

**Hazardous Waste:** A "hazardous waste" is a waste that poses substantial or potential threats to public health or the environment. Hazardous wastes are defined under the Resource Conservation and Recovery Act (RCRA)<sup>8</sup> as 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).

---

<sup>5</sup> U.S. Environmental Protection Agency. 2019. *Brownfields and Land Revitalization Activities Near You*. Available online at: <https://www.epa.gov/brownfields/brownfields-and-land-revitalization-activities-near-you>, accessed August 19, 2019.

<sup>6</sup> Department of Toxic Substances Control. 2019. *Site Mitigation & Restoration Program*. Available online at: <https://dtsc.ca.gov/brownfields/>, accessed August 19, 2019.

<sup>7</sup> California Legislative Information. 2001. *Senate Bill No. 32*.

<sup>8</sup> U.S. Environmental Protection Agency. 2019. *Resource Conservation and Recovery Act (RCRA) Laws and Regulations*. Available online at: <https://www.epa.gov/rcra>, accessed August 19, 2019.

**Certified Unified Program Agencies:** California Unified Program Agencies (CUPA) implement the hazardous waste and material standard including petroleum storage, areas plans for hazardous material emergencies, California Accidental Release Prevention (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.<sup>9</sup> 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.<sup>10</sup>

**Contaminated Sites:** A site at which hazardous substances occur at concentration 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. DTSC maintains a database of properties in California where hazardous substances were released, see **Section 3.9.1.2, Properties Included on a List of Hazardous Materials Sites Pursuant to Government Code Section 65962.5.**

**Federal Emergency Management Agency (FEMA):** FEMA coordinates the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, including acts of terror, see **Section 3.9.2.1, Federal Regulations.**<sup>11</sup>

**Reactive Materials:** Reactive materials may cause explosions or generate toxic gases. Explosives, pure sodium or potassium metals (which react violently with water), and cyanides are examples of reactive materials.

**Radioactive Materials:** Materials that emit radiation resulting from changes in the nuclei of atoms of the element.

---

<sup>9</sup> California Environmental Protection Agency. 2019. *More about the Unified Program*. Available online at: <https://calepa.ca.gov/cupa/about/>, accessed August 19, 2019.

<sup>10</sup> California Office of Emergency Services. 2019. *California Accidental Release Prevention*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/california-accidental-release-prevention>, accessed August 19, 2019.

<sup>11</sup> FEMA. *About the Agency*. Available online at: <https://www.fema.gov/about-agency>, accessed September 5, 2019.

By definition, EPA determined that some specific wastes are hazardous when they exhibit the characteristics of ignitability, reactivity, corrosivity, and toxicity. Once a site is determined hazardous, CERCLA provides a mechanism and assign liabilities for cleanup of the sites. The actions may involve short-term measures taken to address releases, long-term actions to permanently and significantly reduce the risk of release of hazardous substances, and a preliminary assessment/site inspection then a remedial investigation/feasibility study.

**Spill Cleanup Site:** 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 subjected to Spill Prevention Control and Countermeasure (SPCC) rules. 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 U.S. EPA 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 U.S.<sup>12</sup>

**State Response System:** The State of California's response system is represented by the Department of Fish and Wildlife (CDFW), Office of Oil Spill Prevention and Response (OSPR), local government, and the U.S. Coast Guard. Section 8670.7 of the California Government Code establishes that the Administrator of OSPR has the primary state authority to direct removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the state.<sup>13</sup>

**Superfund Sites:** Superfund sites generally refer to contaminated sites that have been designated by EPA on the National Priorities List (NPL) that are eligible for funding from the trust fund (the "Superfund") established by EPA for cleaning up abandoned or uncontrolled hazardous waste sites pursuant to 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 U.S. EPA to clean up such sites and to compel responsible parties to perform cleanups or reimburse the government for EPA-led cleanups.

---

<sup>12</sup> U.S. Environmental Protection Agency. 2010. *Spill Prevention, Control, and Countermeasure (SPCC) Regulation*. Available online at: <https://www.epa.gov/sites/production/files/documents/spccbluebroch.pdf>, accessed August 19, 2019.

<sup>13</sup> California Legislative Information. 1990. *ARTICLE 10. Environmental Enhancement Fun [8670.70-8670.73]*.

**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 Voluntary Cleanup Program 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 voluntary cleanup programs have played a major role in cleaning up brownfields since the 1990s. Through a nonbinding memorandum of agreement, the U.S. EPA partnered with the state to provide resource and coordination of Superfund sites to meet Resource Conservation and Recovery Act (RCRA) liabilities and provide corrective actions to provide "one cleanup" approaches. Selection of sites eligible for VCPs are provided under EPA's March 2003 guidance that exclude sites from "eligible response site" when not meeting regional determinations under Section 101(41)(C)(i) of CERCLA.<sup>14</sup>

**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 CAA and 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 lead-based paint 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

---

<sup>14</sup> California Environmental Protection Agency. *Guidance on Regional Determination Regarding Eligible Response Sites*. Available at: <http://www2.epa.gov/enforcement/guidance-regional-determinations-regarding-eligible-response-sites>, accessed September 11, 2015.

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.

### 3.9.1.2 Properties Included on a List of Hazardous Materials Sites Pursuant to Government Code Section 65962.5

The DTSC maintained a database, known as CalSites, which contained information on properties in California where hazardous substances were released, or where the potential for a release existed.<sup>15</sup> In 2006, DTSC launched its brownfields site database, EnviroStor, which replaced the CalSites database. 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 (**Table 3.9-1, Number of Cleanup Sites by County**).<sup>16</sup> The DTSC also tracks and monitors hazardous materials through the HazNet list and Cortese List, while the Cal EPA, State Water Resources Control Board (SWRCB), and the California Integrated Waste Management Board monitor potential solid waste hazards, Leaking Underground Storage Tanks, and potential clean-up sites.

---

<sup>15</sup> U.S. Environmental Protection Agency. 201. *CalSites, Annual Work Plan (AWP), CA Department of Toxic Substance Control (DTSC)*. Available online at: [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?Lab=ORD&dirEntryID=142416](https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=ORD&dirEntryID=142416), accessed August 19, 2019.

<sup>16</sup> Department of Toxic Substances Control. *EnviroStor*. Available online at: <https://www.envirostor.dtsc.ca.gov/public/>, accessed August 19, 2019.

**Table 3.9-1  
Number of Cleanup Sites by County**

County	Federal Superfund (NPL)	School Cleanup	State Response	Voluntary Cleanup
Imperial	1	1	15	11
Los Angeles	18	149	165	370
Orange	4	14	48	62
Riverside	3	16	27	35
San Bernardino	5	23	34	47
Ventura	2	5	14	27
Total	33	208	303	552

Source: Department of Toxic Substances Control (DTSC). 2019. Envirostor. Available online at: <https://www.envirostor.dtsc.ca.gov/public/search?basic=True>, accessed February 8, 2019.

### 3.9.1.3 Underground Storage Tanks (USTs)<sup>17</sup>

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. Federal UST regulations apply only to underground tanks and piping storing either petroleum or certain hazardous substances. When the UST program began, there were approximately 2.1 million regulated tanks in the United States. Today, there are far fewer regulated tanks, since many substandard UST systems have been closed. Nearly all USTs at these sites contain petroleum. These sites include marketers who sell gasoline to the public (such as service stations and convenience stores) and nonmarketers who use tanks solely for their own needs (such as fleet service operators and local governments). The U.S. EPA estimates about 10,000 tanks hold hazardous substances covered by the UST regulations.

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, the source of drinking water for nearly half of all Americans (although not such a high percentage in the SCAG region). 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. There are nearly 15,000

<sup>17</sup> U.S. Environmental Protection Agency. 2018. *Underground Storage Tanks (USTs)*. Available online at: <http://www.epa.gov/OUST/overview.htm>, accessed February 8, 2019.

LUSTs in the SCAG region, with over half in Los Angeles County, and the least number, by an order of magnitude, in Imperial County (Table 3.9-2, Leaking Underground Storage Tank Cleanup Sites).

**Table 3.9-2  
Leaking Underground Storage Tank Cleanup Sites**

County	Leaking Underground Storage Tank (LUST)
Imperial	235
Los Angeles	7,528
Orange	3,020
Riverside	1,364
San Bernardino	1,083
Ventura	1,407

Source:

Cal EPA, State Water Resources Control Board. 2019. Geotracker. Available online at: [http://geotracker.waterboards.ca.gov/sites\\_by\\_county.asp](http://geotracker.waterboards.ca.gov/sites_by_county.asp), accessed September 3, 2019.

### 3.9.1.4 Routine Transport, Use, or Disposal of Hazardous Materials

There are several risks associated with the transportation-related use of hazardous materials in the SCAG region. Actual transport of hazardous materials via truck, rail, and other modes involves a degree of risk of accident and release. The use of hazardous materials and the generation of hazardous waste in the construction and maintenance of the transportation system are other avenues for risk or exposure. Finally, the past disposal of hazardous materials in a manner that creates residual contamination of soil or water can be a source of risk when such sites are disturbed in the course of future transportation projects or associated development. Each of these avenues is discussed below.

Hazardous materials move through 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 (U.S. DOT), 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 of hazardous materials implies a degree of risk, depending on the material being moved, the mode of transport, and numerous other factors.<sup>18</sup>

<sup>18</sup> U.S. Department of Transportation. *Office of Hazardous Material Safety*. Available online at: <https://www.phmsa.dot.gov/about-phmsa/offices/office-hazardous-materials-safety>, accessed August 19, 2019.

There are 20 hazardous material treatment storage and disposal facilities in the SCAG region (**Table 3.9-3, Hazardous Material Treatment Storage and Disposal Facilities in the SCAG Region**).

### 3.9.1.5 Release of Hazardous Materials in the Environment

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 U.S. EPA 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. 16 of the 29 superfund sites on the National Priorities List in the SCAG region were in the process of being cleaned up during the period of preparation of this PEIR.<sup>19</sup>

- Barstow Marine Corps Logistics Base, Barstow
- Cooper Drum Co., South Gate
- Del Amo Hazardous Waste Site, Torrance
- George Airforce Base, Victorville
- Halaco Engineering Company, Oxnard
- Jet Propulsion Lab (NASA), Pasadena
- March Air Force Base, Riverside
- Montrose Chemical Corp, Torrance
- Newmark Ground Contamination, San Bernardino
- Omega Chemical Corporation, Whittier
- Palos Verdes Shelf
- Pemaco, Maywood
- Rockets, Fireworks, and Flares Site, Rialto
- San Fernando Valley, Areas 1,2, and 4, County of Los Angeles
- San Gabriel Valley (Areas 2, 4): Baldwin Park
- Stringfellow, Glen Avon Heights

---

<sup>19</sup> U.S. EPA. National Priorities List (NPL) Sites – by State. Available online at: <https://www.epa.gov/superfund/national-priorities-list-npl-sites-state#CA>, accessed July 29, 2019.

