

3.7 HAZARDS AND HAZARDOUS MATERIALS

Hazardous substances are defined by state and federal regulations as substances that must be regulated in order to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be hazards. The California Code of Regulations (CCR) Title 22, Division 4.5, Chapter 11, Article 2, Section 66261.10 defines hazardous materials as:

“...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.”

According to Title 22 (CCR Chapter 11, Article 3), substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered to be hazardous. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, contaminated, or that is being stored prior to disposal.

Toxic substances may cause short or long-term health effects, ranging from temporary effects to permanent disability or death. Examples of toxic substances include most heavy metals, pesticides, benzene, gasoline, hexane, natural gas, sulfuric acid, lye, explosives, pressurized canisters, and radioactive and biohazardous materials. Soils may also be toxic because of accidental spilling of toxic substances. This chapter evaluates potential impacts related to hazards and hazardous materials, including whether a significant hazard to the public or the environment would result from the proposed project due to its proximity to hazardous conditions and/or hazardous materials.

The following analysis is based in part upon information presented in the *Geotechnical Investigation, Los Angeles State Historic Park, Los Angeles, California*, prepared by Group Delta Consultants, Inc. in March 2011. This report is included as Appendix E of this EIR.

3.7.1 ENVIRONMENTAL SETTING

PROJECT SITE CONDITIONS

The project site is located at 1245 North Spring Street, directly east of the Chinatown community within the City of Los Angeles. The 32-acre project site is generally bound by Broadway to the north, the channelized Los Angeles River to the east, Spring Street to the south, and commercial uses to the west.

The project site is currently developed with a 13-acre interim public use park. Existing park amenities include a drinking fountain, benches, and picnic tables. Existing structures on the project site include a small lunch stand, an information kiosk, a park administration building, and a maintenance trailer. The park also contains a maintenance yard, which occupies the southwestern corner of the project site.

3.7 Hazards and Hazardous Materials

Regulatory Database Search

The California Department of Toxic Substances Control (DTSC) Envirostor and the California State Water Resources Control Board GeoTracker databases were evaluated to determine whether hazardous materials are or have been present on the project site. The Envirostor database includes the following site types: those listed on the National Priorities List (Federal Superfund sites); State Superfund and Military Facilities; Voluntary Cleanup; and School sites. The GeoTracker database includes geographic information and data on underground fuel tanks, fuel pipelines, and public drinking water supplies, and contains information regarding leaking underground fuel tanks. This database also includes information and data on non-leaking underground fuel tank cleanup programs, including Spills-Leaks-Investigations-Cleanups sites, U.S. Department of Defense Sites, and Land Disposal programs.

The project site is listed on both the Envirostor and GeoTracker databases. The Envirostor database lists potential arsenic, lead, and total petroleum hydrocarbons (TPH) motor oil contamination associated with former railroad and industrial uses at the project site. However, voluntary cleanup actions were certified for the project site as of February 28, 2003.¹ The GeoTracker database indicates contamination at the project site in connection with a leaking underground storage tank (LUST) containing gasoline. The cleanup status for this LUST includes ongoing site assessment as of August 9, 1999.² The GeoTracker database also indicates the presence of benzene on the project site, for which verification monitoring occurred as of July 8, 2010.³

A search of the Envirostor and GeoTracker databases identified the following three active sites within a 0.25-mile radius of the project site:

- Main Street Oil Depot property located at 1630 North Main Street. Potential contaminants of concern include solvents and/or non-petroleum hydrocarbons in connection with former operations at this site. Remediation activities have been ongoing since January 21, 1997.⁴
- City of Los Angeles Department of Water and Power site located at 1630 North Main Street. Potential contaminants of concern include asbestos-containing materials, polychlorinated biphenyls, and tetrachloroethylene in connection with the site's former uses, which included vehicle storage and refueling, waste storage, transformer repair, and electric and vehicle maintenance. Cleanup activities at this site were active as of June 15, 2009.⁵

¹ DTSC, Envirostor database, Cornfield Site Summary, available at: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=19400013, accessed: May 26, 2011.

