4.5 Hazardous Materials

4.5.1 Introduction

This section addresses whether the proposed Project would result in impacts related to hazardous materials and whether there would be the potential for the proposed Project to affect ongoing soil and groundwater contamination characterization, monitoring, and/or remediation activities, and the associated potential of hazardous materials to result in significant impacts to the public or the environment.

Prior to the preparation of this EIR, an Initial Study (included as **Appendix A** of this EIR) was prepared using the CEQA Environmental Checklist Form to assess potential environmental impacts associated with hazardous materials. For four of these screening criteria and portions of two screening criteria, the Initial Study found that the proposed Project would result in either "No Impact" or a "Less Than Significant Impact" and, thus, no further analysis of these topics in an EIR was required. Based on the Initial Study screening criteria related to hazards and hazardous materials, the following potential impacts do not require any additional analysis in this EIR:

- Potential impacts related to hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials (State CEQA Guidelines Appendix G, Question IX.a) were evaluated and determined to be less than significant in the Initial Study. The proposed Project would not result in any substantial changes to the routine use of hazardous materials. Compliance with existing federal, state, and local regulations and routine precautions would reduce the potential for accidental releases of a hazardous material to occur and would minimize the impact of an accident should one occur. As such, the proposed Project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials and no further evaluation in this EIR is required.
- In the Initial Study, the potential for the proposed Project to 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 (State CEQA Guidelines Appendix G, Question IX.b) was determined to consist of three types of risks: (1) inadvertent releases of hazardous or regulated materials during construction or operation; (2) releases of hazardous building materials (such as asbestos-containing materials and lead) that may be present in buildings to be demolished or modified; and (3) interference with ongoing soil and groundwater remediation activities that would result in a hazard to the public or environment. Potential impacts related to inadvertent releases of hazardous materials or hazardous building materials during demolition, construction, or operation were evaluated and determined to be less than significant in the Initial Study. Compliance with existing federal, state, and local regulations governing the treatment and removal of hazardous building materials, occupational safety and health, and the handling, storage, transport, and disposal of hazardous materials; use of construction Best Management Practices (BMPs) implemented as part of a construction Stormwater Pollution Prevention Plan (SWPPP); and compliance with LAWA's Design and Construction Handbook,[1] which mandates compliance with all requirements of environmental regulatory agencies, would minimize potential adverse effects to the general public and environment from inadvertent releases during demolition, construction, and operation of the proposed Project. In addition, if contaminated soils or groundwater are encountered during

[1] City of Los Angeles, Los Angeles World Airports, *2020 Design and Construction Handbook (DCH), Version 1.0,* June 30, 2020. Available: https://www.lawa.org/en/lawa-businesses/lawa-documents-and-guidelines/lawa-design-and-construction-handbook.

construction, compliance with federal, state, and local regulations and regulatory oversight by agencies, including the Los Angeles Fire Department (LAFD) and the Los Angeles Regional Water Quality Control Board (RWQCB), would minimize potential adverse effects to the general public and the environment. As such, construction and operation of the proposed Project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment specific to inadvertent releases, including the release of hazardous building materials, and no further evaluation of these topics is required in this EIR. (Potential impacts due to releases of hazardous materials related to interference with the remediation of existing soil and/or groundwater contamination were determined to be possible; these impacts are evaluated in this section.)