**Table 3.9-3  
Hazardous Material Treatment Storage and Disposal Facilities in the SCAG Region**

Facility Name	Handler ID	Address (click for map)	Contact	Operator
Clean Harbors Los Angeles, LLC	CAD050806850	5756 Alba Street Los Angeles, CA 90058	Contact: Roger R Fox, 3232772528	Operator: Clean Harbors Los Angeles, LLC
Clean Harbors Westmorland, LLC	CAD000633164	5295 S Garvey Rd Westmorland, CA 92281	Contact: Andrew M Yadvish, 7603449400 Ext. 4004	Operator: Clean Harbors Westmorland LLC
Crosby & Overton	CAD028409019	1610 West 17th Street Long Beach, CA 90813	Contact: Michael A Shloub, 5624325445 Ext. 228	Operator: Crosby And Overton INC
Demunno / Kerdoon	CAT080013352	2000 North Alameda Street Compton, CA 90222	Contact: Bonnie Booth, 3105377100 Ext. 224	Operator: Demunno / Kerdoon
DK Environmental	CAT080033681	3650 East 26th Street Los Angeles, CA 90023	Contact: Rosemary Domino, 3232685056 Ext. 108	Operator: DK Environmental
Filter Recycling Services, Inc.	CAD982444481	180 West Monte Avenue Rialto, CA 92376	Contact: Wade K Riddering, 9098734141	Operator: Filter Recycling Services, Inc.
GCE Industries, Inc	CAD981377492	1891 Nirvana Ave Chula Vista, CA 91911	Contact: Charles W Ball, 6194211151 Ext. 254	Operator: GCE Industries, Inc
Heraeus Metal Processing, Inc.	CAD060398229	13429 Alondra Blvd. Santa Fe Springs, CA 90670	Contact: Peter Eckert, 5624831830	Operator: Heraeus Metal Processing, Inc.
Lighting Resources Inc	CAL000827758	805 Francis St Ontario, CA 91761	Contact: Dan P Gillespie, 9099237252 Ext. 14	Operator: Dan Gillespie
Onyx Environmental Services, L.L.C.	CAD008302903	1704 W First St Azusa, CA 91702	Contact: Javed Hussain, 6268152220	Operator: Onyx Environmental Services
Pacific Resource Recovery Services	CAD008252405	3150 East Pico Blvd. Los Angeles, CA 90023	Contact: Mark Russell, 3232618114 Ext. 343	Operator: Pacific Resource Recovery
Phibro-Tech, Inc.	CAD008488025	8851 Dice Road Santa Fe Springs, CA 90670	Contact: Marty Voss, 5626988036 Ext. 120	Operator: Phibro-Tech, Inc.
Quemetco, Inc.	CAD066233966	720 S. 7th Avenue City of Industry, CA 91746	Contact: Neal I Lyon, 6263302294 Ext. 242	Operator: Quemetco, Inc.
Raytheon Co Space And Airborne Systems	CAD000633230	2000 E El Segundo Blvd El Segundo, CA 90245	Contact: Dean D Richardson, 3103347385	Operator: Raytheon Co

3.9 Hazards and Hazardous Materials

Facility Name	Handler ID	Address (click for map)	Contact	Operator
RHO-Chem Corp	CAD008364432	425 Isis Avenue Inglewood, CA 90301	Contact: Hector U Sanchez, 3237766233 Ext. 204	Operator: Philip Services Corporation
Safety-Kleen Systems Inc	CAT000613976	2120 South Yale Santa Ana, CA 92704	Contact: Nahid Toossi, 7144294355	Operator: Safety-Kleen Systems Inc
Safety-Kleen Systems Inc	CAT000613927	7979 Palm Ave Unit A Highland, CA 92346	Contact: Nahid Toossi, 7144294355	Operator: Safety-Kleen Systems Inc
Safety-Kleen Systems Inc	CAT000613893	10625 Hickson St Unit A El Monte, CA 91731	Contact: John Matthews, 6264010106	Operator: Safety-Kleen Systems Inc
Safety-Kleen Systems Inc	CAT000613935	2918 Worthen Ave Los Angeles, CA 90039	Contact: John Matthews, 6264010106	Operator: Safety-Kleen Systems Inc
Teris Wilmington	CAD044429835	1737 E Denni St Wilmington, CA 90744	Contact: Joe L Christopher, 3108359998 Ext. 499	Operator: Teris LLC
USFilter Recovery Services	CAD097030993	5375 South Boyle Avenue Vernon, CA 90058	Contact: Ingun Littorin, 3232771518 Ext. 1518	Operator: USFilter Recovery Services

Source:

TSD & Recycling State Resource Locator. Available online at: <https://www.envcap.org/tsdf/srl.php?srl=18&state=CA>, accessed February 8, 2019.

Numerous smaller properties also have been designated as contaminated sites. Often, these are gas station sites, where leaking underground storage tanks were upgraded under a federal requirement in the late 1980s. Another category of sites, which may have some overlap with the types already mentioned, are brownfields 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 U.S. EPA 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.<sup>20</sup> 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.<sup>21</sup> On October 17, 2019 the California Coastal Commission approved a coastal development permit allowing dismantlement of plant structures and decontamination of the site.<sup>22</sup>

---

<sup>20</sup> California Energy Commission. 2019. *Nuclear Energy in California*. Available online at: <http://www.energy.ca.gov/nuclear/california.html>, accessed January, 10, 2019.

<sup>21</sup> Southern California Edison. 2019. *Continued Safe Storage of Nuclear Fuel*. Available online at: <http://www.songscommunity.com/nuclear-fuel-storage.asp>, accessed January 10, 2019.

<sup>22</sup> Southern California Edison, 2019. Crucial Milestone Achieved for Decommissioning, <https://www.songscommunity.com/news/releases/crucial-milestone-achieved-for-decommissioning-san-onofre-nuclear-plant>, accessed November 2, 2019.

### *Hazardous Emissions within One-Quarter Mile of a School Site*

As described in **Section 4.15.3, Public Services-Schools**, there are nearly 5,000 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 are located 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, with Los Angeles County having 42 percent of the private K–12 schools. The California Education Code 17213(b)<sup>23</sup> has minimum standards to minimize the potential for hazardous emissions within one-quarter mile 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 50-133 kV line
  - 2,150 feet for 220-230 kV line
  - 3,350 feet for 500-550 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.

---

<sup>23</sup> California Legislative Information. 1996. *ARTICLE 1. General Provisions [17210-17224]*.

- 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.

### ***Properties Located within Two Miles of a Public, Public Use, or Private Airport***

There are 57 public and private airports in the SCAG region, including 12 major airports (**Figure 3.9-1, Airports in the SCAG Region**).<sup>24</sup>

### ***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.). Products can be produced within the U.S. or another country, and make their way to a business, retail store, or directly to consumers versus traditional purchases by consumers at physical retail outlets. The efficient movement of these goods are 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 world markets through trade. This 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 also has negative impacts and externalities. 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 U.S.C. §§ 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

---

<sup>24</sup> U.S. Federal Aviation Administration. 2019. *Airport Data and Contact Information*. Available online at: [http://www.faa.gov/airports/airport\\_safety/airportdata\\_5010/](http://www.faa.gov/airports/airport_safety/airportdata_5010/), accessed January 10, 2019.

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.<sup>25</sup>

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 California Government Code 65041.1 (Cal Civ. Code § 65041.1) and identifies planning considerations for freight that are consistent with federal requirements.

### ***Emergency Response Plan / Emergency Evacuation Plan***

California updated its State of California Multi-Hazard Mitigation Plan in 2018.<sup>26</sup> The state is required to adopt a federally approved State Multi-Hazard Mitigation Plan to be eligible for certain disaster assistance and mitigation funding. 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, although Ventura County is currently in the process of updating its documents. California Emergency Management Agency (Cal EMA) dictates that these plans must be updated every three years.<sup>27</sup> See **Section 3.20, Wildlife**, for an additional discussion of emergency response plans and emergency evacuation plans.

---

<sup>25</sup> United State Code. 2019. §134. *Metropolitan transportation planning*. Available online at: [https://www.govregs.com/uscode/title23\\_chapter1\\_section134](https://www.govregs.com/uscode/title23_chapter1_section134), accessed September 16, 2019.

<sup>26</sup> California Governor's Office of Emergency Services. 2019. State Hazard Mitigation Plan. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/state-hazard-mitigation-plan>, accessed July 29, 2019.

<sup>27</sup> California Emergency Management Agency. 2019. *Local Hazard Mitigation Program*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/local-hazard-mitigation-program>, accessed July 11, 2019.

## 3.9.2 REGULATORY FRAMEWORK

### 3.9.2.1 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 the Federal Occupational Safety and Health Administration (OSHA), contains provisions with respect to hazardous materials handling. Federal 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. In California, OSHA has delegated the authority to administer OSHA regulations to the State of California.<sup>28</sup>

#### *Hazardous Materials Transportation Act of 1975*

The Hazardous Materials Transportation Act (Title 49 U.S. Code [USC] 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.<sup>29</sup>

#### *Hazardous Materials Transportation Act (HMTA)*

Enacted in 1975, the HMTA (49 USC 51, Sections 5101 et seq.) is the principal federal law regulating the transportation of hazardous materials. Its purpose is to “protect against the risks to life, property, and the

---

<sup>28</sup> U.S. Department of Labor. *Regulations (Standards – 29 CFR)*. Available online at: <https://www.osha.gov/laws-regs/regulations/standardnumber>, accessed August 19, 2019.

<sup>29</sup> U.S. Environmental Protection Agency. *Hazardous Materials Transportation Act*. Available online at: <https://archive.epa.gov/emergencies/content/lawsregs/web/html/hmtaover.html#provisions>, accessed August 19, 2019.

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.<sup>30</sup>

### ***Response Conservation and Recovery Act (RCRA)***

The RCRA of 1976 (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 U.S. EPA 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.<sup>31</sup>

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.<sup>32</sup>

### ***Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)***

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

---

<sup>30</sup> 49 USC 5101. Available online at: <https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title49-section5101&num=0&edition=prelim>, accessed August 19, 2019.

<sup>31</sup> U.S. Environmental Protection Agency. 2019. *Summary of the Resource Conservation and Recovery Act*. Available online at: <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>, accessed August 19, 2019.

<sup>32</sup> Electronic Code of Federal Regulations. *Part 258- Criteria for Municipal Solid Waste Landfills*. Available online at: <https://www.ecfr.gov/cgi-bin/text-idx?SID=6015fe03e8fe343109548a041a62130c&mc=true&node=pt40.27.258&rgn=div5>, accessed August 19, 2019.

substances.<sup>33</sup> The SCAG region lies within U.S. Environmental Protection Agency (EPA) Region 9, which has the responsibility for designation and oversight of Superfund sites on the National Priorities List. There are 33 Superfund sites on the National Priorities List in the SCAG region.<sup>34</sup>

### ***Emergency Planning and Community Right-to-Know Act (EPCRA)***

The 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.<sup>35</sup>

### ***Superfund Amendment and Reauthorization Act (SARA), Title III***

SARA, Title III, of 1986 is the Emergency Planning and Community Right-to-Know Act (40 CFR Parts 350– 372). Facilities are required to report the following items on U.S. EPA 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.<sup>36</sup>

### ***Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended, and Related Authorities***

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 100-707), signed into law on November 23, 1988, amended the Disaster Relief Act of 1974 (Public Law 93-288). The Stafford Act

---

<sup>33</sup> U.S. Environmental Protection Agency. 2018. *Superfund: CERCLA Overview*. Available online at: <https://www.epa.gov/superfund/superfund-cercla-overview>, accessed August 19, 2019.

<sup>34</sup> U.S. Environmental Protection Agency. Pacific Southwest, Region 9. *Map of Superfund Sites in Southern California*. Available online at: <https://www.epa.gov/superfund/search-superfund-sites-where-you-live#map>, accessed January 10, 2019.

<sup>35</sup> U.S. Environmental Protection Agency. 2019. *Summary of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)*. Available online at: <https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act>, accessed August 19, 2019.

<sup>36</sup> U.S. Environmental Protection Agency. 1987. *Title III Section 313 Release Reporting Requirements*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/9100AFKN.PDF?Dockey=9100AFKN.PDF>, accessed August 19, 2019.

constitutes the statutory authority for most federal disaster response activities especially as they pertain to FEMA and FEMA programs.<sup>37</sup>

### ***Disaster Mitigation Act (DMA) of 2000***

DMA 2000 (Public Law 106-390) provides the legal basis for FEMA mitigation planning requirements for state, local and Indian Tribal governments as a condition of mitigation grant assistance. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need for state, local, and Indian Tribal entities to closely coordinate mitigation planning and implementation efforts. The requirement for a state mitigation plan is continued as a condition of disaster assistance, adding incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans. DMA 2000 also established a new requirement for local mitigation plans and authorized up to 7 percent of HMGP funds available to a state for development of state, local, and Indian Tribal mitigation plans.<sup>38</sup>

### ***Pipeline and Hazardous Materials Safety Administration Hazardous Materials Regulations***

PHMSA is the federal regulator for the movement of hazardous materials by rail. Regulations cover product classification, operating rules, and tank car standards.<sup>39</sup>

### ***Code of Federal Regulations, Title 14, Part 77***

FAA's 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

<sup>37</sup> FEMA. *Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities as of August 2016*. Available online at: <https://www.fema.gov/media-library/assets/documents/15271>.