² California State Water Resources Control Board, GeoTracker database, Vacant property located at 1245 North Spring Street Site Summary, available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603700537&assigned_name=MAINSITE, accessed: May 26, 2011.

³ California State Water Resources Control Board, GeoTracker database, Union Pacific Railroad – Cornfield Yard Site Summary, available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL2047T1683&assigned_name=SLIC, accessed: May 26, 2011.

⁴ California State Water Resources Control Board, GeoTracker database, Main Street Oil Depot Site Summary, available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603700511, accessed: May 26, 2011.

⁵ DTSC, Envirostor database, LADWP Site Summary, available at: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80001337, accessed: May 26, 2011.

- Bortz Oil Company property located at 1746 North Spring Street. Potential contaminants of concern include volatile organic compounds (VOCs), as well as other uncategorized contaminants in connection to the distribution and manufacturing of chemicals at the site. Cleanup activities at this site are active as of August 1, 1996.⁶

Remedial Action Completion Report

The Geotechnical Investigation prepared for the proposed project (see Appendix E of this EIR) identified the *Removal Action Completion Report, 32-acre parcel of the former Cornfield Rail Yard, 1245 Spring Street, Los Angeles, California*, prepared by Shaw Environmental, Inc. in February 2003 in evaluating potential environmental conditions at the project site. The report was reviewed and utilized in preparation of the recommendations provided in the Geotechnical Investigation.

A Preliminary Endangerment Assessment report was prepared in January 2002 to describe the environmental conditions at the project site. A Final Site Characterization letter report was also prepared to further describe the extent of site contamination. These investigations determined that soil at the project site contained chemical constituents including arsenic, lead, and TPH, which posed a potential human health hazard and risk. Results indicated that localized areas within the project site contained arsenic and lead at concentrations exceeding the DTSC screening concentrations. Two areas also contained TPH at concentrations exceeding a commonly used screening concentration. A Removal Action Work Plan was subsequently prepared and approved by DTSC on the basis of which remedial action was undertaken at the project site.

The removal action was completed in late 2002, which consisted of the excavation of impacted soil from site areas identified in the Removal Action Work Plan. The planned boundaries and depths of the identified excavation areas were used as a basis for defining the field action. It was discovered that Metro had previously removed soil during their use of a portion of the project site as a Metro Gold Line construction staging area. In other areas, over-excavation was necessary to achieve the remediation goals. A total of 5,238 tons of impacted soil was removed during remediation and was properly disposed off-site.

Methane Gas

Methane is generated by the biodegradation of organic matter in the absence of oxygen. Methane is not toxic; however, it is combustible and potentially explosive at concentrations above 53,000 parts per million in the presence of oxygen. While non-pressurized methane is not normally problematic, if the gas accumulates to high concentrations and becomes pressurized, detectable levels may enter the interior of a

⁶ DTSC, Envirostor database, Bortz Oil Company Site Summary, available at: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=19290289, accessed: May 26, 2011.

3.7 Hazards and Hazardous Materials

structure through cracks or other penetrations present in floor slabs. The project site is located within a City of Los Angeles Methane Zone.⁷

3.7.2 REGULATORY SETTING

FEDERAL

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act, or “Superfund,” provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. This act established prohibitions and requirements concerning closed and abandoned hazardous waste at these sites, provided for liability of persons responsible for releases of hazardous waste, and established a trust fund to provide for cleanup when no responsible party could be identified. Additionally, the Superfund Amendment and Reauthorization Act, which extended and amended Comprehensive Environmental Response, Compensation, and Liability Act, required that due diligence be exercised in the investigation of past and current handling of hazardous substances prior to property sale.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act provides the U.S. Environmental Protection Agency (USEPA) the authority to control hazardous wastes from “cradle-to-grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The Resource Conservation and Recovery Act also establishes a framework for the management of nonhazardous wastes.

Other Federal Laws and Regulations

Other laws and regulations governing the management and control of hazardous substances include the following, which fall under the jurisdiction of the USEPA:

- The Toxic Substances Control Act, enacted in 1976, regulates and controls harmful chemicals and toxic substances in commercial use, in particular polychlorinated biphenyls.
- The Federal Insecticide, Fungicide, and Rodenticide Act (as amended) controls the manufacture, use, and disposal of pesticides and herbicides.
- The Hazardous and Solid Waste Act includes the 1984 amendments to the Resource Conservation and Recovery Act to address gaps in the area of highly toxic wastes.

