5.8 HAZARDS AND HAZARDOUS MATERIALS

This section describes the hazards and hazardous materials and potential health and safety issues associated with the project. The presence of project site-specific health, safety, and hazardous material status is evaluated, and an analysis of the potential impacts associated with the project is presented. This section also includes feasible mitigation measures, where applicable, to reduce significant impacts associated with hazardous materials and health and safety risks. The analysis in this section is based on a desktop environmental database search prepared by SWCA, the *La Brea Tar Pits Master Plan Preliminary Civil Engineering Narrative* prepared by KPFF Consulting Engineers (KPFF) dated March 4, 2021, and *Methane Survey Report for the La Brea Tar Pits Site Master Plan* prepared by Leighton Consulting, Inc., dated January 12, 2023 (Appendix G).

5.8.1 Existing Conditions

5.8.1.1 Existing and Past Uses of the Project Site

The project site consists of 13 acres of the eastern and northwestern portions of Hancock Park and broadly encompasses La Brea Tar Pits, with facilities including the 1977 George C. Page Museum (Page Museum); 1952 Observation Pit; various tar pit excavation sites and features, primarily with temporary construction serving as support facilities; a concession and public restroom building; a multipurpose lawn and recreational areas; hardscaping/landscaping features throughout the park; and a surface parking lot. The larger 23-acre Hancock Park, established in the 1920s, has remained intact as a relatively undeveloped open space, public park, and cultural institution in the Mid-Wilshire neighborhood for nearly a century. Dating back to the early 1900s, prior to the dedication of the project site to its current use, the project site was used for oil mining for the production of asphalt materials.

The project site currently supports a variety of museum and research-related activities, including the excavation and processing of fossils, requiring the use and storage of hazardous materials typically associated with museums. According to the Safety Data Sheets provided by the Los Angeles County Museum of Natural History Foundation (Foundation), these include compressed gases (i.e., ethers, carbon dioxide, nitrogen, butylene oxide, methoxyphenol), biodiesel fuels, acetone, vapor degreasing solvents, various paints, resins, and cleaning supplies (Foundation 2022). At the project site, health and safety responsibilities are managed by a Safety and Risk Management professional, a position funded by the Foundation. The Safety and Risk Management position is responsible for managing the use of hazardous materials at the project site in compliance with regulatory standards and reporting requirements.

5.8.1.2 Recorded Hazardous Materials Sites

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Government Code Section 65962.5 list is not one document but rather a series of data resources lists from responsible organizations including the California Department of Toxic Substance Control (DTSC), the California Department of Health Services, the State Water Resources Control Board (SWRCB), and the California Integrated Waste Management Board (CalEPA 2023). The DTSC EnviroStor is the data management system that tracks cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination. The DTSC EnviroStor also lists hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code. The SWRCB GeoTracker database is the data management system that identifies hazardous materials sites that impact, or have the potential to impact, groundwater quality in the state including leaking underground storage tank (LUST) sites, solid waste disposal sites with waste

constituents above hazardous waste levels, active cease and desist orders, and cleanup and abatement orders that concern the discharge of wastes that are hazardous materials.

Based on a desktop query of the databases above, the project site was not included on any of the identified Government Code Section 65962.5 lists identified above (DTSC 2022; SWRCB 2022). Of note, there is a LUST cleanup site at Museum Square (5757 Wilshire Boulevard), which is approximately 300 feet southeast of the project site. The potential contaminant of concern was diesel; however, the case was closed as of May 21, 1996. As such, there are no active Government Code Section 65962.5 hazardous materials sites located within the project site or within a 1,000-foot radius of the project site (DTSC 2022; SWRCB 2022).

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR) on July 21, 2022, to determine whether hazardous waste or hazardous material management, handling, treatment, or disposal activities have occurred on or near the project site (EDR 2022). Review of the EDR database report and supplemental records from state and federal regulatory databases found the following:

- The project site is identified by the California Environmental Reporting System (CERS) as a generator of hazardous waste and as a chemical storage facility. Numerous administrative violations are noted but none that would indicate potential leaks, spills, or contamination.
- The project site (under the name George C. Page Museum) is identified as a Resource Conservation and Recovery Act (RCRA) large-quantity generator and transporter of hazardous waste. No violations are noted and there are no indications of potential leaks, spills, or contamination. The RCRA database contains information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA, and a listing as a RCRA site is not an indication of leaks, spills, or contamination.
- The project site (under the name George C. Page Museum) is identified in the California Hazardous Material Incident Reporting System. In 1999, oil from an oil/water separator at the museum entered the Ballona Creek storm drain system. Cleanup was completed by the Los Angeles County Fire Department. The type of oil is not reported. Because of the amount of time that has passed, and because it likely immediately washed away in the storm drain system, this spill is not expected to affect the project site.
- The southwest-adjoining Los Angeles County Museum of Art is identified in several listings:
 - It is identified as a RCRA small-quantity generator of hazardous waste. No violations are noted and there are no indications of potential leaks, spills, or contamination.
 - The facility is identified by CERS as a chemical storage facility. The listing notes several administrative violations but none that would indicate potential leaks, spills, or contamination.
- The Wilshire Courtyard property, adjoining the southeast of the project site at 5750 Wilshire Boulevard, is identified in the CERS tanks program as a UST site. No violations are noted in these listings and there are no indications of potential leaks, spills, or contamination. No further details are provided. This location is also identified by CERS as a facility that stores chemicals. Numerous administrative violations are noted but none that would indicate potential leaks, spills, or contamination.
- Pearls Cleaners, also at 5750 Wilshire Boulevard (adjoining the project site), is identified as having been a dry-cleaning plant from 1991 to 2005. This listing also identifies Attila Photo/One Hour Lab at this address in 1991. Historically, dry cleaners have had a high frequency of spills and discharges. The primary contaminants from dry cleaners are the chlorinated solvents perchloroethylene (PCE), trichloroethylene (TCE), and vinyl chloride (VC). These contaminants

are volatile, mobile, and resistant to degradation. The concern for properties near historical dry cleaners is vapor intrusion—the movement of contaminant vapors through the soil, utility corridors, or other pathways, which can then permeate foundations and concentrate in enclosed indoor areas. Old photography labs are also commonly identified as sources of contamination.

- AT&T California H4A02, adjoining the south of the project site at 5820 Wilshire Boulevard, is identified by CERS as a facility that stores chemicals. No violations are noted and there are no indications of potential leaks, spills, or contamination.
- Several listings are identified at 5757 Wilshire Boulevard, located 240 feet east the project site:
 - Museum Square discovered a diesel fuel leak from a UST in 1995. Because the case was closed in 1996 after assessment and abatement actions, this facility is not expected to affect the project site.
 - Downey Center, Inc., is identified as having been a convenience store and automotive repair shop (Rancho Santa Fe Auto Center, LP) from 1999 to 2008.
 - Splendid Cleaners is identified as having been a dry-cleaning plant from 1993 to 2002. As discussed above, dry cleaners are often a concern.
- Wardrobe Cleaners, located 540 feet northwest of the project site at 540 South Ogden Drive, is identified as having been a dry-cleaning plant from 2008 to 2012. As discussed above, dry cleaners are often a concern.
- Mobile Cleaners, located 560 feet southwest of the project site at 5900 Wilshire Boulevard, is identified as having been a dry cleaner from 1994 to 1999. As discussed above, dry cleaners are often a concern.
- Al-Sal Oil (old Unocal), located 500 feet west of the project site at 6050 West 6th Street, is listed as a LUST site. A gasoline LUST was identified in 1994. Because the case was closed in 1995, this facility is not expected to affect the project site.
- MAS Auto Service, located 0.4 mile northwest of the project site at 371 South Fairfax Avenue, is listed as a LUST site. The case is open and remediation is ongoing. A gasoline leak was reported at this location in 1991, and the site was the subject of several enforcement actions between 1999 and 2021. Because of its distance, this facility is not expected to affect the project site.
- The Grove at Farmers Market, located 0.45 mile north of the project site at 6301 West 3rd Street, is identified as a state Cleanup Program Site Spills, Leaks, Investigations and Cleanups (CPS-SLIC site). Because of its distance, and because remediation is complete, this facility is not expected to affect the project site.
- Shinwa Corporation, located 0.44 mile southwest of the project site at 938 Orange Grove Avenue, is identified as a CPS-SLIC site. Because of its distance, and because it achieved no further action status, this facility is not expected to affect the project site.