<sup>38</sup> FEMA. 2000. *Disaster Mitigation Act of 2000*. Available online at: <https://www.fema.gov/media-library/assets/documents/4596>, accessed August 19, 2019.

<sup>39</sup> U.S. Department of Transportation. *Pipeline and Hazardous Materials Safety Administration*. Available online at: <https://www.phmsa.dot.gov/>, accessed August 19, 2019.

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.<sup>40</sup>

### ***Title 40 - Protection of Environment, Chapter I - Environmental Protection Agency (Continued) CFR Part 68 - Chemical Accident Prevention Provisions***

This part sets forth the list of regulated substances and thresholds, the petition process for adding or removing substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the state accidental release prevention programs approved under Section 112(r).<sup>41</sup>

### ***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

---

<sup>40</sup> Electronic Code of Federal Regulation. 2019. *Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace*. Available online at: <https://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=14:2.0.1.2.9>, accessed August 19, 2019.

<sup>41</sup> U.S. Government Information. 2016. *Title 40 Protection of the Environment Parts 64 to 71*. Available online at: <https://www.govinfo.gov/content/pkg/CFR-2016-title40-vol17/pdf/CFR-2016-title40-vol17.pdf>, accessed August 19, 2019.

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 3 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.<sup>42</sup>

### ***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 (NIMS), which provides a consistent template for managing incidents.<sup>43</sup>

### ***Federal Response Plan***

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal

---

<sup>42</sup> International Code Council. *Overview of the International Fire Code*. Available online at: <https://www.iccsafe.org/products-and-services/i-codes/2018-i-codes/ifc/>, accessed August 19, 2019.

<sup>43</sup> U.S. Department of Homeland Security. 2008. *National Response Framework*. Available online at: <https://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>, accessed August 19, 2019.

emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.<sup>44</sup>

#### ***Federal Railroad Administration Office of Railroad Safety***

FRA's Office of Railroad Safety promotes and regulates safety throughout the Nation's railroad industry.<sup>45</sup> 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.

#### ***Federal Emergency Management Agency (FEMA)***

FEMA's mission is to reduce the loss of life and property and protect communities nationwide from all hazards, including natural disasters, acts of terrorism, and other man-made disasters. FEMA leads and supports the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery and mitigation.

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, which covers Arizona, California, Hawaii, Nevada, Guam, American Samoa, Commonwealth of Northern Mariana Islands, Republic of Marshall Islands, Federated State of Micronesia, and more than 150 sovereign tribal entities. In Southern California, FEMA Region 9 specifically plans for hazards such as major earthquakes and wildfires. A catastrophic earthquake could result in 1,800 fatalities, 9 million people displaced, and \$200 billion in losses.<sup>46</sup>

---

<sup>44</sup> FEMA. 1999. *Federal Response Plan*. Available online at: <https://biotech.law.lsu.edu/blaw/FEMA/frpfull.pdf>, accessed August 19, 2019.

<sup>45</sup> Federal Railroad Administration. 2019. Office of Safety Analysis. Available online at: <https://safetydata.fra.dot.gov/OfficeofSafety/default.aspx>, accessed August 19, 2019.

<sup>46</sup> FEMA. 2019. *FEMA Region IX: Arizona, California, Hawaii, Nevada, and the Pacific Islands*. Available online at: <https://www.fema.gov/fema-region-ix-arizona-california-hawaii-nevada-pacific-islands>, accessed August 19, 2019.

### *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.<sup>47</sup> 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.<sup>48</sup>

#### **3.9.2.2 State**

### *Hazardous Waste Control Law of 1972*

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.<sup>49</sup> The Act is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), 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.

### *Hazardous Materials Release Response Plans and Inventory Law of 1985*

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 agency surveillance programs.<sup>50</sup>

---

<sup>47</sup> U.S. Department of the Interior. *Implementing the National Fire Plan*. Available online at: <https://www.doi.gov/sites/doi.gov/files/migrated/budget/appropriations/2003/upload/Implementing-the-National-Fire-Plan.pdf>, accessed August 19, 2019.

<sup>48</sup> U.S. Fish & Wildlife Service. 2009. *Rural Fire Assistance*. Available online at: [https://www.fws.gov/fire/living\\_with\\_fire/rural\\_fire\\_assistance.shtml](https://www.fws.gov/fire/living_with_fire/rural_fire_assistance.shtml), accessed August 19, 2019.

<sup>49</sup> California Legislative Information. 1972. *ARTICLE 1. Findings and Declarations [25100-25106]*.

<sup>50</sup> California Legislative Information. 2013. *Article 1. Business and Area Plans [25500-25519]*.

### ***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 National Contingency Plan, 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.<sup>51</sup>

### ***California Disaster Assistance Act (CDAA)***

The California Disaster Assistance Act (CDAA; 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.<sup>52</sup>

### **Office of Emergency Services**

The Office of Emergency Services (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 which is responsible for coordinating and maintaining resources necessary for first responders to protect the community. In addition to maintaining a Material Safety Data Sheets (MSDS), 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.

---

<sup>51</sup> Oil Spill Task Force. *California*. Available online at: <http://oilspilltaskforce.org/about/task-force-jurisdictions/california/>, accessed August 19, 2019.

<sup>52</sup> California Office of Emergency Services. 2019. *California Disaster Assistance Act (CDAA)*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/california-disaster-assistance-act>, accessed August 19, 2019.

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.<sup>53</sup>

### ***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

---

<sup>53</sup> California Governor’s Office of Emergency Services (Cal OES). 2019. *About Cal OES*. Available online at: <https://www.caloes.ca.gov/Cal-OES-Divisions/About-Cal-OES>, accessed September 4, 2019.

- Emergency response communication protocols<sup>54</sup>

### ***California State Aeronautics Act***

The purpose of the California State Aeronautics Act pursuant to Public Utilities Code Section 21001 et seq. “is to further and protect the public interest in aeronautics and aeronautical progress” through encouraging the development of private flying and air transportation, promoting safety in aeronautics, effecting uniformity in laws and regulations relating to aeronautics, providing cooperation with federal authorities, protecting residents from unreasonable levels of aircraft noise, and promoting the development of a stable regional air carrier system. The California Department of Transportation (Caltrans), Division of Aeronautics, administers much of this statute.<sup>55</sup>

### ***Hazardous Substances Account Act (State Superfund) (HSC Sections 25300–25301)***

Chapter 6.8 of the California Health and Safety Code requires the DTSC to include “the largest manageable number” of potentially responsible parties (PRPs) in any cleanup order that applies to a multiple PRP site after considering certain factors, including the adequacy of the evidence of each PRP's liability, the financial viability of each PRP, and the degree to which each PRP contributed to the release of hazardous substances at the site.<sup>56</sup>

### ***California Emergency Services Act (Assembly Bill (AB) 38 (Chapter 372)***

AB 38 combined the Office of Homeland Security and the Office of Emergency Services into Cal EMA. Under AB 38 Cal EMA was responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities in the state.<sup>57</sup> In 2013, under the Governor's reorganization plan #2, Cal EMA was eliminated and restored to the Governor's Office, renaming it the California Governor's Office of Emergency Services (Cal OES).<sup>58</sup>

### ***Hazardous Materials Release Cleanup (Assembly Bill (AB) 440 Chapter 588)***

AB 440 Chapter 588, passed into law in 2013, authorizes a local agency to take clean up action similar to that under the Polanco Redevelopment Act that the local agency determines is necessary, consistent with other state and federal laws, to remedy or remove a release of hazardous substances within the

<sup>54</sup> California Legislative Information. 2006. *Article 7.3. Local Community Rail Security Act of 2006 [7665-7667]*.

<sup>55</sup> California Legislative Information. *Chapter 1 General Provisions and Definitions [21001-21020]*.

<sup>56</sup> California Legislative Information. 1999. *ARTICLE 1. Short Title and Legislative Intent [25300-25301]*.

<sup>57</sup> California Legislative Information. 2008. *Assembly Bill No. 38*.

<sup>58</sup> California Office of Emergency Services. 2019. *About CAL OES*. Available online at: <https://caloes.ca.gov/cal-oes-divisions/about-cal-oes>, accessed October 24, 2019.

boundaries of the local agency. AB 440 allows the local agency 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 agency 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 agency to recover cleanup costs from the responsible party.<sup>59</sup>

### *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.<sup>60</sup> 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.<sup>61</sup> In July 2001, ARB adopted a new ATCM for construction, grading, quarrying, and surface mining operations in areas with serpentine or ultramafic rocks.<sup>62</sup> 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.<sup>63</sup>

In October 2000, the Governor's Office of Planning and Research (OPR) issued a memorandum providing guidance to lead agencies in analyzing the impacts of NOA on the environment through the California Environmental Quality Act (CEQA) review process.<sup>64</sup> In November 2000, the California Department of Real Estate added a section to subdivision forms that includes questions related to NOA on property

---

<sup>59</sup> California Legislative Information. 2013. *Assembly Bill No. 440*.

<sup>60</sup> California Air Resources Board. 2019. *Asbestos ATCM for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/atcm/asbeatcm.htm>, accessed August 19, 2019.

<sup>61</sup> California Air Resources Board. 2001. *Amendments to the Asbestos Regulation for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv1101.pdf>, accessed August 19, 2019.

<sup>62</sup> California Air Resources Board. 2001. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv0702.pdf>, accessed August 19, 2019.

<sup>63</sup> California Code of Regulations. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: [http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final\\_reg\\_order.ashx](http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final_reg_order.ashx), accessed August 19, 2019.

<sup>64</sup> Governor's Office of Planning and Research. 2000. *Addressing Naturally Occurring Asbestos in CEQA Documents*. Available online at: [http://www.co.mendocino.ca.us/aqmd/pdf\\_files/NOA\\_OPR.pdf](http://www.co.mendocino.ca.us/aqmd/pdf_files/NOA_OPR.pdf), accessed August 19, 2019.

proposed for development.<sup>65</sup> 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.<sup>66</sup>

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 the US EPA, pursuant to Part 61 of Title 40 of the Code of Federal Regulations.<sup>67</sup>

**California Occupational Safety and Health Administration (Cal/OSHA) Regulations.** Cal/OSHA sets forth regulations for the disturbance of Asbestos Containing Construction Materials (ACCMs) including removal operations for all types of ACCMs. Cal/OSHA requires contractors and employers that remove ACCMs 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.<sup>68</sup>

**California Code of Regulations (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.<sup>69</sup>

---

<sup>65</sup> California Department of Real Estate. *Subdivision Forms*. Available online at: <http://www.bre.ca.gov/Forms/Subdivisions.html>, accessed August 19, 2019.

<sup>66</sup> Department of Toxic Substances Control. 2004. *Interim Guidance Naturally Occurring Asbestos (NOA) at School Sites*. Available online at: [https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP\\_POL\\_Guidance\\_Schools\\_NOA.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP_POL_Guidance_Schools_NOA.pdf), accessed August 19, 2019.

<sup>67</sup> California Legislative Information. 1979. *ARTICLE 1. Contents [19825-19829]*.

<sup>68</sup> State of California Department of Industrial Relations. 2019. *Cal/OSHA*. Available online at: <https://www.dir.ca.gov/DOSH/>, accessed September 16, 2019.

<sup>69</sup> California Code of Regulations. §1529. *Asbestos*. Available online at: <https://www.dir.ca.gov/title8/1529.html>, accessed September 16, 2019.