⁷ City of Los Angeles, Zoning Information and Map Access System (ZIMAS), available at: <http://zimas.lacity.org/>, accessed: May 24, 2011.

- Code of Federal Regulations, Title 29, Part 1910 contains the Occupational Safety and Health Act (OSHA) requirements for workers at hazardous waste sites including emergency response, hazard communication, and personal protective equipment.

STATE

At the state level, California has developed hazardous waste regulations that are similar to but more stringent in their application than the federal laws.

Hazardous Waste Control Law

The basic law established in California, similar to the Resource Conservation and Recovery Act, is the Hazardous Waste Control Law. CCR Title 22 includes state hazardous waste regulations enforced by the DTSC and local Certified Unified Program Agencies. Authority from the State was delegated to the local Certified Unified Program Agencies to establish a unified hazardous waste and hazardous materials management program for hazardous waste generators, treatment of hazardous waste subject to tiered permitting, facilities with underground storage tanks and aboveground storage tanks, risk management and prevention plans, and hazardous materials management plans and inventory statements required by the Uniform Fire Code.

According to California hazardous waste criteria (CCR Title 22), sediments remaining undisturbed are not considered a waste material until they are removed for disposal or recycling. Once removed, any sediment would be considered a hazardous waste if one or more regulated substances exceed the total threshold limit concentration or the soluble threshold limits concentration set forth in Title 22. Both of these threshold limits define a substances' toxicity. Any substance that exceeds one or both of these criteria is considered toxic at that concentration. This toxicity also defines any waste that contains the substance as a Resource Conservation and Recovery Act hazardous waste by the USEPA.

California Health and Safety Code

State hazardous waste control laws enforced by DTSC are included in the California Health and Safety Code. These regulations identify standards for the classification, management, and disposal of hazardous waste in California.

Occupational Safety and Health Act

Federal and state occupational safety and health regulations also contain provisions on hazardous materials management as it relates to worker safety, worker training, and worker right-to-know. Under OSHA, the applicable federal law, authority to administer this act is delegated to states that have developed a plan with provisions that are at least as stringent as those provided by the federal government. For federal OSHA purposes, California is a delegated state. The California Occupational Safety and Health Act and authorized regulations and programs are commonly referred to as Cal/OSHA.

3.7 Hazards and Hazardous Materials

Other Relevant State Laws

Other relevant California laws include:

- Proposition 65 focuses on carcinogenic or teratogenic contaminants and implements the State's community-right-to-know program.
- Underground Storage Tank Law that regulates underground storage to prevent groundwater contamination.
- Porter-Cologne Water Quality Control Act, adopted in 1969, requires the maintenance of the highest reasonable quality of the State's waters. It authorized the Regional Water Quality Control Board to supervise cleanup efforts at spill sites that have affected groundwater.

The DTSC has the primary responsibility for enforcement and implementation of hazardous waste control laws in the State. However, this responsibility is shared with other State and local government agencies, including the State Water Resources Control Board, Regional Water Quality Control Board, and city and county governments.

3.7.3 ENVIRONMENTAL IMPACTS

THRESHOLDS OF SIGNIFICANCE

As part of the Initial Study (see Appendix A of this EIR), it was determined that the proposed project would not result in significant impacts related to the routine transport, use, or disposal of hazardous materials. Additionally, the proposed project is not located within an airport land use plan or within the vicinity of a public airport or private airstrip. As such, the Initial Study found that no related impacts would occur. Furthermore, the Initial Study found that the proposed project would not expose people or structures to impacts associated with wildland fires. Accordingly, these issues are not further analyzed in the EIR.

In accordance with the CEQA Guidelines, the project would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; or

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

IMPACT ANALYSIS

HAZ-1 *The proposed project would 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. Implementation of the mitigation measures would reduce impact to a less than significant level.*

As previously discussed, potential contamination has been identified in association with the railroad and industrial uses that formerly existed on the project site, which potentially includes arsenic, lead, and TPH motor oil contamination. In addition, contamination at the project site has also been identified in connection with a LUST containing gasoline. Additionally, benzene has been found to be present beneath the project site.