5.8.1.3 Methane Gas

The project site is located within a designated methane zone mapped by the City of Los Angeles (2022). Areas underlain by methane are extensive in Southern California; these areas are typically characterized by subsurface methane gas produced from naturally occurring petroleum fields. Methane is a naturally occurring gas associated with the decomposition of organic materials. In high concentrations of between 50,000 and 150,000 parts per million by volume (ppmv) in the presence of oxygen, methane can be an explosion hazard. In Los Angeles County, the typical trigger concentration in which methane gas protection systems are required to be installed is 5,000 ppmv. Based on results of a subsurface investigation conducted for the project by Leighton Consulting, Inc., on October 18 and October 19,

2022, elevated methane concentrations of up to 50,000 ppmv were identified in the soils at the project site.

5.8.1.4 Tar Seeps

The project site is subject to natural tar seeps resulting from release of oil and methane gas pressure through fissures in the substrate. Oil or tar then migrates to the surface throughout the project site. It has been observed that the pressure from tar and gas has caused the entire Central Green lawn to heave over time, resulting in grades that are higher than originally designed and constructed (KPFF 2021). The most recent documented locations of the tar seeps within the project site show the largest concentration of tar seeps within the current parking lot, with others occurring near walkways around the Central Green and the Lake Pit (Figure 5.8-1). It is important to note that tar seeps can develop throughout the entire project site and may not be limited to the locations shown in Figure 5.8-1.

Historically, various strategies have been employed to manage breakouts of tar at the surface of the ground. Prior environmental investigations revealed that concrete curbs and fences had been constructed around a tar seep to allow tar to continue to vent in that location while protecting the public (KPFF 2021). Some of the existing "tar pits" may have initially been examples of these protective measures. There are also three locations within the surface parking lot where several parking spaces have been replaced with a chain-link barrier around an obvious tar seep, as well as similar barriers in the surrounding lawn areas. Additional approaches to address the issue have involved a series of open-bottom manholes constructed around apparent tar seeps. Several of these manholes or vaults exist throughout the project site and are intended to collect and concentrate tar below grade. Vacuum trucks (also known as "pumper trucks") then periodically pump out the water and tar that collects within the manhole and empty the contents into the Lake Pit. This activity is performed by a contractor licensed to handle and transport these materials to ensure that any tar material pumped from the manholes that could be considered hazardous does not come in contact with the public or employees at the project site. In addition, water collected during this process is treated via an underground clarifying system located west of the Lake Pit that filters out fine oil particulates and settleable constituents through a two-step reverse clarifier sequence and is then discharged into the sewer system per an existing agreement between the Foundation and Los Angeles Sanitation and Environment (LASAN) (Foundation 2023). Another strategy the staff at La Brea Tar Pits have implemented is putting up cones or other barriers (e.g., chain-link fencing) around aboveground tar seeps to limit access to these areas. Implementation of these strategies has adequately and safety managed tar seeps at the site to-date (Foundation 2023).

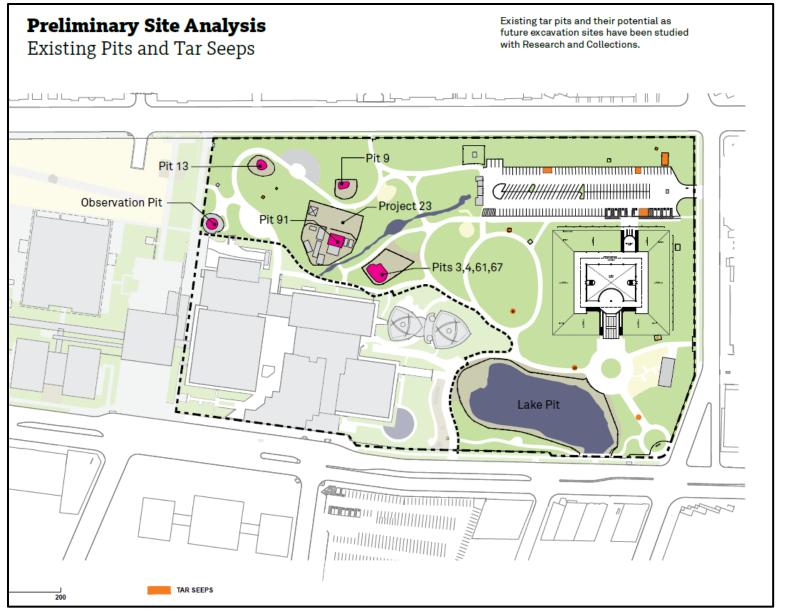


Figure 5.8-1. Tar seeps within the project site.

5.8.1.5 Schools

Table 5.8-1 provides a list of existing school facilities in close proximity (less than 1 mile) to the project site. The nearest school to the project site is Fusion Academy Miracle Mile, a private learning institution for middle and high school–aged students.

Table 5.8-1. Existing Schools in the Project Vicinity	Table 5.8-1.	Existing	Schools	in the	Project	Vicinity
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School	Address	Distance and Direction from the Project site	
Fusion Academy Miracle Mile	5757 Wilshire Boulevard	0.12 mile east	
Hancock Park Elementary School	408 Fairfax Avenue	0.45 mile northwest	
Westside Jewish Community Preschool	5870 West Olympic Boulevard	0.46 mile south	
Shalhevet High School	910 S. Fairfax Avenue	0.50 mile southwest	
Yachaywasi Spanish Immersion Preschool	934 Hauser Boulevard	0.52 mile southeast	
Cathedral Chapel Middle School	755 S. Cochran Avenue	0.56 mile southeast	
Le Petit Bebe Day Care	6268 Del Valle Drive	0.70 mile southwest	
Language Garden Preschool	1067 South Fairfax Avenue	0.86 miles southwest	
Le Petit Gan International Preschool	1071 South Fairfax Avenue	0.86 miles southwest	
Ohr Eliyahu Academy also known as Yeshiva Aharon Yaakov Ohr Eliyahu (Preschool)	241 South Detroit Street	0.96 mile northeast	

5.8.1.6 Airports

The project site is not located within 2 miles of a public airport or public use airport. The nearest airport to the project site is Santa Monica Airport, which is located approximately 6 miles southwest of the project site.

5.8.1.7 Emergency Response Plans

The Los Angeles County Operational Area Emergency Response Plan (Emergency Response Plan) maintained by the Los County Office of Emergency Management describes the planned response of the County Operational Area to emergencies associated with natural and human-made disasters and technological incidents. This plan also provides an overview of operational concepts, identifies components of the County's Emergency Management Organization, and describes responsibilities of the federal, state, and local agencies for protecting life and property. The Office of Emergency Management leads and coordinates disaster plans and disaster preparedness exercises for all areas of Los Angeles County including cities. In addition, the Los Angeles County Community Emergency Response Team, composed of local residents trained in emergency response and coordinated by the Los Angeles County Fire Department, is deployed as needed during emergencies.

Local emergency preparedness plans and emergency response operations have also been prepared by the City of Los Angeles (City). The City's Emergency Operation Plan, adopted in November 2018, addresses the City's response from small- to large-scale emergency situations associated with natural disasters or human-caused emergencies. It describes the methods for carrying out emergency operations, the process for rendering mutual aid, the emergency services of governmental departments and agencies, how resources are mobilized, how the public will be informed, and the process to ensure continuity of government during an emergency or disaster.