- Potential impacts associated with hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (State CEQA Guidelines Appendix G, Question IX.c) were evaluated and determined to have no impact in the Initial Study. There are no schools located or proposed within one-quarter mile of the Project site. (As noted in Section 2.2.2, *Local Setting and Land Uses*, in Chapter 2, *Description of the Proposed Project*, the Los Angeles Community College District offers a periodic course at a warehouse facility that is located close to the proposed landside improvements; however, the facility is not a school.) Therefore, no impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school would occur with the implementation of the proposed Project and no further evaluation in this EIR is required.
- Potential impacts related to safety hazards for people residing or working in the Project area (State CEQA Guidelines Appendix G, Question IX.e), which itself is located within an airport land use plan, were evaluated and determined to have no impact in the Initial Study.[2] Numerous safeguards are required by law to minimize the potential for, and the effects from, an accident if one were to occur. Federal Aviation Administration (FAA) Airport Design Standards establish, among other things, land use-related guidelines to protect people and property on the ground, including establishment of safety zones that keep areas near runways free of objects that could interfere with aviation activities. Section 12.50 of the Comprehensive Zoning Plan of the City of Los Angeles regulates building height limits and land uses within the Hazard Area established by the Planning and Zoning Code to protect aircraft approaching and departing from LAX from obstacles. In addition to the many safeguards required by law, LAWA and tenants of LAX maintain emergency response and evacuation plans that also serve to minimize the potential for and the effects of an accident. All proposed Project buildings/structures would be designed in accordance with FAA's Airport Design Standards to ensure that the buildings/structures do not interfere with Airport Traffic Control Tower (ATCT) activities or affect airfield safety. Construction activities would be coordinated with FAA through the use of Form FAA 7460-1 (Notice of Proposed Construction or Alteration), which requires that the developer of any project on or near airports must provide notice to FAA so that FAA can conduct an analysis of any potential hazards to air navigation. As discussed in Section 2.4.3.2, *Relationship to Airspace/Airfield Surfaces*, in Chapter 2, *Description of the Proposed Project*, the proposed airfield, terminal, and landside

[2] Initial Study Checklist Item IX.e. evaluates safety hazards and excessive noise for projects within an airport land use plan. The Initial Study found that the proposed Project would not result in a safety hazard, but that construction and operation of the proposed Project may generate noise levels in excess of applicable federal, state and/or local noise standards. Please see Section 4.7, *Noise*, for a discussion of the potential noise impacts of the proposed Project.

(roadway) improvements would not penetrate Part 77 Surfaces.[3] Further, as described in Chapter 2, *Description of the Proposed Project*, the proposed Project includes a number of airfield elements that would enhance aviation safety within the north airfield, in particular, modifications to the Runway 6L-24R exits. By improving the north airfield, and adhering to FAA Airport Design Standards in the design of new buildings/structures, the proposed Project would not result in a safety hazard for people residing or working in the Project area and no further evaluation in this EIR is required.

- Potential impacts related to impairing implementation of, or causing physical interference with, an adopted emergency response plan or emergency evacuation plan (State CEQA Guidelines Appendix G, Question IX.f) were evaluated and determined to have no impact in the Initial Study. LAWA and tenants of LAX maintain emergency response plans and emergency evacuation plans to minimize the potential for and the effects of an accident, should one occur. Construction activities at the proposed Project site and staging areas would comply with LAWA and FAA guidelines and procedures that are in place to limit the impacts of construction at the airport, including the potential to affect emergency response. In addition, LAWA uses Intelligent Transportation Systems (ITS), including changeable message signs, to notify drivers of construction-related activities and roadway conditions in and around the Central Terminal Area (CTA), which improves traffic flows at LAX. Further, LAWA would coordinate with the LAFD and Los Angeles World Airports Police Division (LAWA PD) regarding emergency access and other design needs to ensure that emergency service levels are maintained during construction. The LAWA Coordination and Logistics Management (CALM) Team would ensure that occupancy and operation of adjacent and surrounding facilities would be maintained throughout demolition and construction activities. In addition, in accordance with standard LAWA practices, all emergency access routes in the vicinity of the Project site and staging areas would be kept clear and unobstructed at all times in accordance with FAA, State Fire Marshal, and Los Angeles Fire Code regulations. Therefore, implementation of the proposed Project would have no impact related to emergency response plans or emergency evacuation plans and no further evaluation in this EIR is required.
- Potential impacts related to exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires (State CEQA Guidelines Appendix G, Question IX.g) were evaluated and determined to have no impact in the Initial Study. The Project site is located within a developed airport and surrounded by airport uses, urbanized areas, and the Los Angeles/El Segundo Dunes. There are no fire hazard areas containing flammable brush or grass on the Project site. Furthermore, the Project site is not within a City of Los Angeles Wildfire Hazard Area, as delineated in the Safety Element of the General Plan.[4] Therefore, implementation of the proposed Project would not result in the exposure of people or structures to hazards associated with wildland fires and no further evaluation in this EIR is required.