In 2002, a Removal Action Work Plan was prepared and approved by DTSC in regards to the arsenic, lead, and TPH motor oil contamination of the soil on the project site. The removal action was completed in late 2002, which consisted of the excavation of impacted soil from site areas identified in the Removal Action Work Plan. A total of 5,238 tons of impacted soil was removed during remediation and was properly disposed off-site.

The Geotechnical Investigation prepared for the proposed project (see Appendix E of this EIR) identified the *Additional Site Investigation Summary and Groundwater Monitoring Report, Former Cornfield Yard, 1245 N. Spring Street, Los Angeles, California*, prepared by ERM-West, Inc. in October 2006 in evaluating potential environmental conditions at the project site. The report was reviewed and utilized in preparation of the recommendations provided in the Geotechnical Investigation.

The *Additional Site Investigation Summary and Groundwater Monitoring Report* is a part of on-going groundwater monitoring that is being conducted at the project site. This report also discusses the results of an investigation of groundwater sampling wells at seven locations to study the nature of groundwater impacts in the project area. At least 10 of the monitoring wells that are being periodically sampled are located on the project site. As discussed in Chapter 3.8, Hydrology and Water Quality, groundwater has been reported at a depth between 30 and 35 feet bgs of the project site. Groundwater beneath the project site is reported to flow toward the southwest.

Groundwater samples were analyzed for VOCs using USEPA Test Method 8260 and TPH using Test Method 8015M. High concentrations of gasoline based contaminants have been reported in the groundwater. Additionally, 1,2-dichloroethane, a VOC, is reported in excess of its maximum contamination level. Based on non-detectable constituent concentrations in three down-gradient wells, the observed gasoline impacts to groundwater were defined and confined to be located within a limited and interior portion of the project site.

3.7 Hazards and Hazardous Materials

Construction of the proposed project would involve near-surface grading that would be limited to shallow excavation and backfill for foundations, pavements, hardscape, and utility installation. As part of the Removal Action Work Plan, soil containing arsenic, lead, and TPH motor oil contamination have been remediated at the project site. Thus, contaminated soils are not anticipated to be encountered during the construction or operation of the proposed project. Additionally, excavation would occur only to a shallow depth, and it is not anticipated that contaminated groundwater would be encountered during construction activities. Further, as reported in the Geotechnical Investigation, contaminants reported in the groundwater are not a direct concern to surface use of the project site. Notwithstanding, there is potential to encounter previously unknown soil or groundwater contamination during the construction process. Implementation of mitigation measures HAZ-A and HAZ-B would reduce this impact to a less than significant level.

Methane Gas

As described previously, methane gas is generated in the project area by subterranean sources, including oil production facilities. Methane can enter buildings through fissures or cracks in building foundations. A methane soil gas investigation was conducted for the project site (see Appendix E of this EIR). This investigation concluded that a hazard may result from the presence of methane gas within portions of the soil on the project site. Implementation of mitigation measure HAZ-C would reduce the impact to a less than significant level.

HAZ-2 *The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The impact would be less than significant.*

There are two schools located within a 0.25-mile radius of the project site including Cathedral High School, located at 1253 Bishops Road, and Ann Street Elementary School, located at 126 Bloom Street. Proposed project construction would involve the handling of hazardous materials (fuels, lubricants, and oils). However, construction activities are temporary in nature and the handling of minor amounts of hazardous materials would be in compliance with applicable regulations. Additionally, as discussed, the proposed project would not pose a substantial risk involving the routine transport, use, and disposal of hazardous materials. Furthermore, operation of the proposed project would not generate industrial wastes or toxic substances. Therefore, the potential impact associated with the emission of hazardous materials near an existing or proposed school would be less than significant.

HAZ-3 *The proposed project would 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, may potentially create a significant hazard to the public or the environment. Implementation of the mitigation measures would reduce the impact to a less than significant level.*

Government Code Section 65962.5 requires various state agencies to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water

wells, and solid waste facilities from which there is known migration of hazardous waste, and submit such information to the Secretary for Environmental Protection on at least an annual basis.