As part of the Emergency Response Plan, the City has identified Disaster Routes for the Los Angeles County Operational Area. Disaster Routes are freeway, highway, or arterial routes pre-identified for use during times of crisis. These routes are used to bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property, and minimize impact to the environment. During a disaster, these routes have priority for clearing, repairing, and restoration over all other roads. According to the Los Angeles County Department of Public Works (County Public Works) Disaster Route maps, the project site is within Area H, Los Angeles Central. There are no streets immediately adjacent to the project site that are designated Disaster Routes (County Public Works 2022). The nearest designated Disaster Routes to the project site include Beverly Boulevard approximately 1 mile to the north, Olympic Boulevard approximately 0.4 mile to the south, La Brea Avenue approximately 0.6 mile to the east, and North La Cienega Boulevard approximately 1.2 miles to the west.

5.8.2 Regulatory Setting

5.8.2.1 Federal

RESOURCE CONSERVATION AND RECOVERY ACT OF 1976

The Resource Conservation and Recovery Act of 1976 establishes the framework for a national system of solid waste control. RCRA is a program administered by the U.S. Environmental Protection Agency (EPA) for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act (EPA 2022a).

TOXIC SUBSTANCES CONTROL ACT OF 1976

The Toxic Substances Control Act (TSCA) of 1976 authorizes the EPA to require reporting, recordkeeping, testing requirements, and restrictions related to chemical substances and/or mixtures. Food, drugs, cosmetics, and pesticides are generally excluded from the TSCA. The EPA focuses on six primary substances under the TSCA: polychlorinated biphenyls (PCBs), asbestos, radon, lead, formaldehyde, and mercury. TSCA requirements most often affect the regulation of PCBs, asbestos, and lead in federal facilities. For example, under the TSCA, asbestos regulations require that only properly trained and certified persons perform asbestos abatement activities in public or commercial buildings (EPA 2022b).

HAZARDOUS MATERIAL TRANSPORTATION UNIFORM SAFETY ACT OF 1990

The Hazardous Material Transportation Uniform Safety Act was amended in 1990 to clarify conflicting state, local, and federal regulations. The amendment requires the Secretary of Transportation to issue regulations for the safe transport of hazardous material in domestic and foreign commerce. The Secretary also retains the authority to designate hazardous materials as hazardous when they pose an uncontrolled threat to health, safety, or property. The Act also includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials.

FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION – PROCESS SAFETY MANAGEMENT STANDARD

The federal Occupational Safety and Health Administration (OSHA) issued the Process Safety Management of Highly Hazardous Chemicals standard (29 Code of Federal Regulations [CFR] 1910.119 and 1926.64) to identify requirements for the management of hazards during the use of hazardous chemicals for general industry and construction activities. This standard includes requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Requirements of this standard include providing employees with information about hazardous chemicals, training employees on the operation of equipment that use hazardous materials, and employer requirements to perform a process hazard analysis.

ASBESTOS HAZARD EMERGENCY RESPONSE ACT OF 1986

The Asbestos Hazard Emergency Response Act (AHERA) of 1986 requires the EPA to evaluate the extent of danger to human health posed by asbestos in public and commercial buildings and the means to respond to any identified danger. AHERA establishes regulations for inspections, abatement activity, appropriate response actions, implementation of response actions, operations and maintenance programs, periodic surveillance of asbestos, transport and disposal, and management plans required for schools. AHERA also creates accreditation programs for inspectors, management plan developers, and abatement contractors.

CLEAN AIR ACT

Regulations under the Clean Air Act are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store minimum quantities (called threshold quantities) or greater of listed regulated substances to develop a risk management plan including hazard assessments and response programs, to prevent and respond to accidental releases of listed chemicals.

5.8.2.2 State

GOVERNMENT CODE SECTION 65962.5

Government Code Section 65962.5 requires the CalEPA to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the state. The Government Code Section 65962.5 list is not one document but rather a series of data resources lists from responsible organizations including the DTSC, the California Department of Health Services, the SWRCB, and the California Integrated Waste Management Board (CalEPA 2023). Before lead agencies accept applications for any development project as complete, the applicant must consult these lists to determine if the subject site is included on the Cortese List. The project site is not included on a Government Code Section 65962.5 list (DTSC 2022; SWRCB 2022).

HAZARDOUS WASTE CONTROL LAW

California Health and Safety Code (HSC) Division 20, Chapter 6.5 codifies the Hazardous Waste Control law, which states that generators of hazardous waste must employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal. The law also creates the Hazardous Waste Management Council, which is responsible for making recommendations for a system that ensures financial liability for persons injured or otherwise affected by hazardous wastes that are treated or disposed of within their community. It is the overall intent of this law to grant those powers necessary to secure and maintain interim and final authorization for the state hazardous waste program in accordance with the requirements of Section 3006 of Public Law 94-580, RCRA (42 United States Code 6926), and to implement such program in lieu of the federal program. The Hazardous Waste Control Law empowers DTSC to administer the State's hazardous waste program and implement the federal program in California.

ENVIRONMENTAL HEALTH STANDARDS FOR THE MANAGEMENT OF HAZARDOUS WASTE

Title 22, Division 4.5 of the California Code of Regulations (CCR) codifies regulations in place for the management of hazardous waste, implemented by and affecting the DTSC. The DTSC is a department of the CalEPA, which is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California HSC.

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the CCR as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed. (22 CCR Section 66261.10)

Title 22 of the CCR identifies several regulations pertaining to the management of hazardous materials, and the following may be applicable to construction and/or operation of the project:

- 22 CCR 66261.20 classifies hazardous waste as a substance that is ignitable, corrosive, reactive, or toxic.
- 22 CCR 66262.11 provides a method of determination for hazardous materials to ensure generators properly handle, store, transport, and/or dispose of hazardous materials accordingly.
- 22 CCR 66262.30–66262.35 requires proper packaging, labeling, marking, placarding, and accumulation timing of hazardous materials that are to be transported.
- 22 CCR 66262.70 states that waste pesticide, including pesticide containers or inner liners from pesticide containers, that meets the definition of hazardous waste, generated as part of a commercial farming operation, is not required to be managed in compliance with the standards in this chapter.
- 22 CCR 66263.30–66262.32 requires that in the event of a discharge of hazardous waste during transportation, the transporter shall take immediate action to protect human and environmental health, shall clean up spilled hazardous waste discharge, and properly report the incident.
- 22 CCR 66268 identifies land disposal restrictions for hazardous wastes, treatment standards for wastes, prohibitions on storage and land disposals, and potential incineration requirements.

CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Under California Division of Occupational Safety and Health Administration (Cal/OSHA) Title 8, subchapter 2, employers must disclose potential workplace hazards and develop site-specific health and

safety plans for workers and the workplace. In addition, workers that may potentially be exposed to hazardous materials in their workplace must be notified of exposure so that they are aware of workplace hazards.

CALIFORNIA VEHICLE CODE LICENSE TO TRANSPORT HAZARDOUS MATERIALS SECTION 32000.5 ET SEQ.

The California Department of Transportation (Caltrans) regulates hazardous materials transportation on all interstate roads. Within California, the state agencies with primary responsibility for enforcing federal and state regulations and for responding to transportation emergencies are the California Highway Patrol and Caltrans. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications for vehicles transporting hazardous materials.

LEAD-BASED PAINT REGULATIONS

Lead-based paint is defined as any paint, varnish, stain, or other applied coating that has 1 milligram per square centimeter (mg/cm²) (5,000 micrograms per gram [μ g/g] or 0.5% by weight) or more of lead. The U.S. Consumer Product Safety Commission (16 CFR 1303) banned paint containing more than 0.06% lead for residential use in 1978. Buildings built before 1978 are much more likely to have lead-based paint. The Page Museum was built in 1977.