[3] Federal Aviation Regulation (FAR) Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*, serves as a means of identifying the airspace required for safe operation of aircraft at or near an airport. This regulation establishes imaginary surfaces extending outward from the runways within which it is required that the FAA be notified of any proposed development or structural changes that would obstruct the path of operating aircraft. These "imaginary surfaces" are three dimensional, starting at ground level around each runway and sloping upward and outward at various angles for various distances. The standards that define these imaginary surfaces provide guidance to state and local governments in their efforts to control land use around airports so as to protect aircraft in flight and people on the ground.

[4] City of Los Angeles, Department of City Planning, *Safety Element of the City of Los Angeles General Plan*, Exhibit D, Selected Wildfire Hazard Areas In the City of Los Angeles, April 1996.

The Initial Study found that implementation of the proposed Project has the potential to result in a significant hazard to the public or environment as a result of being on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. There is a potential of a significant hazard to the public or environment associated with a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment associated with existing soil and/or groundwater contamination remediation activities in areas that would be developed under the proposed Project. As such, these potential impacts, as identified in the Initial Study, are evaluated below.

4.5.2 Methodology

The study area for the hazardous materials analysis includes the areas that could be affected by construction activities, in particular, areas where proposed airfield, Concourse 0, Terminal 9, and roadway improvements would occur. The general Project study area is identified in Figure 2-3 in Chapter 2, *Description of the Proposed Project*. The specific study area for the analysis of hazardous materials consists of the locations of individual Project improvements; these specific locations are shown in Figure 2-1. To analyze the potential impacts of the proposed Project on ongoing characterization, remediation, and monitoring activities, the study area was reviewed to identify existing known contaminated soil and/or groundwater sites and related cleanup activities. Numerous lists of hazardous waste sites and other sources were used in this analysis, as identified below. The locations identified from these lists and other sources were mapped within the hazardous materials study area to determine whether the proposed Project would overlap with such hazardous sites. This process identified areas where construction activities would have the potential to interfere with the cleanup of sites that are currently under investigation, undergoing remediation, or that have remediation planned in the future. These impacts are typically construction-related because the construction phase requires demolition, grading, and excavation, which can disturb monitoring and extraction wells and related infrastructure.

Data regarding areas of known contamination were obtained from a variety of sources. As required by Public Resources Code Section 21092.6, a search of database lists compiled pursuant to Section 65962.5 of the California Government Code was conducted to determine if regulatory agencies have identified sites within the hazardous materials study area as having been contaminated by hazardous materials or substances releases. A government records search was performed by Environmental Data Resources Inc. (EDR) in June 2019 (see **Appendix E**) to identify potential areas of groundwater and/or soil contamination within the hazardous materials study area. The records search included numerous federal, state, and local government databases, such as those identifying leaking underground storage tanks (USTs), sites with known hazardous materials or substances releases, and sites with extensive contamination and ongoing remediation (e.g., National Priority List sites). A complete list of databases included in the records search is provided at the beginning of **Appendix E**.

Site contamination information from the EDR report was supplemented by reviewing technical reports and studies on GeoTracker[5] and EnviroStor[6] online databases, as well as information from LAWA personnel. Additional databases that comprise the "Cortese List" (list of designated hazardous waste sites), as currently defined by California Environmental Protection Agency (CalEPA), were also reviewed.

[5] GeoTracker is the State Water Resources Control Board's (SWRCB's) data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, such as leaking UST sites. GeoTracker portals retrieve records and view integrated data sets from multiple SWRCB programs and other agencies. Users can view these data through a Google Maps GIS interface. The GeoTracker website is online at https://geotracker.waterboards.ca.gov/.

[6] EnviroStor is the California Department of Toxic Substances Control's (DTSC's) data management system for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further. The EnvirStor website is online at https://www.envirostor.dtsc.ca.gov/public/.