As previously discussed, the DTSC and GeoTracker databases were evaluated to determine whether hazardous materials are currently or have been present on the project site. These databases are comprehensive and cover the types of facilities and sites required for listing under Government Code Section 65965.5. The project site is listed on both the Envirostor and GeoTracker databases. The Envirostor database lists potential arsenic, lead, and TPH-motor oil contamination associated with the former railroad and industrial uses at the project site; however, voluntary cleanup actions were certified as of February 28, 2003.⁸ The GeoTracker database indentified a LUST containing gasoline, which has been associated with contamination at the project site. Ongoing site assessment of the LUST has occurred at the project site as of August 9, 1999.⁹ The GeoTracker database also indicates the presence of benzene on the project site, for which verification monitoring occurred as of July 8, 2010.

In addition, soil contamination has been remediated with the removal of contaminated soils from the project site pursuant to the Removal Action Work Plan. As only shallow excavations would be required with the construction of the proposed project, contaminated groundwater is not anticipated to be encountered. Further, groundwater contaminants are not a direct concern to surface uses at the project site. Nonetheless, the potential exists that previously unknown soil or groundwater contamination could be encountered. Therefore, mitigation measures HAZ-A and HAZ-B would be required to reduce on-site impacts to a less than significant level.

Three properties within 0.25 miles of the project site were identified in a review of hazardous materials databases. The Main Street Oil Depot property is listed on the GeoTracker database, while the City of Los Angeles Department of Water and Power site and Bortz Oil Company property are listed on the Envirostor database. Remediation activities at the Main Street Oil Depot site have been ongoing since January 21, 1997, and cleanup activities at the City site and the Bortz Oil Company site are active as of June 15, 2009 and August 1, 1996, respectively. As cleanup activities have been initiated and are ongoing at these three sites, it is unlikely that any potential release of hazardous materials could impact the project site. Additionally, both the Main Street Oil Depot and City sites are located hydraulically down-gradient from the project site. Therefore, potential hazardous materials impacts from off-site land uses would be less than significant.

⁸ DTSC, Envirostor database, Cornfield Site Summary, available at: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=19400013, accessed: May 26, 2011.

⁹ California State Water Resources Control Board, GeoTracker database, Vacant property located at 1245 North Spring Street Site Summary, available at: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603700537&assigned_name=MAINSITE, accessed: May 26, 2011.

3.7 Hazards and Hazardous Materials

HAZ-4 *The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The impact would be less than significant.*

The nearest City-designated disaster route is North Spring Street, which forms the southern boundary of the project site.¹⁰ The proposed project would not impede public access to or travel upon this route. As discussed in Chapter 3.12, Transportation and Traffic, project-generated traffic impacts would be less than significant. Additionally, an adopted emergency response plan would be developed by CDPH, which would include response plans for special events. Thus, the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan. Development and implementation of an emergency response plan for the proposed project would minimize impacts. Therefore, impacts related to emergency plans would be less than significant.

3.7.4 MITIGATION MEASURES

HAZ-A Should previously unknown areas of metal and/or TPH contaminated soils be encountered during construction activities, the soil shall be stockpiled, sampled, and properly managed on the basis of sampling results.

HAZ-B Should previously unknown subsurface groundwater contamination, which could potentially expose enclosed spaces to VOCs, be encountered within the proposed building areas on-site during construction activities, a qualified abatement consultant shall abate the contaminated areas in compliance with applicable state regulations.

HAZ-C During construction, a methane mitigation system shall be implemented in all new structures in coordination with a methane consultant. This shall include a vapor barrier, granular soil layers, and other elements installed within the 12 inches of soil directly below any new building slab.

3.7.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with existing hazards regulations and the implementation of mitigation measures HAZ-A through HAZ-C would ensure that project impacts are less than significant.

¹⁰ Los Angeles County Department of Public Works, Disaster Route Maps by City, *City of Los Angeles – Central Area Map*, available at: <http://dpw.lacounty.gov/dsg/disasterRoutes/city.cfm>, accessed: May 26, 2011.