**SCAQMD Rule 1403.** The Clean Air Act regulates asbestos as a hazardous air pollutant, which subjects it to regulation by South Coast Air Quality Management District (SCAQMD) under its Rule 1403. OSHA also regulates asbestos as a potential worker safety hazard. These rules and regulations prohibit emissions of asbestos from demolition or construction activities, require medical examinations and monitoring of employees engaged in activities that could disturb asbestos fibers, and require notice to federal and local government agencies prior to renovation or demolition activities that could disturb asbestos.<sup>70</sup>

### ***Lead Regulations***

Because of its toxic properties, lead is regulated as a hazardous material. Lead is also regulated as a toxic air contaminant. State-certified contractors must perform inspection, testing, and removal (abatement) of lead-containing building materials in compliance with applicable health and safety and hazardous materials regulations, including those outlined in Title 17 of the CCR.

**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.<sup>71</sup>

Other state laws that address lead include:

- Hazardous Waste Control Law
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

---

<sup>70</sup> South Coast Air Quality Management District. 2007. *Rule 1403. Asbestos Emissions from Demolition/Renovation Activities*. Available online at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf>, accessed September 16, 2019.

<sup>71</sup> California Code of Regulations. §1532.1. *Lead*. Available online at: [https://www.dir.ca.gov/title8/1532\\_1.html](https://www.dir.ca.gov/title8/1532_1.html), accessed September 16, 2019.

- 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)

### ***California Accidental Release Prevention Program***

The California Accidental Release Prevention Program (CalARP; 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 Code of Federal Regulations, Title 40, Part 68, and the State of California program, in accordance with the Title 19 of the California Code of Regulations, Division 2, Chapter 4.5.<sup>72</sup>

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 Human Health Screening Levels***

The California Human Health Screening Levels (CHHSLs) were developed as a tool to assist in the evaluation of contaminated sites for potential adverse threats to human health. Preparation of the CHHSLs was required by the California Land Environmental Restoration and Reuse Act of 2001. The CHHSLs were developed by OEHHA, an agency under the umbrella of Cal/EPA, and are contained in its report entitled *Human-Exposure- Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for*

---

<sup>72</sup> California Office of Emergency Services. 2019. *California Accidental Release Prevention*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/California-Accidental-Release-Prevention>, accessed August 19, 2019.

*Contaminated Soil*.<sup>73</sup> The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one in 1 million and a hazard quotient of 1.0 for non-cancer health effects. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by EPA and Cal/EPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/ industrial CHHSLs) at the site.<sup>74</sup>

#### ***California Fire Code (CFC)***

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.<sup>75</sup>

#### ***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

---

<sup>73</sup> Office of Environmental Health Hazard Assessment. 2005. *Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil*. Available online at: <https://oehha.ca.gov/media/downloads/cmr/screenreport010405.pdf>, accessed September 4, 2019.

<sup>74</sup> Office of Environmental Health Hazard Assessment. 2019. *California Human Health Screening Levels*. Available online at: <https://oehha.ca.gov/risk-assessment/california-human-health-screening-levels-chhsls>, accessed August 19, 2019.

<sup>75</sup> International Code Council. 2019. *2019 California Fire Code, Title 24, Part 9*. Available online at: <https://codes.iccsafe.org/content/chapter/15600/>, accessed August 19, 2019.

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.<sup>76</sup>

### ***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.<sup>77</sup>

#### **3.9.2.3 Local**

##### ***Certified Unified Program Agencies (Senate Bill 1082)***

Californians are protected from hazardous waste and materials by a unified program that ensures consistency throughout the state in regards to administrative requirements, permits, inspections, and enforcements. The goal of the CUPA is to create a more cohesive, effective, and efficient program. Under the CUPA, application and required submission forms are standardized and consolidated, inspections are combined where possible, annual fees for each program element are merged into a single fee system, and enforcement procedures are made more consistent. The program elements consolidated under the CUPA are:

- Hazardous waste generator and onsite hazardous waste treatment programs (a.k.a. Tiered permitting);
- Aboveground petroleum storage tank spill prevention control and countermeasure plan (SPCC);

---

<sup>76</sup> California Emergency Management Agency. 2017. *State of California Emergency Plan 2017*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/state-of-california-emergency-plan-emergency-support-functions>, accessed September 16, 2019.

<sup>77</sup> California's Office of Emergency Services. 2018. *2018 California State Hazard Mitigation Plan*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/state-hazard-mitigation-plan>, accessed August 19, 2019.

- Hazardous materials release response plans and inventory program (a.k.a. hazardous materials disclosure or community-right-to-know)
- California Accidental Release Prevention Program (Cal ARP);
- Underground storage tank program (UST); and
- Uniform fire code plans and inventory requirements.

CalEPA oversees the program, and certifies 83 local government agencies, including 37 in the SCAG region. Local agencies administering one or more of the six program elements have the option to either apply for CUPA status within the CalEPA or retain their programs by becoming a participating agency under another CUPA's jurisdiction. Some examples of the agencies that are participating under the CUPA are fire departments, environmental and health branches, Department of Toxic Substances Controls within city and municipal governments.<sup>78</sup>

### ***County General Plans and Other County-wide 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.

#### **Los Angeles County General Plan**

The Safety Element of the Los Angeles County General Plan 2035 Update, in conjunction with the AllHazard 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.<sup>79,80</sup>

#### **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

---

<sup>78</sup> California Environmental Protection Agency. 2019. *Unified Program*. Available online at: <https://calepa.ca.gov/cupa/>, accessed August 19, 2019.

<sup>79</sup> Los Angeles County Department of Regional Planning. 2015. *Los Angeles County General Plan*. Available online at: [http://planning.lacounty.gov/assets/upl/project/gp\\_final-general-plan.pdf](http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf), accessed August 19, 2019.

<sup>80</sup> County of Los Angeles, Chief Executive Office – Office of Emergency Management. 2014. All-Hazard Mitigation Plan. Available online at: <https://ceo.lacounty.gov/wp-content/uploads/OEM/hazmitgplan.pdf>, accessed September 4, 2019.

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 Standard Emergency Management System, 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.<sup>81</sup>

### **San Bernardino County General Plan**

The San Bernardino County General Plan contains an entire element regarding household hazardous waste, which includes reduction implementation programs.<sup>82</sup> 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.<sup>83</sup>

### **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,

---

<sup>81</sup> County of Los Angeles. *Los Angeles County Operational Area Emergency Response Plan*. Available online at: <https://www.caloes.ca.gov/AccessFunctionalNeedsSite/Documents/LA%20County%20OA%20Emergency%20Response%20Plan.pdf>, accessed September 16, 2019.

<sup>82</sup> County of San Bernardino Land Use Services Division. 2014. *County of San Bernardino 2007 General Plan*. Available online at: <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>, August 19, 2019.

<sup>83</sup> County of San Bernardino Land Use Services Division. 2014. *County of San Bernardino 2007 General Plan*. Available online at: <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>, August 19, 2019.

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.<sup>84</sup>

### 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<sup>85</sup>

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.<sup>86</sup>

### 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

---

<sup>84</sup> Imperial County Planning & Development Services. 2015. *Land Use Element of the Imperial County General Plan*. Available online at: [http://www.icpds.com/CMS/Media/Land-Use-Element-\(2015\).pdf](http://www.icpds.com/CMS/Media/Land-Use-Element-(2015).pdf), accessed August 19, 2019.

<sup>85</sup> Orange County Planning & Development. *Chapter IX Safety Element*. Available online at: <https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=40234>, accessed August 19, 2019.

<sup>86</sup> County of Orange & Orange County Fire Authority. 2015. *Local Hazard Mitigation Plan*. Available online at: [http://cams.ocgov.com/Web\\_Publisher/Agenda07\\_12\\_2016\\_files/images/O00216-000668A.PDF](http://cams.ocgov.com/Web_Publisher/Agenda07_12_2016_files/images/O00216-000668A.PDF), accessed August 19, 2019.

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.<sup>87</sup>

### *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.<sup>88</sup> 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.

## **3.9.3 ENVIRONMENTAL IMPACTS**

### **3.9.3.1 Thresholds of Significance**

For the purposes of this PEIR, SCAG has determined the Plan could result in significant impacts related to hazards and hazardous materials, if the Plan would result in any of the following:

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

---

<sup>87</sup> Ventura County. 2019. *Ventura County 2040 General Plan Preliminary Public Review Draft*. Available online at: [https://vc2040.org/images/2040\\_General\\_Plan\\_Files\\_-\\_May\\_2019/PPRD\\_2040\\_General\\_Plan\\_COMPLETE-compressed.pdf](https://vc2040.org/images/2040_General_Plan_Files_-_May_2019/PPRD_2040_General_Plan_COMPLETE-compressed.pdf), accessed August 19, 2019.

<sup>88</sup> City of Los Angeles Emergency Management Department. 2018. *Local Hazard Mitigation Plan*. Available online at: [https://emergency.lacity.org/sites/g/files/wph496/f/2018\\_LA\\_HMP\\_Final\\_2018-11-30.pdf](https://emergency.lacity.org/sites/g/files/wph496/f/2018_LA_HMP_Final_2018-11-30.pdf), accessed September 4, 2019.

- 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**).

### 3.9.3.2 Methodology

The potential for implementation of the Plan to expose people or property to risk from hazards or hazardous materials was evaluated in accordance with Appendix G of the 2019 *State California Environmental Quality Act (CEQA) Guidelines*, and at the programmatic level of detail, in relation to the general plans of the six counties and the 191 cities within the SCAG region, a query of government data bases, and a review of related literature germane to the SCAG region.

The frequency and location of hazardous material shipments are an indicator of potential risk. The impact of hazardous materials transportation through the SCAG region can be assessed by examining the Plan's effect on shipments of hazardous materials. To assess potential hazards to sensitive receptors adjacent to transportation corridors, geographic information systems (GIS) analysis was used to identify where major highway, rail, and transit projects included in the Plan would be within 150 feet of 2045 residential land uses. Major projects considered in the Plan since the 2016 RTP/SCS was adopted include additional highway projects, high-occupancy vehicle (HOV) projects, mixed flow projects, and toll projects.

The methodology for determining the significance of hazardous material impacts compares the existing conditions (2019) to the future 2045 conditions under the Plan, as required in CEQA Section 15126.2(a). Implementation of the Plan would 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. The potential for risk related to the transport of hazardous materials was assessed by evaluating the locations of proposed transportation projects in relation to the surrounding uses, as well as potential significant impacts related to the risk of accidental releases of hazardous materials due to an increase in the transportation of hazardous materials and the potential for such releases to reach schools, and communities adjacent to transportation facilities included in the Plan.

In 2015, the California Supreme Court in *CBIA v. BAAQMD*, held that CEQA generally 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 presents a programmatic, regional

evaluation of potential impacts of transportation projects, land use strategies, and development projects anticipated to occur under the Plan on increased risk of exposure to hazardous materials.<sup>89</sup>

The mitigation measures in the PEIR are divided into two categories: SCAG mitigation and project-level mitigation measures. SCAG mitigation measures shall be implemented by SCAG over the lifetime of the Plan. For projects proposing to streamline environmental review pursuant to SB 375, SB 743 or SB 226 (as described in Section 1.0 Introduction), or for projects otherwise tiering off this PEIR, the project-level mitigation measures described below (or comparable measures) can and should be considered and implemented by Lead Agencies and Project Sponsors during the subsequent, project- or site-specific environmental reviews for transportation and development projects as applicable and feasible. However, SCAG cannot require implementing agencies to adopt mitigation, and it is ultimately the responsibility of the implementing agency to determine and adopt project-specific mitigation.

### 3.9.3.3 Impacts and Mitigation Measures

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

*Significant and Unavoidable Impact- Mitigation Required.*

The transportation, use, and/or disposal of hazardous materials are subject to numerous laws, regulations, and health and safety standards set forth by federal, state, and local authorities that regulate the proper handling of such materials and their containers. These include the EPA, OSHA, U.S. DOT, and the Food and Drug Administration (FDA) for the federal government. State agencies, including the Cal/EPA, have parallel and, in some cases, more stringent rules governing the use of hazardous materials. U.S. DOT requires that hazardous waste inventories (which are used to ensure that hazardous wastes are strictly monitored and tracked from the point of generation through ultimate disposal) be maintained. To operate in California, all hazardous waste transporters must be registered with the DTSC. Unless specifically exempted, hazardous waste transporters must comply with the California Highway Patrol Regulations, the California State Fire Marshal Regulations, and the U.S. DOT regulations.