The demolition of buildings containing lead-based paint is subject to a comprehensive set of California regulatory requirements that are designed to assure the safe handling and disposal of these materials. Cal/OSHA has established limits of exposure to lead contained in dusts and fumes, which provides for exposure limits, exposure monitoring, and respiratory protection, and mandates good working practices by workers exposed to lead, particularly since demolition workers are at greatest risk of adverse exposure. Lead-contaminated debris and other wastes must also be managed and disposed of in accordance with applicable provisions of the California HSC.

CALIFORNIA WATER CODE

The California Water Code authorizes the SWRCB to implement provisions of the Clean Water Act, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. In regards to construction dewatering discharge analysis and treatment, groundwater may be encountered during deeper excavation. While the exact depth of construction and the finish grade of the new museum building has not been established, this analysis assumes that the depth of excavation would be approximately 6 to 10 feet below ground surface. While the final elevation of the foundation for the new museum building is not known at this time, it may be below the existing ground surface in order to provide a smooth connection to the existing Page Museum.

Under the California Water Code, discharge of any such groundwater to surface waters, or any point sources hydrologically connected to surface waters, such as storm drains, is prohibited unless conducted in compliance with a Waste Discharge Requirement (WDR) permit. In addition to the California Water Code, these permits implement and are in compliance with the federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program. In accordance with these legal requirements, dewatering, treatment, and disposal of groundwater encountered during construction activities would be conducted in accordance with the Los Angeles Regional Water Quality Control Board's (LARWQCB's) Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, pursuant to adopted Order No. R4-2013-0095, or any other appropriate WDR permit identified by the LARWQCB. Compliance with an appropriate WDR permit would include monitoring, treatment if appropriate, and

proper disposal of any encountered groundwater in accordance with applicable water quality standards. If, for example, extracted groundwater contains total petroleum hydrocarbons or other petroleum breakdown compounds in concentrations exceeding water quality standards, compliance with legal requirements would mandate treatment to meet published state water quality standards prior to discharge into a storm drain system.

5.8.2.3 County of Los Angeles

COUNTY OF LOS ANGELES CERTIFIED UNIFIED PROGRAM AGENCY

The primary local agency with responsibility for implementing federal and state laws and regulations pertaining to hazardous materials management is the Los Angeles County Health Department, Environmental Health Division. The Los Angeles County Health Department is the Certified Unified Program Agency (CUPA) for the County of Los Angeles. A CUPA is a local agency that has been certified by CalEPA to implement the six state environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California HSC made by Senate Bill 1082 in 1994. The six consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory (Business Plans);
- California Accidental Release Prevention (CalARP);
- Hazardous Waste (including Tiered Permitting);
- Underground Storage Tanks (USTs);
- Aboveground Storage Tanks (ASTs) (Spill Prevention, Control, and Countermeasures requirements); and
- UFC Article 80 Hazardous Material Management Program (HMMP) and Hazardous Material Identification System (HMIS).

As the CUPA for the County, the Los Angeles County Health Department, Environmental Health Division maintains the records regarding location and status of hazardous materials sites in the county and administers programs that regulate and enforce the transport, use, storage, manufacturing, and remediation of hazardous materials. A Participating Agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. The Los Angeles County Health Department, Environmental Health Division has designated the Los Angeles Fire Department (LAFD) as a Participating Agency. The LAFD monitors the storage of hazardous materials in the city for compliance with local requirements. Specifically, businesses and facilities that store more than threshold quantities of hazardous materials as defined in California HSC Code Chapter 6.95 are required to file an Accidental Risk Prevention Program with LAFD. This program includes information such as emergency contacts, telephone numbers, facility information, chemical inventory, and hazardous materials handling and storage locations. LAFD also has the authority to administer and enforce federal and state laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade, and removal of USTs are reviewed by LAFD Inspectors. LAFD, in their role as a Participating Agency of the CUPA, also oversees and addresses issues relating to the presence and handling of contaminated soils that may be present at the project site. In addition, the LAFD may consult with other agencies (e.g., DTSC and the LARWQCB) if the nature of the contamination warrants the involvement of these agencies.

COUNTY OF LOS ANGELES 2035 GENERAL PLAN SAFETY ELEMENT

The project is subject to relevant goals, policies, and actions listed in the Los Angeles County 2035 General Plan (County of Los Angeles 2015). Goals, policies, and actions related to hazardous materials are included below.

Goal S 7. Effective County emergency response management capabilities.

Policy S 7.1. Ensure that residents are protected from the public health consequences of natural or human-made disasters through increased readiness and response capabilities, risk communication, and the dissemination of public information.

Policy S.4.3. Coordinate with other County and public agencies, such as transportation agencies and health care providers, on emergency planning and response activities, and evacuation planning.

COUNTY OF LOS ANGELES MUNICIPAL CODE

The Los Angeles County Code Title 2 (Administration), Division 3 (Departments and other Administrative Bodies), Chapter 2.68 (Emergency Services), provides plans to provide coordination of emergency operations to protect the public peace, health, and lives and property of people in Los Angeles County in the event of an emergency. This portion of the County Code provides the direction for the emergency organization; and the coordination of the emergency functions of the County with all other public agencies, corporations, organizations, and affected private persons.

COUNTY OF LOS ANGELES BUILDING CODE

The County of Los Angeles Building Code (Title 33) establishes the minimum requirements to safeguard the public health, safety, and general welfare by regulating the repair, alteration, change of occupancy, addition to, and relocation of existing buildings. The provisions of Title 33 apply to any existing building or structure within the unincorporated territory of the Los Angeles County and to such work or use by the County in any incorporated city.

LOS ANGELES COUNTY OPERATIONAL AREA EMERGENCY RESPONSE PLAN

The County of Los Angeles developed the Emergency Response Plan to ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency. The Emergency Response Plan does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with them. Instead, the operational concepts reflected in this plan focus on potential large-scale disasters like extraordinary emergency situations associated with natural and human-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 facilities and personnel of the 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.

5.8.2.4 City of Los Angeles

While the project site is located within the city of Los Angeles, it is owned by the County of Los Angeles and is proposed for uses that benefit the public. Accordingly, the project is not subject to the regulatory controls of the City of Los Angeles. Nonetheless, City regulatory and planning documents that are most relevant to the project as they relate to hazards and hazardous materials are provided herein for informational purposes.

CITY OF LOS ANGELES GENERAL PLAN SAFETY ELEMENT

The City of Los Angeles General Plan Safety Element includes policies related to the City's response to hazardous materials and represents the long-range emergency response plan for the City of Los Angeles.

Goal 1. A city where potential injury, loss of life, property damage and disruption of the social and economic life of the City due to hazards is minimized.

Policy 1.1.4 (Health/Environmental Protection). Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and public from potential health safety hazards associated with program implementation.

Goal 2. A city that responds with the maximum feasible speed and efficiency to disaster events so as to minimize injury, loss of life, property damage and disruption of the social and economic life of the City and its immediate environs.

Policy 2.1.2 (Health and environmental protection). Develop and implement procedures to protect the environment, sensitive species, and public from potential health and safety hazards associated with hazard mitigation and disaster recovery efforts.

CITY OF LOS ANGELES FIRE CODE

The City of Los Angeles Fire Code, Chapter V, Article 7, Section 57.101 et seq., of the City of Los Angeles Municipal Code (LAMC) establishes the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion, panic, or dangerous conditions in new and existing buildings, structures, and premises, and to provide a reasonable level of safety to firefighters and emergency responders during emergency operations. At the local level, the LAFD monitors the storage of hazardous materials for compliance with local requirements and enforces the Fire Code.

CITY OF LOS ANGELES METHANE CODE AND METHANE BUFFER ZONES

The City of Los Angeles Methane Seepage Regulations (Methane Code), Chapter IX, Article I, Division 71, Section 91.7103 et seq., of the LAMC, establishes requirements for buildings and paved areas located in methane zones and methane buffer zones. The project site is located within a designated methane zone mapped by the City (City of Los Angeles 2022).