4.5.3 Existing Conditions

4.5.3.1 Regulatory Setting

There are numerous federal, state, and local laws and regulations governing the use, storage, transport, and disposal of hazardous materials; remediation of environmental contamination; public notification; emergency response; and other topics. Many of these laws and regulations pertain to subjects that are not evaluated in the Draft EIR (see Section 4.5.1). The following presents the relevant regulatory framework, laws, ordinances, and regulations that are applicable to the analysis of the potential for the proposed Project to affect ongoing soil and groundwater contamination characterization, monitoring, and/or remediation activities. Agencies with jurisdiction over these activities are also identified. Laws and regulations governing toxic air contaminants are discussed is Section 4.1.2, *Human Health Risk*.

4.5.3.1.1 Federal

Resource Conservation and Recovery Act (RCRA)

RCRA establishes national goals to protect human health and the environment from the potential hazards of waste disposal to ensure that wastes are managed in an environmentally-sound manner. RCRA Subtitle C (42 USC Section 6901 et seq.) is intended to proactively manage hazardous waste and to minimize and avoid hazardous waste contamination. RCRA Subtitle C addresses hazardous waste from cradle-to-grave, regulating the generation, transport, storage, treatment, and disposal of hazardous waste. RCRA Subtitle I, the Hazardous and Solid Waste Amendments (HSWA) of 1984, expanded and clarified RCRA Subtitle C. The U.S. Environmental Protection Agency (USEPA) administers RCRA Subtitle C pursuant to regulations found at 40 CFR Section 260 et seq. and has delegated RCRA Subtitle C implementation and enforcement within California to the State.

To protect groundwater, RCRA Subtitle I (42 USC Section 6991 et seq., 40 CFR Section 280 et seq.) establishes design, construction, and operational standards to prevent chemical releases from USTs. RCRA Subtitle I regulates USTs containing hazardous substances or petroleum. USEPA sets standards governing tank construction based on whether the tank is new or whether an existing tank is upgraded. USEPA also imposes operation and maintenance procedures for UST owners and operators, and establishes reporting requirements from regulated tanks that release substances into the environment.

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

CERCLA, also known as Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites, as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. CERCLA establishes procedures to identify and clean up chemically contaminated sites posing a significant environmental health threat (42 USC 9601 et seq.). The program also establishes a liability process that governs which parties are responsible for cleanup costs. Under CERCLA, USEPA is authorized to clean up hazardous waste contaminated sites and seek reimbursement from liable individuals for expenses incurred during the cleanup process (42 USC Section 9606(a)). USEPA administers CERCLA (40 CFR Section 300 et seq.). CERCLA was reauthorized in 1986 by the Superfund Amendments and Reauthorization Act.

Executive Order 12088 - Federal Compliance with Pollution Control

Executive Order 12088, *Federal Compliance with Pollution Control*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved. As implementation of the proposed Project would require various federal approvals, Executive Order 12088 would apply to the proposed Project.

4.5.3.1.2 State

California Government Code Section 65962.5

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List" (after the Legislator who authored the legislation that enacted it).[7] Section 65962.5 requires the CalEPA to compile and maintain a list of potential hazardous materials release sites located throughout California. CalEPA has identified the data resources below that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements:[8]

- List of Hazardous Waste and Substances sites from the California Department of Toxic Substances Control's (DTSC's) EnviroStor database
- List of Open Active Leaking Underground Storage Tank Sites from the SWRCB's GeoTracker database
- List of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of "active" Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC

Hazardous Substance Account Act

The Hazardous Substance Account Act (HSAA; Health and Safety Code Section 25300 et seq.) establishes a state Superfund program to clean up contaminated sites not listed on the National Priorities List. The HSAA authorizes DTSC to initiate remedial and removal actions, and to enter into enforceable agreements with potentially responsible parties to investigate and remediate contamination.