The Connect SoCal Plan includes transportation projects and land use strategies, that may create a significant hazard to the public or the environment through the transportation, use, and/or disposal of

---

<sup>89</sup> Note that as discussed in **Section 3.15.3 Public Services – Schools**, 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 Pub. Res. Code § 21096.

hazardous materials, constituting a significant impact. 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 these projects would result in use of equipment that contains or uses routine hazardous materials (e.g., diesel-fuel, paint and cleaning solutions), and the transportation of excavated soil and/or groundwater containing contaminants from previously contaminated areas. Port traffic (and associated goods movement in the region) is anticipated to triple over the lifetime of the Plan. Container traffic for the San Pedro Bay Ports is anticipated to increase from approximately 17.6 million Twenty-foot Equivalent Units (TEUs) in 2018 to a projected 34 million TEUs in 2040. The fraction of containers that include hazardous materials is not known, but if it is assumed 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).

Reducing conflicts between goods movement and people movement is critical to realize a safer system for users. In 2016, there were nearly 3,700 truck-involved accidents<sup>90</sup> in the SCAG region, an increase of 22.8 percent versus 2012, and more than 130 of them resulted in fatalities.<sup>91</sup> A greater separation of passenger and goods movement is envisioned in the Plan to make the system safer for all users.

Regional goods movement strategies should also mitigate neighborhood and community impacts to the maximum extent possible by selecting the least intrusive alignments for new facilities, seeking shared-use corridors (e.g., rail and truck, transportation and utility), and separating modal system conflicts. The California Air Resources Board (CARB) plans to release a freight handbook in early 2020 that will offer communities recommendations on mitigation from freight facilities. This is consistent with the Plan which offers an aggressive program of technology research, development, and demonstration aimed at zero emission truck and rail technologies as major elements of the vision.

The construction and maintenance of transportation projects and development projects anticipated to occur under the Plan would potentially involve the use of hazardous materials such as fuels, solvents, paints, and other architectural coatings. The use and storage of these materials is regulated by local fire departments, Certified Unified Program Agencies (CUPAs), and the Cal OSHA. Materials remaining after

---

<sup>90</sup> Another 245 resulted in severe injuries and more than 1,000 others had other visible injuries.

<sup>91</sup> With the exception of 2015, the number of fatalities in truck involved collisions has increased annually since 2012. However, the ratio of overall fatalities to truck-involved collisions has remained between 3.6 percent to 3.8 percent for each year besides 2014 (4.1 percent).

project construction can likely be reused on other projects. For materials that cannot be or are not reused, disposal would be regulated by DTSC under state and federal hazardous waste regulations. 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 (3.2 million more people by 2045), the Connect SoCal Plan's land use strategies encourage 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. While the transport, use, and disposal of hazardous materials is heavily regulated as discussed above, and transportation projects and development projects would be required to comply with all existing applicable regulations, due to the volume of transportation projects and large amount of growth anticipated to occur under the Plan, it is possible that significant impacts could occur thus requiring the consideration of mitigation measures.

### *Mitigation Measures*

#### SCAG Mitigation Measures

- SMM HAZ-1:** SCAG shall work with the U.S. DOT, the Office of Environmental Service Caltrans, and the private sector to continue to conduct driver safety training programs and enforce speed limits on roadways. In an effort to reduce risks associated with the transport of hazardous materials in the SCAG region, SCAG shall encourage the U.S. Department of Transportation and the California Highway Patrol to continue to enforce speed limits and existing regulations governing goods movement and hazardous materials transportation.
- SMM HAZ-2:** SCAG shall notify member agencies of the importance of ensuring that construction and operation of transportation projects provide for the safe transport and disposal of hazardous waste, consistent with the provisions of HMR, 49 CFR Parts 171–180.
- SMM HAZ-3:** SCAG shall coordinate with the Office of Environmental Services to identify any transportation infrastructure elements within the SCAG region where risks to people and property occur at an above-average incident level, potentially warranting consideration for remedial design in future regional transportation plans (RTPs).

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

- a) Where the construction or operation of projects involves the transport of hazardous material, provide a written plan of proposed routes of travel demonstrating use of roadways designated for the transport of such materials.
- b) Specify Project requirements for interim storage and disposal of hazardous materials during construction and operation. Storage and disposal strategies must be consistent with applicable federal, state, and local statutes and regulations. Specify the appropriate procedures for interim storage and disposal of hazardous materials, anticipated to be required in support of operations and maintenance activities, in conformance with applicable federal, state, and local statutes and regulations, in the business plan for projects as applicable and appropriate.
- c) Submit a Hazardous Materials Business/Operations Plan for review and approval by the appropriate local agency. Once approved, keep the plan on file with the Lead Agency (or other appropriate government agency) and update, as applicable. The purpose of the Hazardous Materials Business/Operations Plan is to ensure that employees are adequately trained to handle the materials and provides information to the local fire protection agency should emergency response be required. The Hazardous Materials Business/Operations Plan should include the following:
  - The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.
  - The location of such hazardous materials.
  - An emergency response plan including employee training information.

- A plan that describes the way these materials are handled, transported and disposed.
- d) Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction.
- e) Avoid overtopping construction equipment fuel gas tanks.
- f) Properly contain and remove grease and oils during routine maintenance of construction equipment.
- g) Properly dispose of discarded containers of fuels and other chemicals.
- h) Prior to shipment remove the most volatile elements, including flammable natural gas liquids, as feasible.
- i) Identify and implement more stringent tank car safety standards.
- j) Improve rail transportation route analysis, and modification of routes based on that analysis.
- k) Use the best available inspection equipment and protocols and implement positive train control.
- l) Reduce train car speeds to 40 miles per hour when passing through urbanized areas of any size.
- m) Limit storage of crude oil tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments.
- n) Notify in advance county and city emergency operations offices of all crude oil shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident.
- o) 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.

- p) Fund training and outfitting emergency response crews that includes the cost of backfilling personnel while in training.
- q) 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 discussed above, regulations and policies would reduce impacts but given the regional scale of the analysis in this PEIR, it is not possible to determine if all impacts would be fully mitigated by existing regulations and policies. Therefore, this EIR identifies project-level mitigation measures consistent with applicable regulations and policies designed to reduce impacts. Lead Agencies may choose to include project-level mitigation measures in environmental documents as they determine to be appropriate and feasible. However, because of the regional nature of the analysis, the volume of transportation projects and amount of growth under the Plan, and SCAG's lack of authority to impose project-level mitigation measures, this PEIR finds impacts related to routine use, transport or disposal of hazardous waste to be significant and unavoidable.

**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.*

Implementation of transportation projects included in the Connect SoCal Plan would result in significant impacts by facilitating the movement of goods, including hazardous materials, through the SCAG region. The Plan's land use strategies may guide regional growth, including industrial types of uses that could generate hazardous materials. The region's highway and arterial system covers over 73,000 lane miles and serves more than 63 million trips daily.<sup>92</sup> As a result of anticipated growth that is projected to occur within cities and counties under the Plan in the next 25 years, it is anticipated that there would be a substantial increase in vehicle miles traveled (VMT) by trucks, a common mode of hazardous materials transport, as Plan transportation improvements close critical gaps in the highway network. In addition, freight rail enhancements, truck mobility improvements, intermodal facilities, and other goods movement capacity enhancements are included in the Plan, including new and expanded railyards, additional main line railroad tracks, improved and modernized port terminals and critical bottleneck

---

<sup>92</sup> Southern California Association of Governments. 2019. Highways and Arterials Draft Technical Report.

relief projects on major freeways. Specifically, the Plan proposes to expand near-dock rail and double the capacity of the Intermodal Transfer Container Facility. In order to improve on-road transportation, the Plan has identified 42 heavy duty truck bottlenecks in the region and proposes the Bottleneck Relief Strategy and freight corridors to alleviate truck congestion. Moreover, near the San Pedro Port and the Port of Hueneme, many modernization and new on-road transportation projects have been proposed and are included in the Connect SoCal's Goods Movement Report.<sup>93</sup>

Transportation of goods, in general, and hazardous materials, in particular, can thus be expected to increase substantially with implementation of the transportation projects included in the Plan. It is estimated that daily regional heavy-duty truck vehicle hours of delay (VHD) within the SCAG region would increase from 113,192 in 2019 to 177,459 in 2045, which is an approximately 56 percent increase. Further, the Plan estimates a 300 percent increase in vehicle hours of delay at rail-highway grade crossings in the region by 2045. The past several Plan updates including this one, incorporate dedicated truck lane facilities. These facilities would be aligned to connect freight intensive locations such as the ports, warehousing/distribution center locations and manufacturing locations. They would have fewer ingress/egress locations than typical urban interstates have to smooth the flow of goods in the region. Additional transportation strategies and projects included in the Plan would generally improve transportation safety, thus reducing the likelihood of hazardous material transportation incidents.

Plan projects, including rail-to-rail grade separations, rail operations safety improvements, truck mobility improvements such as truck-only freight corridors, and grade separations of streets and highways from rail lines, could be expected to reduce the level of risk posed by hazardous materials transport by separating freight transportation from other traffic types and reducing the risk of collisions. Such improvements to the transportation system may provide an incentive for even greater goods shipment through the SCAG region, potentially offsetting this benefit. The imposition of tolls or fees for dedicated truck lane facilities may induce the transfer of some freight, including hazardous materials, to rail rather than truck. Federal statistics show that hazardous materials incidents are much less common by rail than on highways. Since most hazardous materials are transported by truck, the majority of incidents related to the movement of hazardous materials occur on highways or in truck terminals. A very small share of hazardous materials transportation incidents are the result of a vehicular crash or derailment (referred to as "accident related"). While 1.5 percent of the incidents in 2016 were accident related, they accounted for

---

<sup>93</sup> See 2020 RTP/SCS Goods Movement Technical Report.

64.3 percent of all property damage. Highway had the highest share of incidents at 90.4 percent but accounted for 60.9 percent of all property damage.<sup>94</sup>

Even with Plan transportation improvements, there remains the potential for significant impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment from implementation of transportation projects and development anticipated to occur under the Plan, requiring the consideration of mitigation measures.

### *Mitigation Measures*

#### SCAG Mitigation Measures

See SMM HAZ-1 through SMM HAZ-3.

#### 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 hazards related to the reasonably foreseeable upsets and accidents involving the release of hazardous materials, as applicable and feasible. Such measures may include the following or other comparable measures identified by the Lead Agency:

Require implementation of safety standards regarding transport of hazardous materials, including but not limited to the following:

- a) Removal of the most volatile elements, including flammable natural gas liquids, prior to shipment;
- b) More stringent tank car safety standards;
- c) Improved rail transportation route analysis, and modification of routes based on that analysis;
- d) Utilization of the best available inspection equipment and protocols, and implementation of positive train control;

---

<sup>94</sup> U.S. Department of Transportation, Bureau of Transportation Statistics. 2017. *Freight Facts and Figures*. Available online at: <https://rosap.ntl.bts.gov/view/dot/34923>, accessed September 5, 2019.

- e) Reduced train car speeds to 40 miles per hour when passing through urbanized areas of any size;
- f) Limitations on storage of hazardous materials tank cars in urbanized areas of any size and provide appropriate security in storage yards for all shipments;
- g) Advance notification to county and city emergency operations offices of all crude oil and hazardous materials shipments, including a contact number that can provide real-time information in the event of an oil train derailment or accident;
- h) 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 hazardous materials.