Requirements for new construction within such zones include methane gas sampling and, depending on the detected concentrations of methane and gas pressure at the site, application of design remedies for reducing potential methane impacts. The required methane mitigation systems are based on the Site Design Level, with more involved mitigation systems required at the higher Site Design Levels.

EMERGENCY MANAGEMENT DEPARTMENT, EMERGENCY OPERATIONS ORGANIZATION, AND EMERGENCY OPERATIONS CENTER

The City's Emergency Management Department consists of four divisions and two units: the administrative services division, communications division, community emergency management division, operations division, planning unit, and training exercise unit. The Emergency Management Department works with City departments, municipalities, and with community-based organizations to ensure that the City and its residents have the resources and information they need to prepare, respond, and recover from emergencies, disasters, and significant events. The Emergency Operations Organization is the operational department responsible for the City's emergency preparations (planning, training, and mitigation), response, and recovery operations. The Emergency Operations Organization centralizes command and information coordination to enable its unified chain-of-command to operate efficiently and effectively in managing the City's resources.

The Emergency Operations Center is the focal point for coordination of the City's emergency planning, training, response, and recovery efforts. Emergency Operations Center processes follow the National All-Hazards approach to major disasters such as fires, floods, earthquakes, acts of terrorism, and large-scale events in the city that require involvement by multiple City departments.

5.8.3 Thresholds of Significance

The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the State CEQA Guidelines. A project would result in significant adverse impacts related to hazards and hazardous materials if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- b) 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.
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
- d) 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 result, would it create a significant hazard to the public or the environment.
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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.
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Thresholds a) through f) are discussed under Section 5.8.5, Environmental Impact Analysis, below. However, it has been determined that the project would not result in significant impacts related to wildland fires (threshold g). The project site is surrounded by a variety of urban land uses and is not classified by the California Department of Forestry and Fire Protection (CAL FIRE) as located within a very high fire hazard severity zone in a state responsibility area or local responsibility area (CAL FIRE 2022). Therefore, the project would not interfere with emergency response or evacuation plans during wildfires, exacerbate wildfire risks, require the installation of wildfire prevention infrastructure, or expose people or structures to post-fire flooding or landslides. As a result, threshold g) will not be further discussed in this section. See Chapter 7, Other CEQA Considerations, for a brief evaluation of this and other impacts found not to be significant.

5.8.4 Impact Assessment Methodology

The project's potential impacts associated with hazards and hazardous materials were evaluated based on a comprehensive review of the desktop environmental database search prepared by SWCA, the *La Brea Tar Pits Master Plan Preliminary Civil Engineering Narrative* prepared by KPFF dated March 4, 2021, the *Methane Survey Report for the La Brea Tar Pits Site Master Plan* prepared by Leighton Consulting, Inc., dated January 12, 2023 (see Appendix G), and all applicable regulatory requirements.

5.8.5 Environmental Impact Analysis

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

CONSTRUCTION

During project demolition, earthwork, grading, and building construction, hazardous materials such as fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners, could be routinely used on-site. In addition, the project would require earthwork activities with excavations that could reach up to approximately 10 feet. Due to anticipated soil impacts from the naturally occurring tar seeps present throughout the project site, on-site soils may not be suitable for reuse and would need to be exported for proper remediation and disposal (KPFF 2021). Of this export, it is conservatively assumed that an estimated 53,000 cubic yards may include potentially hazardous substances, which would be exported to an appropriate disposal facility based on waste sampling and characterization, which would be required for any material leaving the site. Each disposal facility would require testing of the material being proposed for disposal to characterize and determine whether they could accept the material. Facilities that would potentially accept the materials include those characterized as Class I for federal hazardous waste (e.g., U.S. Ecology in Beatty, Nevada), Class II for California hazardous waste (e.g., Chiquita Canyon Landfill in Castaic, California).

Health and safety responsibilities are managed at the project site by a Safety and Risk Management professional. The Safety and Risk Management professional is responsible for managing the use of hazardous materials at the project site in compliance with regulatory standards and reporting requirements. Construction contractors would be required to comply with applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials (Section 5.8.2, Regulatory Setting), and all potentially hazardous materials used during construction would be required to be handled and disposed of in accordance with manufacturers' specifications and instructions. When tested for hydrocarbon range and EPA SW-846 hazardous waste test methods, tar could also be characterized as hazardous material due to flammability and potential for vapor inhalation. The presence of the naturally occurring tar seeps throughout the project site and the required removal of contaminated soils to an off-site location have the potential to create a hazard to construction workers at the site during construction activities, the public, and the staff at La Brea Tar Pits. Construction-related impacts could be *significant*. Construction-related impacts could be *significant*.

OPERATION

Upon project completion, the use of hazardous materials typically used in museums and for building and grounds maintenance, including cleaning solvents and pesticides for landscaping, would occur. As proposed operations would be similar to those operations occurring presently on-site, substantial increases in the amount or type of operational hazardous wastes would not be expected. Activities involving the handling and disposal of hazardous waste would occur in compliance with all applicable federal, state, and local requirements concerning the handling and disposal of hazardous waste.

The project site is susceptible to naturally occurring tar seeps, including the Central Green and parking lot areas. The location of past and existing tar seeps is generally shown in Figure 5.8-1, including seeps within the existing parking lot. Implementation of the project would not change the expected attributes or characteristics of this naturally occurring phenomenon currently at the project site.

As described in Section 5.8.1.4, various strategies have been employed to manage tar seeps within the project site, including implementing a series of open-bottom manholes around apparent tar seeps to collect and concentrate tar below grade. Vacuum trucks (also known as "pumper" trucks) then periodically pump out the water and tar that collects within the manhole and empty the contents into the Lake Pit. This activity is performed by a contractor licensed to handle and transport these materials to ensure that any tar material pumped from the manholes that could be considered hazardous does not come in contact with the public or employees at the project site. In addition, water collected during this process is treated via an underground clarifying system located west of the Lake Pit that filters out fine oil particulates and settleable constituents through a two-step reverse clarifier sequence and is then discharged into the sewer system per an existing agreement between the Foundation and LASAN (Foundation 2023). Another strategy the staff at La Brea Tar Pits have implemented is using cones or other barriers (e.g., chain-link fencing) around aboveground tar seeps to limit access to these areas. Implementation of these strategies has adequately and safely managed tar seeps at the site to-date (Foundation 2023).

Operation of the project would not create new tar seeps within the project site. Further, operation of the project would not trigger the need to change the existing tar management approach or modify the existing protocol to manage tar accumulation at the project site. The existing strategies discussed above address the project site's dynamic conditions and serve to prevent operational hazards associated with the routine movement and disposal of the tar during the operational life of the project. In addition, any new facilities or structures constructed on the project site, including the new museum building, would be designed to accommodate this naturally occurring phenomenon through the engineering and design process to provide appropriate foundational materials that would provide barriers for intrusion and ensure structural stability. Therefore, operational hazards associated with the routine movement and disposal of the tar throughout the project site, including in areas that may interface with the new facilities proposed by the project, would be *less than significant*.

HAZ Impact 1

During project construction, the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction workers, facility employees, and the public could be exposed to hazardous materials associated with the naturally occurring tar seeps present within the project site through the required removal of contaminated soils to an off-site location. Impacts during project construction could be significant.

Project operation would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Operational impacts would be less than significant.