4.5.3.1.3 Regional and Local

South Coast Air Quality Management District Rule 1166

Remediation of contamination has the potential to expose workers to hazardous materials or substances. The South Coast Air Quality Management District (SCAQMD) regulates emissions from soil remediation activities through Rule 1166, *Volatile Organic Compound Emissions from Decontamination of Soil*. This rule requires development and approval of a mitigation plan, monitoring of volatile organic compound (VOC) concentrations, and implementation of the mitigation plan if VOC-contaminated soil is detected.

LAWA's Design and Construction Handbook

LAWA's Design and Construction Handbook[9] (Section 02 00 00 Existing Conditions) includes procedures for addressing soil and groundwater contamination encountered during construction. In accordance with these procedures, facilities are required to be tested to satisfy the requirements of the LAFD, Los Angeles County Fire Department, and the Los Angeles RWQCB to determine if there is contamination of the soil and/or groundwater. If contamination is identified, the project proponent must conduct sampling to determine the extent of contamination, develop a remedy or solution to address the contamination, and develop plans for transporting and disposing of hazardous materials within 90 days in accordance with all

---

7 California Environmental Protection Agency, *Background and History [Government Code Section 65962.5]*. Available: https://calepa.ca.gov/sitecleanup/corteselist/background/, accessed October 22, 2019.

8 California Environmental Protection Agency, *Cortese List Data Resources*. Available: https://calepa.ca.gov/SiteCleanup/CorteseList/, accessed October 22, 2019.

9 City of Los Angeles, Los Angeles World Airports, *2020 Design and Construction Handbook (DCH), Version 1.0,* June 30, 2020. Available: https://www.lawa.org/en/lawa-businesses/lawa-documents-and-guidelines/lawa-design-and-construction-handbook.

applicable laws and ordinances and to the satisfaction of LAWA, LAFD, Los Angeles County Fire Department, and the Los Angeles RWQCB. Specific requirements are outlined in the Design and Construction Handbook that pertain to the investigation, management, removal, transport, and disposal of hazardous materials/wastes encountered during construction activities.

LAX Plan

The LAX Plan,[10] an element of the City of Los Angeles General Plan, provides goals, objectives, policies, and programs that establish a framework for the development of facilities for movement and processing of passengers and cargo at LAX. The LAX Plan is intended to promote an arrangement of LAX uses that encourages and contributes to the modernization of LAX in an orderly and flexible manner within the context of the City of Los Angeles region.

Section 3.8 of the LAX Plan includes the following policy pertaining to hazardous materials:

- **P1:** Implement a program for handling of contaminated materials encountered during construction.

As noted above, LAWA's Design and Construction Handbook identifies procedures for evaluating, handling, and remediating, if necessary, contaminated materials encountered during construction.

4.5.3.1.4 Agencies with Authority Over Remediation of Contaminated Sites

As described in Section 4.5.3.2, *Environmental Setting*, past activities on the airport have resulted in contamination of soil and groundwater by hazardous materials or substances. Releases of hazardous materials are subject to a complex set of reporting requirements, including notification to LAFD and the California Office of Emergency Services (OES). Remediation of contamination is subject to stringent oversight by federal, state, county, and/or city agencies, depending on the nature of contamination. (There are no contaminated sites at or near LAX that are currently subject to federal oversight.) The LAFD oversees contamination resulting from leaking USTs. The Los Angeles RWQCB has the authority to require the remediation of sites where groundwater quality may be degraded by hazardous materials or substances releases from USTs or other sources. These agencies require that remediation continue until regulatory requirements are met and closure is granted. Information about each of these agencies is provided below.

Los Angeles Fire Department

LAFD administers the UST Program for the City of Los Angeles under which it regulates the construction, operation, repair and removals of USTs. When warranted, LAFD requires soil sampling and may initiate a site assessment process. LAFD is responsible for ensuring the cleanup and remediation of contaminated soil associated with USTs. Sites with groundwater contamination are referred to the Los Angeles RWQCB.