*Level of Significance after Mitigation*

As discussed above, regulations and policies would reduce impacts but given the regional scale of the analysis in this PEIR, it is not possible to determine if all impacts would be fully mitigated by existing regulations and policies. Therefore, this EIR identifies project-level mitigation measures consistent with applicable regulations and policies designed to reduce impacts. Lead Agencies may choose to include project-level mitigation measures in environmental documents as they determine to be appropriate and feasible. However, because of the regional nature of the analysis, the increased truck volumes and increases in passenger and freight rail traffic as a result of implementation of the Plan, and SCAG's lack of authority to impose project-level mitigation measures, this PEIR finds impacts related to foreseeable accident conditions resulting in the release of hazardous materials to be significant and unavoidable.

**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.*

Implementation of the transportation projects in the Plan and growth from the Plan could result in significant impacts with regard to emitting hazardous emission or handling of hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school. Transportation and development projects may result in the use, transport and/or storage of hazardous materials. Using SCAG's GIS data, the Plan's network of transportation projects was overlaid on the

region to determine the potential for effects related to hazardous materials emissions to impact schools. Results of the GIS analysis show that under the Plan, approximately 36 existing kindergarten through 12th-grade schools are within a one-quarter mile buffer of the transportation projects included in the Plan (see **Table 3.9-4, School, Hospitals, and Nursing Homes within One-Quarter Mile of Connect SoCal Transportation Projects**).

Increased transport of hazardous materials carried on existing roadways could affect adjacent land uses including along existing facilities within one-quarter mile of schools if there were to be a release or incident during transportation. Changes in air toxics and potential impacts on sensitive receptors (including schools) is discussed in **Section 3.3, Air Quality**. In general, the transport, use, and storage of hazardous materials is heavily regulated as described in the regulatory framework section above, to ensure that hazardous materials do not pose a significant risk to nearby receptors including schools.

However, due to the number of transportation projects and more dense, compact urban development encouraged by land use strategies in the Plan, there would be the potential for significant impacts related to the emission of hazardous materials or the handling of hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school, requiring mitigation measures.

---

**Table 3.9-4**  
**School, Hospitals, and Nursing Homes within One-Quarter Mile**  
**of Connect SoCal Transportation Projects**

Mode	Connect SoCal Plan
Colleges	66
Hospitals	117
K-12 Schools	36
Nursing Homes	17
Senior Centers	20
Urgent Care Centers	5

*Source: SCAG, 2019: TeleAtlas/TomTom 2018*

*Note: The above figures account for all types of colleges, hospitals, k-12 schools, nursing homes, senior centers, and urgent care centers.*

---

### ***Mitigation Measures***

#### **SCAG Mitigation Measures**

See **SMM HAZ-1** through **SMM HAZ-3**.

Project Level Mitigation Measures

See PMM HAZ-1 and PMM HAZ-2.

**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 the release of hazardous materials within one-quarter mile 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 one-quarter mile of schools, when school is in session, wherever feasible.
- b) Where it is not feasible to avoid transport of hazardous materials, within one-quarter mile of schools on local streets, provide notifications of the anticipated schedule of transport of such materials.

*Level of Significance after Mitigation*

As discussed above, regulations and policies would reduce impacts but given the regional scale of the analysis in this PEIR, it is not possible to determine if all impacts would be fully mitigated by existing regulations and policies. Therefore, this EIR identifies project-level mitigation measures consistent with applicable regulations and policies designed to reduce impacts. Lead Agencies may choose to include project-level mitigation measures in environmental documents as they determine to be appropriate and feasible. However, because of the regional nature of the analysis, the volume of transportation projects, the more dense and compact urban development resulting from the land use strategies in the Plan, and SCAG's lack of authority to impose project-level mitigation measures, this PEIR finds impacts related to release of hazardous materials within one-quarter mile of schools to be significant and unavoidable.

**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 - Mitigation Required.*

Transportation projects and development projects anticipated to occur under the Plan may have the potential to be located on a site which is 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 these transportation projects and anticipated development 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 **Table 3.9-1**). In urban as well as rural areas, many projects, both transportation and development, would likely need to address at least the potential for 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.

The land use strategies included in the Plan as well as transportation strategies and investments that 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. The land use strategies included in the Plan generally aim to direct future population growth toward high-quality transit areas (HQTAs) in close proximity to transit. Consequently, the redevelopment and reuse of urban infill lands as well as urban opportunity areas that are currently underutilized may become more common as the region grows.

Because Connect SoCal may cause transportation projects and development to be located on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the Plan would have the potential to create a significant hazard to the public or the environment, requiring mitigation measures.

### *Mitigation Measures*

#### SCAG Mitigation Measures

See **SMM HAZ-1** through **SMM HAZ-3**.

#### Project Level Mitigation Measures

**PMM HAZ-4:** 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) Where warranted due to the known presence of contaminated materials, submit to the appropriate agency responsible for hazardous materials/wastes oversight a Phase II Environmental Site Assessment report if warranted by a Phase I report for the project site. The reports should make recommendations for remedial action, if appropriate, and be signed by a Registered Environmental Assessor, 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 U.S. EPA to determine the extent of potential contamination beneath all underground storage tanks (USTs), 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, 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, 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 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 (RWQCB), 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, lead based paint, and any other building materials or stored materials classified as hazardous waste by state or federal law.
- o) Where the remediation of lead-based paint 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 (Cal OSHA's) Construction Lead Standard, Title 8 California Code of Regulations (CCR) Section 1532.1 and Department of Health Services (DHS) 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 discussed above, regulations and policies would reduce impacts but given the regional scale of the analysis in this PEIR, it is not possible to determine if all impacts would be fully mitigated by existing regulations and policies. Therefore, this EIR identifies project-level mitigation measures consistent with applicable regulations and policies designed to reduce impacts. Lead Agencies may choose to include project-level mitigation measures in environmental documents as they determine to be appropriate and

feasible. However, because of the regional nature of the analysis, the number of contaminated sites on the Cortese List in the region, and SCAG's lack of authority to impose project-level mitigation measures, this PEIR finds impacts related to being located on a hazardous materials site to be significant and unavoidable.

**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 – Mitigation Required.*

The Plan would not in itself result in a safety hazard; however, increased population growth that would occur by 2045 would result in increased air traffic in major commercial airports in Southern California. Air travel in the SCAG region continues to grow. The 2020 Plan's regional air passenger demand forecast is 197.14 million annual passengers (MAP) in 2045, and the Plan's air cargo demand is approximately 7.77 million tons in 2045. The MAP forecast is higher than the previously adopted 2016 RTP/SCS's number of 136.2 MAP adopted for 2040, and the air cargo demand is similarly higher than what was adopted in the previously adopted 2016 RTP/SCS (approximately 3.78 million metric tons in 2040). Aircraft operations are not anticipated to grow as fast as passenger growth, but are still expected to grow -- from 3.7 million in 2017 to 4.58 million in 2045,<sup>95</sup>

There are 57 public and private airports in the SCAG region, including 12 major airports serving the region (**Figure 3.9-1**). The Plan's land use strategies generally aim to focus growth in HQTAs and transit priority areas (TPAs) in locations away from airport clear zones and accident potential zones. Encouraging and distributing new growth in HQTAs and TPAs is expected to decrease the number of Southern California residents' proximity to airports and potential for safety risks and hazards associated with air traffic.

In addition, most major public airports are required to implement an Airport Land Use Compatibility Plan which regulates safety and land use in adjacent areas. As explained in the Connect SoCal Aviation and Airport Ground Access Technical Report,<sup>96</sup> existing law mandates the creation of an ALUCP to coordinate planning for areas that surround public use airports. The ALUCP protects the public by minimizing their exposure to excessive noise<sup>97</sup> and safety hazards within these areas. See **Section 3.13**

<sup>95</sup> Southern California Association of Governments. 2019. *Aviation and Airport Ground Access Draft Technical Report*.

<sup>96</sup> Southern California Association of Governments. 2019. *Aviation and Airport Ground Access Draft Technical Report*.

<sup>97</sup> Noise impacts related to airports/aircraft are specifically discussed in **Section 3.13, Noise**.

**Noise, Impact NOI-3** for a further discussion noise impacts from airports/aircrafts. However, it is conservatively assumed sensitive receptors may experience a greater risk to hazard impacts than at present in the vicinity of airports resulting in significant impacts.

*Mitigation Measures*

SCAG Mitigation Measures

**SMM NOISE-1**

**SMM HAZ-5:** SCAG shall continue to collaborate with key 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.

Project Level Mitigation Measures

**PMM NOISE-1**

*Level of Significance after Mitigation*

As discussed above, regulations and policies would reduce impacts but given the regional scale of the analysis in this PEIR, it is not possible to determine if all impacts would be fully mitigated by existing regulations and policies. Therefore, this EIR identifies project-level mitigation measures consistent with applicable regulations and policies designed to reduce impacts. Lead Agencies may choose to include project-level mitigation measures in environmental documents as they determine to be appropriate and feasible. However, because of the regional nature of the analysis, and SCAG's lack of authority to impose project-level mitigation measures, this PEIR finds impacts related to safety hazards and excessive noise in proximity to airports to be significant and unavoidable.

**Impact HAZ-6                    Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

*Significant and Unavoidable - Mitigation Required.*

The Plan would result in significant impacts in regards to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan. SCAG does not have a direct role as first response or emergency management, however SCAG can facilitate policy forums to help develop regional consensus and education on security policies and emergency responses,

assist in expediting the planning and programming of transportation infrastructure repairs after any major disasters, and leverage projects and planning functions that benefit transportation security efforts and emergency services.

**Section 3.15, Public Services Fire**, 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 transportation projects included in 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 “new residential subdivisions to provide not less than two means of access for emergency vehicles and resident evacuation.”<sup>98</sup>

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)<sup>99</sup> 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 Standard Emergency Management System,<sup>100</sup> mutual aid and other appropriate response procedures.

---

<sup>98</sup> Ventura County. 2019. *Ventura County 2040 General Plan Preliminary Public Review Draft*. Available online at: [https://vc2040.org/images/2040\\_General\\_Plan\\_Files\\_-\\_May\\_2019/PPRD\\_2040\\_General\\_Plan\\_COMPLETE-compressed.pdf](https://vc2040.org/images/2040_General_Plan_Files_-_May_2019/PPRD_2040_General_Plan_COMPLETE-compressed.pdf), accessed September 16, 2019.

<sup>99</sup> County of Los Angeles. 1998. *Los Angeles County Operational Area Emergency Response Plan*. Available online at: <https://www.caloes.ca.gov/AccessFunctionalNeedsSite/Documents/LA%20County%20OA%20Emergency%20Response%20Plan.pdf>, accessed October 24, 2019.

<sup>100</sup> California Office of Emergency Services. 2019. *Standardized Emergency Management System*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/standardized-emergency-management-system>, accessed October 24, 2019.

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 the 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).<sup>101</sup> 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.

The Plan's land use strategies generally aim to focus new growth in areas well-served by transit, and HQTAs including livable corridors, that allow 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 high value habitat areas. Thus, if the Plan's land use strategies are 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.

The proposed transportation projects would generally increase mobility and circulation capacity and may therefore have the potential to improve response times for police, fire and emergency service providers. However, despite the efforts of the land use strategies and transportation projects included in the Plan, congestion would likely increase in existing and new urban development, like HQTAs, and existing communities in cities and counties in the SCAG region, which could adversely affect emergency access.

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

---

<sup>101</sup> City of Los Angeles. *Emergency Operations Organization*. Available online at: <https://emergency.lacity.org/eoo>, accessed October 24, 2019.

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 county-wide plans).

While the Plan would increase hours of delay at the regional level, 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, Traffic and Safety**, of this 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 thru lanes experience delays. Nonetheless, the potential exists for the Plan to interfere with emergency response plans, mitigation is required.

*Mitigation Measures*

SCAG Mitigation Measures

See SMM HAZ-1 through SMM HAZ-5 and SMM TRA-5.

Project Level Mitigation Measures

See PMM HAZ-1 through PMM HAZ-4 and PMM TRA-5.