(CEQA Checklist Appendix G Threshold IX. a)

HAZ Impact 1 Mitigation Measures		
	 Describe the methodology to identify and manage (reuse or off-site disposal) contaminated soil during soil excavation and/or construction; 	
	 Provide protocols for confirmation sampling, segregation and stockpiling, profiling, backfilling, disposal, guidelines for imported soil, and backfill approval from the DTSC Information Advisory on Clean Imported Fill Material; and 	
	 In addition, the LAFD may consult with other agencies (e.g., DTSC and the LARWQCB) if the nature of the contamination warrants the involvement of these agencies. 	
HAZ/mm-1.2	The following requirements and precautionary actions shall be implemented when disturbing soil at the project site:	
	 No soil disturbance or excavation activities shall occur without a project site-specific Health and Safety Plan (HASP). Any soil that is disturbed, excavated, or trenched due to on-site construction activities shall be handled in accordance with applicable local, state, and federal regulations, as well as sampled and analyzed by a certified laboratory for constituents in accordance with the accepting landfill's requirements (including testing for the presence of hydrocarbons, volatile organic compounds, semi- volatile organic compounds, heavy metals, and pesticides). 	
	The contractor shall prepare a project-specific HASP. It is the responsibility of the contractor to review available information regarding project site conditions, including the SMP, and potential health and safety concerns in the planned area of work. The HASP shall describe the proposed construction activities and hazards associated with each activity. Hazard mitigation shall be presented in the HASP to limit construction-related risks to workers. The HASP shall include emergency contact numbers, maps to the nearest hospital, gas monitoring action levels, gas response actions, allowable worker exposure times, and mandatory personal protective equipment (PPE) requirements. The HASP shall specify Certificate of Competency action levels for construction workers as well as monitoring criteria for increasing the level of PPE. The HASP shall be signed by all workers on-site to demonstrate their understanding of the construction-related risks.	
	 The contractor and each subcontractor shall require their employees who may directly come in contact with Suspect Soil (soil that is stained or odorous) to perform all activities in accordance with the contractor's HASP. If Suspect Soil is encountered, to minimize the exposure of other workers to potential contaminants on the project site, the contractor may erect temporary fencing around excavation areas with appropriate signage as necessary to restrict access and to warn unauthorized on-site personnel not to enter the fenced area. 	
	• There shall be no reuse of excavated soil deemed inappropriate for reuse as defined in the project-specific SMP.	
	 The contractor shall conduct, or have its designated subcontractor conduct, visual screening of soil during activities that include soil disturbance. If the contractor or subcontractor(s) encounter any Suspect Soil, the contractor and subcontractor(s) shall immediately stop work and take measures to not further disturb the soils (e.g., cover suspect soil with plastic sheeting) and inform the Foundation and the environmental monitor. The Foundation shall identify the environmental monitor—an experienced professional trained in the practice of the evaluation and screening of soil for potential 	

HAZ Impact 1

impact working under the direction of a licensed Geologist or Engineer—prior to the beginning of work.

 Prior to excavation activities, the contractor or designated subcontractor shall establish specific areas for stockpiling Suspect Soil, should it be encountered, to control contact by workers and dispersal into the environment, per the provisions provided in the SMP.

Impacts Following Mitigation

Implementation of HAZ/mm-1.1 and HAZ/mm-1.2 would reduce construction impacts associated with routine transport, use, or disposal of hazardous materials to less than significant. Operational impacts would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

CONSTRUCTION

As discussed above, during project construction, activities (including earthwork, grading, and building construction) would likely require the use of hazardous materials such as fuel and oils associated with construction equipment, coatings, paints, adhesives, and caustic or acidic cleaners could be used and would require proper handling, management, and in some cases, waste disposal. The use, handling, storage, and disposal of these materials could result in hazardous materials releases and, subsequently, the exposure of people and the environment to hazardous materials. However, as previously discussed, all potentially hazardous materials used during construction would be handled, used, and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing associated risks. In addition, as described in Section 5.8.2, Regulatory Setting, various regulations establish specific guidelines regarding risk planning and accident prevention, protection from exposure to specific chemicals, and the proper storage of hazardous materials. The project would be required to be in full compliance with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials. General construction and OSHA regulations require the on-site availability of Safety Data Sheets for all potentially hazardous materials. Additionally, spill containment kits would be maintained on-site during construction to respond to the release of potentially hazardous construction-related chemicals.

Regarding impacted soils from naturally occurring tar seeps on-site, project construction activities have the potential to create a hazard to workers at the site as well as the public, as tar could also be characterized as hazardous material due to flammability and the potential for vapor inhalation. Soil removal activities during construction would require appropriate regulatory protocols and management during all soil disturbance activities. Excavated soil with naturally occurring tar impacts would be stored on plastic sheeting to reduce the potential for naturally occurring tar to come in contact with surficial soils. Soil stockpiles would be bermed to contain any potential run-off or seepage and covered when not in use. Soil would be transported in lined and covered trucks properly manifested in accordance with United States Department of Transportation and other regulatory requirements. Excavated soil, including soil with naturally occurring tar in it, would be disposed of in accordance with CalEPA and federal EPA requirements and by contractors licensed to handle and transport these materials.

Regarding surface vapors, the project site is located within a designated methane zone mapped by the City. Extensive areas of Southern California are underlain by areas with high concentrations of methane; the occurrence of methane under the ground surface is typically related to subsurface methane gas

produced from naturally occurring petroleum fields. A subsurface investigation was conducted by Leighton Consulting, Inc., on October 18 and October 19, 2022, and the results of this investigation were documented in the Methane Survey Report prepared for the project, dated January 12, 2023 (see Appendix G). The Methane Survey Report identified elevated methane concentrations of up to 50,000 ppmv in the soils at the project site. Based on these findings, the project site is classified as Site Design Level V based on the LAMC Ordinance No. 175790. The typical trigger concentration in which gas protection systems are required to be installed in Los Angeles County is 5,000 ppmv; therefore, an active methane mitigation is required beneath any proposed structures and should follow Site Design Level V of the City's Department of Building and Safety Methane Code. Additionally, for existing buildings located within a methane zone, additions, alterations, repairs, changes of use, or changes of occupancy must comply with the methane mitigation requirements of LAMC Sections 91.7104.1 and 91.7104.2, when required by LAMC Chapter IX, Article 1, Division 81 or 82. Methane systems should be designed in accordance with the latest regulatory control measures, including the City of Los Angeles Methane Hazard Mitigation Standard Plans, as required by the Department of Building and Safety.

Based on the discussion above, impacts related to impacted soils from naturally occurring tar seeps on-site and subsurface methane gas, as well as associated potential impacts to soil and groundwater, could occur during project construction and may exacerbate the risk of spill and/or accident conditions involving the release of hazardous materials into the environment. Impacts during construction could be *significant*.

OPERATION

Upon project completion, operation of the project would be similar to those operations occurring on-site under existing conditions and would continue to support a variety of museum and research-related activities requiring the use and storage of hazardous materials typically associated with museums (Section 5.8.1.1). As such, the use of hazardous materials typically used in museums and for building and grounds maintenance, including cleaning solvents and pesticides for landscaping, would occur as they do under existing conditions. However, as previously discussed, all potentially hazardous materials used during project operation would be handled, used, and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing associated risks. In addition, as described in Section 5.8.2, Regulatory Setting, various regulations establish specific guidelines regarding risk planning and accident prevention, protection from exposure to specific chemicals, and the proper storage of hazardous materials. As with existing practice, operation of the project would be required to be in full compliance with all applicable federal, state, and local requirements concerning the use, storage, and management of hazardous materials to reduce the risk of release of hazardous materials into the environment.

While project operation would not exacerbate the risk of upset and accident conditions involving the release of tar-related hazardous materials into the environment, the existing high concentration of subsurface methane gas at the project site would require ongoing control measures to ensure a properly designed methane mitigation system would provide a barrier for hazardous vapors. Due to the high potential for elevated concentrations of methane gas at the project site, operational impacts related to the release of hazardous materials into the environment could be *significant*.

HAZ Impact 2

Construction of the project could result in the release of hazardous materials into the environment related to naturally occurring tar seeps and subsurface methane gas. Impacts during project construction could be significant.

During project operation, hazardous vapors from subsurface methane gas could result in the release of hazardous materials into the environment. Impacts during project operation could be significant.