**PMM HAZ-5:** 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 which may impair implementation of or physically interfere with 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:

- a) Continue to coordinate locally and regionally based on ongoing review and integration of projected transportation and circulation conditions.
- b) Develop new methods of conveying projected and real time information to citizens using emerging electronic communication tools including social media and cellular networks;

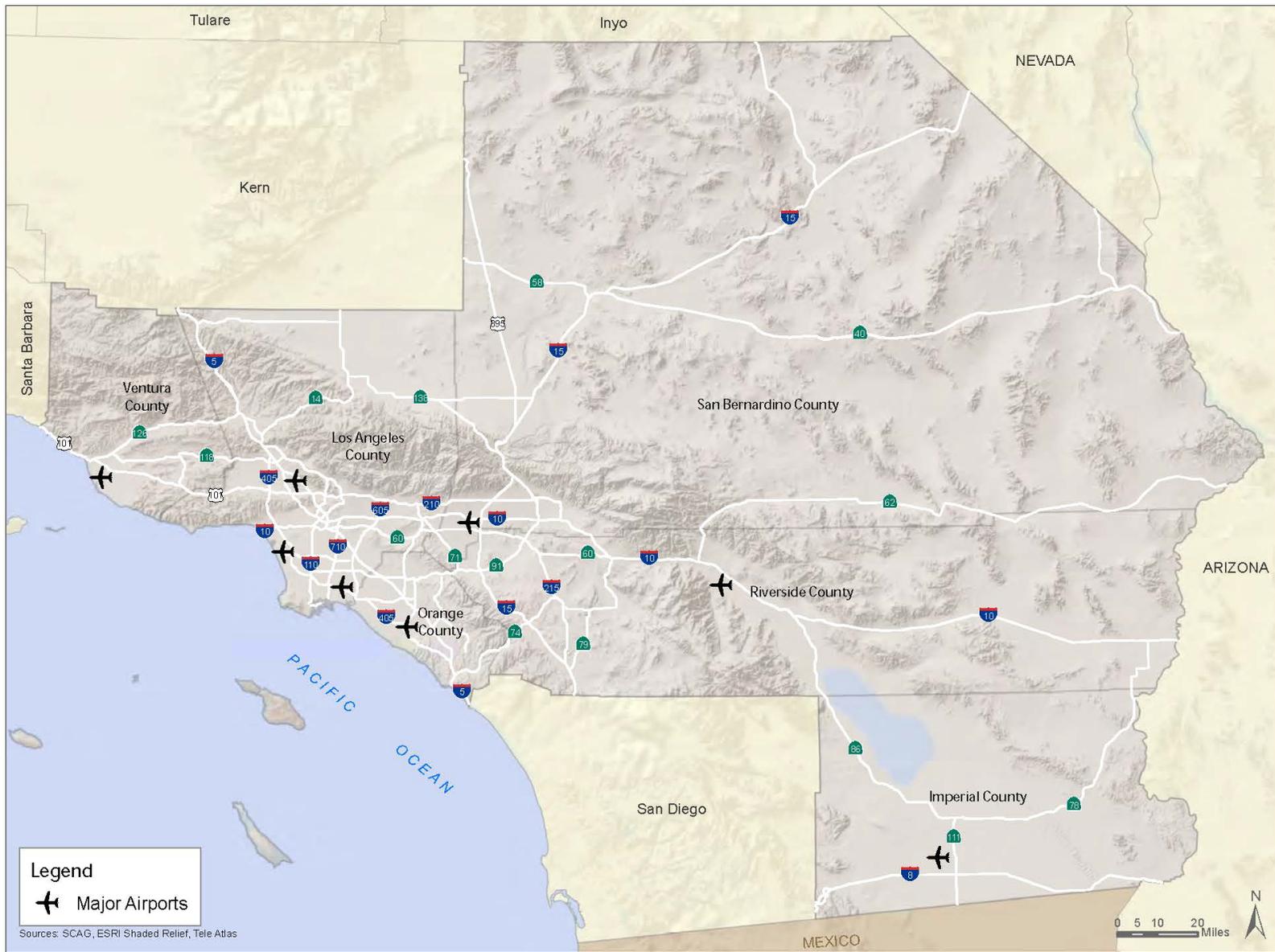
- c) Continue to evaluate lifeline routes for movement of emergency supplies and evacuation.

*Level of Significance after Mitigation*

As discussed above, regulations and policies would reduce impacts but given the regional scale of the analysis in this PEIR, it is not possible to determine if all impacts would be fully mitigated by existing regulations and policies. Therefore, this EIR identifies project-level mitigation measures consistent with applicable regulations and policies designed to reduce impacts. Lead Agencies may choose to include project-level mitigation measures in environmental documents as they determine to be appropriate and feasible. However, because of the regional nature of the analysis, the Plan's potential to result in increased congestion, and SCAG's lack of authority to impose project-level mitigation measures, this PEIR finds impacts related to emergency response to be significant and unavoidable.

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

This question is addressed in **Section 3.20, Wildfire, Impact WF-2.**



SOURCE: SCAG, ESRI Shaded Relief, Tele Atlas, 2012

FIGURE 3.9-1

Major Airports in SCAG Region

### 3.9.4 SOURCES

- 49 USC 5101. Available online at: <https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title49-section5101&num=0&edition=prelim>, accessed August 19, 2019.
- California Air Resources Board. 2001. *Amendments to the Asbestos Regulation for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv1101.pdf>, accessed August 19, 2019.
- California Air Resources Board. 2001. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: <https://ww3.arb.ca.gov/toxics/asbestos/atcm/regadv0702.pdf>, accessed August 19, 2019.
- California Air Resources Board. 2008. *Title 13 – California Code of Regulation*. Available online at: <https://ww3.arb.ca.gov/regact/regs-13.htm>, accessed August 19, 2019.
- California Air Resources Board. 2019. *Asbestos ATCM for Surfacing Applications*. Available online at: <https://ww3.arb.ca.gov/toxics/atcm/asbeatcm.htm>, accessed August 19, 2019.
- California Code of Regulations. §1529. *Asbestos*. Available online at: <https://www.dir.ca.gov/title8/1529.html>, accessed September 16, 2019.
- California Code of Regulations. §1532.1. *Lead*. Available online at: [https://www.dir.ca.gov/title8/1532\\_1.html](https://www.dir.ca.gov/title8/1532_1.html), accessed September 16, 2019.
- California Code of Regulations. *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*. Available online at: [http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final\\_reg\\_order.ashx](http://www.baaqmd.gov/~media/Files/Compliance%20and%20Enforcement/Asbestos/final_reg_order.ashx), accessed August 19, 2019.
- California Department of Education. 2019. *School Site Selection and Approval Guide*. Available online at: <https://www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp#toxics>, accessed August 19, 2019.
- California Department of Real Estate. *Subdivision Forms*. Available online at: <http://www.bre.ca.gov/Forms/Subdivisions.html>, accessed August 19, 2019.
- California Emergency Management Agency. 2017. *State of California Emergency Plan 2017*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/state-of-california-emergency-plan-emergency-support-functions>, accessed September 16, 2019.
- California Emergency Management Agency. 2019. *Local Hazard Mitigation Program*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/local-hazard-mitigation-program>, accessed July 11, 2019.
- California Energy Commission. 2019. *Nuclear Energy in California*. Available online at: <http://www.energy.ca.gov/nuclear/california.html>, accessed January 10, 2019.
- California Environmental Protection Agency. 2019. *More about the Unified Program*. Available online at: <https://calepa.ca.gov/cupa/about/>, accessed August 19, 2019.

California Environmental Protection Agency. 2019. *Unified Program*. Available online at: <https://calepa.ca.gov/cupa/>, accessed August 19, 2019.

California Environmental Protection Agency. *Guidance on Regional Determination Regarding Eligible Response Sites*. Available at: <http://www2.epa.gov/enforcement/guidance-regional-determinations-regarding-eligible-response-sites>, accessed September 11, 2015.

California Governor's Office of Emergency Services. 2019. State Hazard Mitigation Plan. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/state-hazard-mitigation-plan>, accessed July 29, 2019.

California Legislative Information. 1972. *ARTICLE 1. Findings and Declarations [25100-25106]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.5.&article=1](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.5.&article=1), accessed August 19, 2019.

California Legislative Information. 1972. *ARTICLE 6. Transportation [25160-25166.5]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=HSC&sectionNum=25163](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=25163), accessed August 19, 2019.

California Legislative Information. 1978. *ARTICLE 6. Development Permits for Classes of Projects [65960 – 65964.1]*. Available online at: [http://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=GOV&sectionNum=65962.5](http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65962.5), accessed August 19, 2019.

California Legislative Information. 1979. *ARTICLE 1. Contents [19825-19829]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=HSC&sectionNum=19827.5](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=19827.5), accessed August 19, 2019.

California Legislative Information. 1990. *ARTICLE 10. Environmental Enhancement Fund [8670.70-8670.73]*. Available online at: [http://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=GOV&sectionNum=8670.70](http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=8670.70), accessed August 19, 2019.

California Legislative Information. 1996. *ARTICLE 1. General Provisions [17210-17224]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=EDC&sectionNum=17213](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=17213), accessed August 19, 2019.

California Legislative Information. 1999. *ARTICLE 1. Short Title and Legislative Intent [25300-25301]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.8.&article=1](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.8.&article=1), accessed August 19, 2019.

California Legislative Information. 2001. *Senate Bill No. 32*. Available online at: [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200120020SB32](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020SB32), accessed August 19, 2019.

California Legislative Information. 2006. *ARTICLE 7.3. Local Community Rail Security Act of 2006 [7665-7667]*. Available online at:

[https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=PUC&division=4.&title=&part=&chapter=1.&article=7.3](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=4.&title=&part=&chapter=1.&article=7.3), accessed August 19, 2019.

California Legislative Information. 2008. *Assembly Bill No. 38*. Available online at: [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200720080AB38](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080AB38), accessed August 19, 2019.

California Legislative Information. 2013. *ARTICLE 1. Business and Area Plans [25500-25519]*. Available online at: [http://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.95.&article=1](http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.95.&article=1), accessed August 19, 2019.

California Legislative Information. 2013. *Assembly Bill No. 440*. Available online at: [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140AB440](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB440), accessed August 19, 2019.

California Legislative Information. *ARTICLE 1. Business and Area Plan [25500-25519]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=HSC&sectionNum=25501](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=25501), accessed August 19, 2019.

California Legislative Information. *CHAPTER 1 General Provisions and Definitions [21001-21020]*. Available online at: [https://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=PUC&division=9.&title=&part=1.&chapter=1.&article=](https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=9.&title=&part=1.&chapter=1.&article=), accessed August 19, 2019.

California's Office of Emergency Services. 2018. *2018 California State Hazard Mitigation Plan*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/hazard-mitigation-planning/state-hazard-mitigation-plan>, accessed August 19, 2019.

California Office of Emergency Services. 2019. *California Accidental Release Prevention*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/california-accidental-release-prevention>, accessed August 19, 2019.

California Office of Emergency Services. 2019. *California Disaster Assistance Act (CDAA)*. Available at: <https://www.caloes.ca.gov/cal-oes-divisions/recovery/public-assistance/california-disaster-assistance-act>, accessed August 19, 2019.

California Office of Emergency Services. 2019. *Standardized Emergency Management System*. Available online at: <https://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/standardized-emergency-management-system>, accessed October 24, 2019.

California Public Utilities Commission. 2019. *Federal laws, State laws, and CPUC General Orders on Railroads*. Available online at: <https://www.cpuc.ca.gov/General.aspx?id=959>, accessed August 19, 2019.

City of Los Angeles. *Emergency Operations Organization*. Available online at: <https://emergency.lacity.org/eoo>, accessed October 24, 2019.

City of Los Angeles Emergency Management Department. 2018. *Local Hazard Mitigation Plan*. Available online at: [https://emergency.lacity.org/sites/g/files/wph496/f/2018\\_LA\\_HMP\\_Final\\_2018-11-30.pdf](https://emergency.lacity.org/sites/g/files/wph496/f/2018_LA_HMP_Final_2018-11-30.pdf), accessed September 4, 2019.