(CEQA Checklist Appendix G Threshold IX. b)

Mitigation Measures

Construction Mitigation

Implement Mitigation Measures HAZ/mm-1.1 and HAZ/mm-1.2.

HAZ/mm-2.1	During construction activities at the project site, controls shall be in place to address the effect of subsurface gases and impacted soil and groundwater on workers and the public. Durin construction, the following shall be implemented:
	 Monitoring devices for methane and benzene shall be present to alert workers of elevated gas concentrations when subsurface soil-disturbing work is being performed
	Any trench or excavation wider than 18 inches and having a depth greater than 2x it narrowest width shall be monitored with a portable combustible gas detector. The portable detector shall have a resolution capable of reporting to 1% LEL (Lowe Explosive Limit), or 0.1% by volume in air, or in parts per million (ppm, If concentrations of combustible gases reach or exceed 20% LEL, or 1.0% by volum in air, or 10,000 ppm, the trench or excavation shall be evacuated until such time a the gas concentrations are determined to be steadily below these levels. All weldin and electrical equipment shall be removed from the trench/excavation until the area i deemed to be safe. Portable blowers are the most appropriate means of controlling combustible gas concentrations. The blower motors and appurtenant electrical wiring shall not be placed in the trench or excavation.
	 No welding, cutting, or other hot work shall be performed close to flammable tar which, when subjected to heat, might produce flammable or toxic vapors (per OSH, 1910.252(a)(3)(i)). Smoking should also be avoided when working near tar seeps.
	 Contingency procedures shall be in place if elevated gas concentrations are detected such as the mandatory use of PPE, evacuating the area, and/or increasing ventilatio within the immediate work area where the elevated concentrations are detected.
	 Workers shall be trained to identify exposure symptoms and implement alarl response actions.
	 Soil and groundwater exposure during excavations shall be minimized to reduce th surface area which could off-gas. This shall be achieved by staggering expose excavation areas.
	 Soil removed as part of construction shall be sampled and tested for off-site dispose in a timely manner. If soil is stockpiled prior to disposal, it shall be managed is accordance with the project's Stormwater Pollution Prevention Plan.
	 Fencing shall be erected to limit public access and allow for gas dilution The construction contractor can determine the appropriate type of fencing, as long a public access is restricted such that interaction with hazardous construction condition does not occur.
	 All requirements of the project-specific HASP shall be implemented and followed a described in HAZ/mm-1.2.

	HAZ Impact 2			
Operation Mitigation				
HAZ/mm-2.2	As part of the final project design, the project engineer shall develop and implement a methane mitigation system. The mitigation system, which would provide a barrier for hazardous vapors methane, and tar, consists of a subslab venting system that exhausts to the atmosphere, a subslab impermeable gas/tar barrier membrane system, and a monitoring system consisting of probes above and below the gas barrier membrane. The monitoring program consists of routine (quarterly) monitoring and reporting to the County Public Works, Environmenta Programs Division. The Environmental Programs Division shall also review the plans to see the criteria meet the requirements of Los Angeles County Code 110.4 Methane Gas Hazards Additionally, tar collection systems underneath the gas mitigation systems need to be evaluated by the engineer and by the county engineer to evaluate the performance of the overall system			
	A contingency plan should also be prepared to describe how matters shall be handled in the event that high concentrations of methane gas enter a building despite the mitigation measures			
	The inspection and periodic observations of membrane and vapor control measures shall be performed by the Vapor Barrier Engineer (i.e., the Engineer or his Designee). At a minimum inspection/observation shall take place during the installation of the vent piping, after backfilling of the vent piping, during the installation of the vapor barrier, after the installation of the vapo barrier (prior to backfilling), during the placement of the protection course, immediately prior to placement of foundation concrete, during and at the completion of the vent riser installation for the vent piping, and at the completion of construction prior to the issuance of the system certification and certification of occupancy.			
Impacts Follow	ing Mitigation			

Implementation of HAZ/mm-1.1, HAZ/mm-1.2, and HAZ/mm-2.1 during project construction would reduce impacts associated with the release of hazardous materials into the environment to less than significant.

Implementation of HAZ/mm-2.2 would reduce the operational impacts associated with the release of hazardous materials associated with the project to less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The nearest schools to the project site include Fusion Academy Miracle Mile, located approximately 0.12 mile directly east of the project site, and Hancock Park Elementary School, located approximately 0.45 mile northwest of the project site. Based on the list of cumulative development projects in the project vicinity (see Chapter 4, Environmental Setting), no proposed new school facilities are located within 0.25 mile of the project site.

CONSTRUCTION

Construction of the project would involve the use of hazardous materials common to urban construction projects and museum operations. All activities involving the handling, use, storage, transport, and disposal of hazardous materials and wastes would occur in compliance with applicable federal, state, and local requirements. However, as discussed in HAZ Impacts 1 and 2, project construction could create a significant hazard to the public or the environment associated with the naturally occurring tar seeps present within the project site through the required removal of contaminated soils to an off-site location. In addition, construction of the project could result in the release of hazardous materials into the environment related to subsurface methane gas. As such, project construction could result in potential

hazardous emissions or the handling of hazardous materials and wastes within 0.25 mile of an existing school. Impacts could be *significant*.

OPERATION

As stated in HAZ Impacts 1 and 2, while the project operation would not exacerbate the use, handling, and disposal of hazardous materials or increase the risk of spill and accident conditions involving the release of hazardous materials into the environment, the existing, naturally occurring tar seeps and the existing high concentration of subsurface methane gas at the project site would require control measures to ensure proper collection and disposal of accumulated tar near the ground surface as well as a methane mitigation system to provide a barrier for hazardous vapors (see Mitigation Measure HAZ/mm-2.2). As such, operational impacts associated with potential hazardous emissions or the handling of hazardous materials and wastes within 0.25 mile of an existing school could be *significant*.

HAZ Impact 3

The project could introduce hazardous materials within 0.25 mile of an existing or proposed school during both construction and operation. Impacts during project construction and operation could be significant.

(CEQA Checklist Appendix G Threshold IX. c)

Mitigation Measures

Construction Mitigation

Implement Mitigation Measures HAZ/mm-1.1, HAZ/mm-1.2, and HAZ/mm-2.1.

Operation Mitigation

Implement Mitigation Measure HAZ/mm-2.2.

Impacts Following Mitigation

Implementation of HAZ/mm-1.1, HAZ/mm-1.2, and HAZ/mm-2.1 during project construction would reduce impacts associated with the emission of hazardous materials in the vicinity of existing or proposed schools to less than significant.

Implementation of HAZ/mm-2.2 during project operation would reduce impacts associated the emission of hazardous materials in the vicinity of existing or proposed schools to less than significant.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project site is not identified on any of the hazardous materials lists compiled pursuant to Government Code Section 65962.5 (Section 5.8.1.2). The environmental records review conducted by SWCA on July 21, 2022, identified four historic dry cleaners and one historic photography lab within a 1-mile radius of the project site. Historically, dry cleaners have had a high frequency of spills and discharges. The primary contaminants from dry cleaners are the chlorinated solvents PCE, TCE, and VC. These contaminants are volatile, mobile, and resistant to degradation. The concern for properties near historical dry cleaners is vapor intrusion—the movement of contaminant vapors through the soil, utility corridors, or other pathways, which can then permeate foundations and concentrate in enclosed indoor areas. Old photography labs are also commonly identified as sources of contamination. However, the records search did not indicate any areas of concern related to historical hazardous materials sites within the project site or vicinity of the project site (EDR 2022). Therefore, construction and operation of the project would not create a significant hazard to the public or the environment as it relates to hazardous materials sites compiled pursuant to Government Code Section 65962.5. *No impact* would occur.

HAZ Impact 4

The project site is not identified on any of the hazardous materials lists compiled pursuant to Government Code Section 65962.5. Construction and operation of the project would not create a significant hazard to the public or the environment as it relates to hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

(CEQA Checklist Appendix G Threshold IX. d)

Mitigation Measures

No mitigation is required.