County of Los Angeles. 1998. *Los Angeles County Operational Area Emergency Response Plan*. Available online at: <https://www.caloes.ca.gov/AccessFunctionalNeedsSite/Documents/LA%20County%20OA%20Emergency%20Response%20Plan.pdf>, accessed October 24, 2019.

County of Los Angeles, Chief Executive Office – Office of Emergency Management. 2014. *All-Hazard Mitigation Plan*. Available online at: <https://ceo.lacounty.gov/wp-content/uploads/OEM/hazmitgplan.pdf>, accessed September 4, 2019.

County of Los Angeles. *Los Angeles County Operational Area Emergency Response Plan*. Available online at: <https://www.caloes.ca.gov/AccessFunctionalNeedsSite/Documents/LA%20County%20OA%20Emergency%20Response%20Plan.pdf>, accessed September 16, 2019.

County of Orange & Orange County Fire Authority. 2015. *Local Hazard Mitigation Plan*. Available online at: [http://cams.ocgov.com/Web\\_Publisher/Agenda07\\_12\\_2016\\_files/images/O00216-000668A.PDF](http://cams.ocgov.com/Web_Publisher/Agenda07_12_2016_files/images/O00216-000668A.PDF), accessed August 19, 2019.

County of San Bernardino Land Use Services Division. 2014. *County of San Bernardino 2007 General Plan*. Available online at: <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>, August 19, 2019.

Department of Toxic Substances Control. 2004. *Interim Guidance Naturally Occurring Asbestos (NOA) at School Sites*. Available online at: [https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP\\_POL\\_Guidance\\_Schools\\_NOA.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMBRP_POL_Guidance_Schools_NOA.pdf), accessed August 19, 2019.

Department of Toxic Substances Control. 2019. *Official California Code of Regulations (CCR), Title 22, Division 4.5*. Available online at: <https://dtsc.ca.gov/title22/>, accessed August 19, 2019.

Department of Toxic Substances Control. 2019. *Site Mitigation & Restoration Program*. Available online at: <https://dtsc.ca.gov/brownfields/>, accessed August 19, 2019.

Department of Toxic Substances Control. *EnviroStor*. Available online at: <https://www.envirostor.dtsc.ca.gov/public/>, accessed August 19, 2019.

Electronic Code of Federal Regulation. 2019. *Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace*. Available online at: <https://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=14:2.0.1.2.9>, accessed August 19, 2019.

Electronic Code of Federal Regulations. *Part 258- Criteria for Municipal Solid Waste Landfills*. Available online at: <https://www.ecfr.gov/cgi-bin/text-idx?SID=6015fe03e8fe343109548a041a62130c&mc=true&node=pt40.27.258&rgn=div5>, accessed August 19, 2019.

- Federal Railroad Administration. 2019. *Office of Safety Analysis*. Available online at: <https://safetydata.fra.dot.gov/OfficeofSafety/default.aspx>, accessed August 19, 2019.
- FEMA. 1999. *Federal Response Plan*. Available online at: <https://biotech.law.lsu.edu/blaw/FEMA/frpfull.pdf>, accessed August 19, 2019.
- FEMA. 2000. *Disaster Mitigation Act of 2000*. Available online at: <https://www.fema.gov/media-library/assets/documents/4596>, accessed August 19, 2019.
- FEMA. 2019. *FEMA Region IX: Arizona, California, Hawaii, Nevada, and the Pacific Islands*. Available online at: <https://www.fema.gov/fema-region-ix-arizona-california-hawaii-nevada-pacific-islands>, accessed August 19, 2019.
- FEMA. *Robert T. Stafford Disaster Relief and Emergency Assistance Act, , as amended, and Related Authorities as of August 2016*. Available online at: <https://www.fema.gov/media-library/assets/documents/15271>, accessed August 19, 2019.
- Governor's Office of Planning and Research. 2000. *Addressing Naturally Occurring Asbestos in CEQA Documents*. Available online at: [http://www.co.mendocino.ca.us/aqmd/pdf\\_files/NOA\\_OPR.pdf](http://www.co.mendocino.ca.us/aqmd/pdf_files/NOA_OPR.pdf), accessed August 19, 2019.
- Imperial County Planning & Development Services. 2015. *Land Use Element of the Imperial County General Plan*. Available online at: [http://www.icpds.com/CMS/Media/Land-Use-Element-\(2015\).pdf](http://www.icpds.com/CMS/Media/Land-Use-Element-(2015).pdf), accessed August 19, 2019.
- International Code Council. 2019. *2019 California Fire Code, Title 24, Part 9*. Available online at: <https://codes.iccsafe.org/content/chapter/15600/>, accessed August 19, 2019.
- International Code Council. *Overview of the International Fire Code*. Available online at: <https://www.iccsafe.org/products-and-services/i-codes/2018-i-codes/ifc/>, accessed August 19, 2019.
- Los Angeles County Department of Regional Planning. 2015. *Los Angeles County General Plan*. Available online at: [http://planning.lacounty.gov/assets/upl/project/gp\\_final-general-plan.pdf](http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf), accessed August 19, 2019.
- Office of Environmental Health Hazard Assessment. 2019. *California Human Health Screening Levels*. Available online at: <https://oehha.ca.gov/risk-assessment/california-human-health-screening-levels-chhsls>, accessed August 19, 2019.
- Oil Spill Task Force. *California*. Available online at: <http://oilspilltaskforce.org/about/task-force-jurisdictions/california/>, accessed August 19, 2019.
- Orange County Planning & Development. *Chapter IX Safety Element*. Available online at: <https://www.ocgov.com/civicax/filebank/blobdload.aspx?blobid=40234>, accessed August 19, 2019.
- South Coast Air Quality Management District. 2007. *Rule 1403. Asbestos Emissions from Demolition/Renovation Activities*. Available online at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf>, accessed September 16, 2019.

- Southern California Association of Governments. December 2015. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: Highways & Arterials Appendix. Los Angeles, CA.
- Southern California Association of Governments. 2019. *Aviation and Airport Ground Access Draft Technical Report*.
- Southern California Edison, 2019. Crucial Milestone Achieved for Decommissioning, <https://www.songscommunity.com/news/releases/crucial-milestone-achieved-for-decommissioning-san-onofre-nuclear-plant>, accessed November 2, 2019.
- Southern California Edison. 2019. *Continued Safe Storage of Nuclear Fuel*. Available online at: <http://www.songscommunity.com/nuclear-fuel-storage.asp>, accessed January 10, 2019.
- State of California Department of Industrial Relations. 2019. *Cal/OSHA*. Available online at: <https://www.dir.ca.gov/DOSH/>, accessed September 16, 2019.
- TSD & Recycling State Resource Locator. Available online at: <https://www.envcap.org/tsdf/srl.php?srl=18&state=CA>, accessed February 8, 2019.
- U.S. Department of Homeland Security. 2008. *National Response Framework*. Available online at: <https://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>, accessed August 19, 2019.
- U.S. Department of Labor. *Regulations (Standards – 29 CFR)*. Available online at: <https://www.osha.gov/laws-regs/regulations/standardnumber>, accessed August 19, 2019.
- U.S. Department of the Interior. *Implementing the National Fire Plan*. Available online at: <https://www.doi.gov/sites/doi.gov/files/migrated/budget/appropriations/2003/upload/Implementing-the-National-Fire-Plan.pdf>, accessed August 19, 2019.
- U.S. Department of Transportation, Bureau of Transportation Statistics. 2017. *Freight Facts and Figures*. Available online at: <https://rosap.ntl.bts.gov/view/dot/34923>, accessed September 5, 2019.
- U.S. Department of Transportation. *Office of Hazardous Material Safety*. Available online at: <https://www.phmsa.dot.gov/about-phmsa/offices/office-hazardous-materials-safety>, accessed August 19, 2019.
- U.S. Department of Transportation. *Pipeline and Hazardous Materials Safety Administration*. Available online at: <https://www.phmsa.dot.gov/>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 1987. *Title III Section 313 Release Reporting Requirements*. Available online at: <https://nepis.epa.gov/Exe/ZyPDF.cgi/9100AFKN.PDF?Dockey=9100AFKN.PDF>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 201. *CalSites, Annual Work Plan (AWP), CA Department of Toxic Substance Control (DTSC)*. Available online at: [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?Lab=ORD&dirEntryID=142416](https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=ORD&dirEntryID=142416), accessed August 19, 2019.

- U.S. Environmental Protection Agency. 2010. *Spill Prevention, Control, and Countermeasure (SPCC) Regulation*. Available online at: <https://www.epa.gov/sites/production/files/documents/spccbluebroch.pdf>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2018. *Superfund: CERCLA Overview*. Available online at: <https://www.epa.gov/superfund/superfund-cercla-overview>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2018. *Superfund: National Priorities List (NPL)*. Available online at: <https://www.epa.gov/superfund/superfund-national-priorities-list-npl>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2018. *Underground Storage Tanks (USTs)*. Available online at: <http://www.epa.gov/OUST/overview.htm>, accessed February 8, 2019.
- U.S. Environmental Protection Agency. 2019. *Brownfields and Land Revitalization Activities Near You*. Available online at: <https://www.epa.gov/brownfields/brownfields-and-land-revitalization-activities-near-you>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2019. *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*. Available online at: [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=&dirEntryId=2785](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=&dirEntryId=2785), accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2019. *Resource Conservation and Recovery Act (RCRA) Laws and Regulations*. Available online at: <https://www.epa.gov/rcra>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2019. *Summary of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)*. Available online at: <https://www.epa.gov/laws-regulations/summary-comprehensive-environmental-response-compensation-and-liability-act>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. 2019. *Summary of the Resource Conservation and Recovery Act*. Available online at: <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. *Hazardous Materials Transportation Act*. Available online at: <https://archive.epa.gov/emergencies/content/lawsregs/web/html/hmtaover.html#provisions>, accessed August 19, 2019.
- U.S. Environmental Protection Agency. Pacific Southwest, Region 9. *Map of Superfund Sites in Southern California*. Available online at: <https://www.epa.gov/superfund/search-superfund-sites-where-you-live#map>, accessed January 10, 2019.
- U.S. EPA. *National Priorities List (NPL) Sites – by State*. Available online at: <https://www.epa.gov/superfund/national-priorities-list-npl-sites-state#CA>, accessed July 29, 2019.
- U.S. Federal Aviation Administration. 2019. *Airport Data and Contact Information*. Available online at: [http://www.faa.gov/airports/airport\\_safety/airportdata\\_5010/](http://www.faa.gov/airports/airport_safety/airportdata_5010/), accessed January 10, 2019.

- U.S. Fish & Wildlife Service. 2009. *Rural Fire Assistance*. Available online at: [https://www.fws.gov/fire/living\\_with\\_fire/rural\\_fire\\_assistance.shtml](https://www.fws.gov/fire/living_with_fire/rural_fire_assistance.shtml), accessed August 19, 2019.
- U.S. Government Information. 2016. *Title 40 Protection of the Environment Parts 64 to 71*. Available online at: <https://www.govinfo.gov/content/pkg/CFR-2016-title40-vol17/pdf/CFR-2016-title40-vol17.pdf>, accessed August 19, 2019.
- [USC10] 23 USC 134: Metropolitan transportation planning. (2019). Uscode.house.gov. Retrieved 5 June 2019, from <http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title23-section134&num=0&edition=prelim>
- Ventura County. 2019. *Ventura County 2040 General Plan Preliminary Public Review Draft*. Available online at: [https://vc2040.org/images/2040\\_General\\_Plan\\_Files\\_-\\_May\\_2019/PPRD\\_2040\\_General\\_Plan\\_COMPLETE-compressed.pdf](https://vc2040.org/images/2040_General_Plan_Files_-_May_2019/PPRD_2040_General_Plan_COMPLETE-compressed.pdf), accessed August 19, 2019.