Impacts Following Mitigation

Not applicable. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

The project site is not located within 2 miles of a public airport or public use airport. The nearest airport to the project site is Santa Monica Airport, which is approximately 6 miles southwest of the project site. Therefore, the project would not result in an airport-related safety hazard during either project construction or operation. *No impact* would occur.

HAZ Impact 5

The project site is not located within 2 miles of a public airport or public use airport. The project would not result in an airport-related safety hazard during either project construction or operation. No impact would occur.

(CEQA Checklist Appendix G Threshold IX. e)

Mitigation Measures

No mitigation is required.

Impacts Following Mitigation

Not applicable. No impact would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project site is not located along a designated Disaster Route as defined by County Public Works. The nearest designated Disaster Routes to the project site include Beverly Boulevard approximately 1 mile to the north, Olympic Boulevard approximately 0.4 mile to the south, La Brea Avenue approximately 0.6 mile to the east, and North La Cienega Boulevard approximately 1.2 miles to the west.

CONSTRUCTION

While all construction activities, including construction staging of equipment, would be situated entirely within the project site, it is possible that project construction and the need for unique construction-period access may occur in adjacent street rights-of-way during certain periods of the day. However, the designated Disaster Routes discussed above would not be impacted in such a way that the project would interfere with the County or City's Emergency Response Plan. Therefore, construction impacts associated with emergency response and emergency evacuation plans would be *less than significant*.

OPERATION

Upon project completion, the project operation would comply with LAFD access requirements and would not include features that would impede access to and around the site. Thus, the project would not cause an impediment along the designated disaster routes or impair implementation of any adopted emergency response or emergency evacuation plans. Therefore, operational impacts associated with emergency response and emergency evacuation plans would be *less than significant*.

HAZ Impact 6

The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan during either construction or operation. Construction and operational impacts would be less than significant.

(CEQA Checklist Appendix G Threshold IX. f)

Mitigation Measures

No mitigation is required.

Impacts Following Mitigation

Not applicable. Impacts related to an adopted emergency response plan or an emergency evacuation plan would be less than significant.

5.8.6 Cumulative Impact Analysis

Cumulative growth and related development projects in the vicinity of the project site are discussed in Chapter 4, Environmental Setting. The geographic area where projects have potential to contribute to cumulative impacts varies depending on the environmental resource under consideration. The geographic scope of analysis for cumulative hazardous materials impacts is limited to the project site and its immediately adjacent area (defined as the adjacent Los Angeles County Museum of Art parcel, and all land uses and roadways directly and immediately surrounding the project site, including those along West 6th Street, South Curson Avenue, and Wilshire Boulevard). This is because impacts relative to hazardous materials are most typically site-specific. For example, hazardous materials incidents tend to be limited to a smaller, more localized area surrounding the immediate spill location, and the extent of the release could only be cumulative if two or more hazardous materials releases occurred at the same time and overlapped at the same location. As previously discussed, the project would have no impact related to being located on an identified hazardous materials site pursuant to Government Code Section 65962.5 (threshold d) or being situated within 2 miles of a public or private airstrip (threshold e). In addition, the project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan during either construction or operation (threshold f). Accordingly, the project could not contribute to cumulative impacts related to these topics and they are not discussed further. For this analysis, cumulative impacts related to hazards and hazardous material could occur if the incremental impacts of the proposed project combined with the incremental impacts of other projects, including those identified in Chapter 4, Environmental Setting. The following three projects are known projects that are in close proximity to the project site that could contribute to cumulative impacts:

- Metro D (Purple) Line Extension: Extension of underground light rail transit service infrastructure to parallel Wilshire Boulevard located directly adjacent to the project site along with seven new transit stations. This project is under_construction with the first phase (Wilshire/ La Brea, Wilshire/Fairfax, and Wilshire/ La Cienega Stations) anticipated to be completed and in operation by 2024.
- Los Angeles County Museum of Art Renovation: Located directly adjacent to the project site (on parcels directly west and south across Wilshire Boulevard) at 5906 West Wilshire Boulevard. The project includes museum renovation and is under construction with an anticipated completion date of 2024.
- Wilshire Curson Project: Located approximately 0.03 mile southeast of the project site at 5700-5780 Wilshire Boulevard, 712-752 South Curson Avenue, 5721-5773 West 8th Street, and 715-761 South Masselin Avenue. The project includes office and commercial uses and would involve both the renovation of existing buildings as well as the demolition and construction of new buildings. The project is currently under environmental review, and a construction timeline was not available at the time of publication for this EIR.

Each of the related projects has or would require evaluation for potential threats to public safety, including those associated with the use, storage, and/or disposal of hazardous materials and the potential for the release of hazardous materials into the environment as a result of construction and operation. In addition to the environmental review conducted for the projects, it is important that all project-related activities for the projects listed above would be required to comply with all applicable local, state, and federal laws, rules, and regulations regulating the use, disposal, transport, and management of hazardous materials. In addition to the projects above, activities would occur within the project area within the construction timeframe that would not require review under CEQA. For instance, the establishment of a new business in the area that uses hazardous materials may not trigger CEQA review. In addition, during the construction phase and operational life of the project, there could be proposed development projects in the vicinity that would not require discretionary review. As well, unforeseen accidents could always potentially occur through the routine use of hazardous substances by and at surrounding commercial and residential land uses.

Although existing regulations and review processes would likely address hazardous materials concerns, because of the conditions related to the occurrence of petroleum deposits, tar, and methane at the project site and within this general area of the city, it is possible that cumulatively considerable impacts to hazardous materials would occur in the project area if different hazardous conditions or incidents were to occur at the same time (i.e., two or more accidents occurred at the same time).

As identified in the project analysis above, the project could result in:

- Significant construction and operational impacts related to creating a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials associated with the naturally occurring tar seeps present within the project site (threshold a);
- Significant construction and operational impacts associated with the release of hazardous materials into the environment due to naturally occurring tar seeps and subsurface methane gas present within the project site (threshold b); and
- The introduction of hazardous materials within 0.25 mile of an existing or proposed school during both construction and operation (threshold c).

Because construction and operation of the project could result in these direct impacts, the potential exists for the project to also contribute significantly to cumulative impacts. If mitigation were not to be implemented, it is conceivable that the project would significantly contribute to these impacts. Therefore, the project's contribution could be cumulatively considerable; impacts could be *significant*.

Project mitigation measures have been identified and included to address these impacts. The identified mitigation measures would address the direct impacts associated with the project itself as well as the project's potential contribution to cumulatively considerable and significant hazardous materials impacts. Implementation of HAZ/mm-1.1 and HAZ/mm-1.2 during construction would reduce the project's construction and operational impacts associated with routine transport, use, or disposal of hazardous materials to less than significant with mitigation (threshold a). Implementation of HAZ/mm-1.1, HAZ/mm-1.2, and HAZ/mm-2.1 during project construction and implementation of HAZ/mm-2.2 during project operation would reduce impacts associated with the release of hazardous materials into the environment to less than significant with mitigation (thresholds b and c).

HAZ Impact 7 (Cumulative Impacts)

Prior to the consideration of proposed mitigation measures, construction and operation of the project could result in hazardous materials impacts associated with the naturally occurring tar seeps and methane conditions present at the project site, including accidental spills or releases associated with the disposal, transport, and management of hazardous materials. If unaddressed, potential contributions to cumulative hazardous materials impacts could be significant.

Mitigation Measures

Implement Mitigation Measures HAZ/mm-1.1, HAZ/mm-1.2, HAZ/mm-2.1, and HAZ/mm-2.2.

Impacts Following Mitigation

With implementation of Mitigation Measures HAZ/mm-1.1, HAZ/mm-1.2, HAZ/mm-2.1, and HAZ/mm-2.2, the project's contribution to cumulative impacts related to release of hazardous materials into the environment would be reduced to less than significant.