State Water Resources Control Board/Regional Water Quality Control Boards

The SWRCB operates under the authority of the CalEPA with a mission to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses. There are nine RWQCBs that develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the State's waters. The RWQCBs have the authority to require the remediation of sites where groundwater quality may be degraded by hazardous materials or substances releases from USTs or other sources. The Project area is within the jurisdiction of the Los Angeles RWQCB (Region 4). The Los Angeles RWQCB issued Order

[10] City of Los Angeles, Department of City Planning, *Los Angeles International Airport - LAX Plan*, adopted December 14, 2004, last amended June 7, 2017. Available: https://www.lawa.org/-/media/lawa-web/lawa-our-lax/plan-and-ordiance/2017-lax-plan.ashx?la=en&hash=A56B9B036C9CC63428A4AC5DC0E910992C1B0F53.\.

No. R4-2007-0019 which provides General Waste Discharge Requirements (WDRs) relative to the groundwater remediation at petroleum hydrocarbon fuel and/or VOC impacted sites. The Order identifies a list of materials that can be used for in-situ remediation zone treatment purposes.

4.5.3.2 Environmental Setting

4.5.3.2.1 Hazardous Materials Study Area

The proposed Project improvement areas, which constitute the hazardous materials study area, are located within the northern and eastern portions of LAX, as illustrated in Figure 2-1 in Chapter 2, *Description of the Proposed Project*. The study area has irregular boundaries, as illustrated in Figure 2-3 in Chapter 2, *Description of the Proposed Project*. The boundaries of the northern portion of the study area correspond to the area that constitutes the north airfield (i.e., Pershing Drive on the west, Runway 6L-24R on the north, Sepulveda Boulevard on the east, and Taxiway D and the area of its proposed extension on the south). The boundaries of the southern portion of the study area include the CTA (i.e., Terminals 1 and 8) to the west, 96th Street to the north, the future "A" Street and Aviation Boulevard to the east, and Taxiway B to the south.

These areas consist of highly-developed land within and adjacent to a busy international airport. The proposed airfield improvements are situated within a portion of the airport that includes paved airfield areas, airfield access roadways, remote gates, and other aviation-related uses, such as maintenance facilities and fuel storage facilities. The Concourse 0 site is currently occupied by LAX-it, a temporary passenger pickup area for taxis and transportation network companies (TNCs) like Uber and Lyft. The site also houses a groundwater remediation system and associated monitoring wells and equipment to address past contamination beneath the site (described later in this section). The Terminal 9 site encompasses existing cargo and maintenance facilities, aircraft parking spaces, the LAX Records Retention Building, and an American Eagle commuter terminal. The proposed landside improvements would be located in proximity to several hotels (Hyatt Regency Los Angeles, H Hotel/Homewood Suites, Courtyard by Marriott), an office building, surface and structured parking facilities, and the Los Angeles Community College District property. Also within the vicinity of the Project site is the entrance to LAX, located at World Way and Sepulveda Boulevard.

Groundwater beneath LAX is located at a depth of approximately 90 to 100 feet and is not a source of drinking water.

4.5.3.2.2 Known Contamination within the Hazardous Materials Study Area

Past activities conducted by LAWA, former and present tenants, or other parties have resulted in releases of hazardous materials or substances into the environment, causing soil and groundwater contamination at various locations. These incidents are identified in the EDR report, which contains various listings for past spills or hazardous materials incidents at different locations within the airport. Many of these past incidents are minor spills or leaks associated with aircraft and airfield-related maintenance operations, fueling activities, or the movement of cargo. The majority of these incidents are not considered areas of concern, based on further investigation or because they were responded to and cleaned up in accordance with applicable laws and regulations. Other listings in the EDR report are related to leaks of chemicals, fuels, or solvents from activities at the airport or from underground or aboveground storage tanks, which can travel through the soil to the groundwater. Information about contaminated sites within the hazardous materials study area is provided below.

Investigation and remediation of contaminated sites is undertaken by the party responsible. LAWA monitors known or potential groundwater contamination through the Environmental Programs Group. LAWA's monitoring program tracks the progress of tenant investigation, monitoring, and remediation activities associated with groundwater contamination sites at LAX to ensure that adequate and

appropriate cleanup goals are set and attained. All facilities with known groundwater contamination are regulated by the Los Angeles RWQCB, which reviews and approves all work plans and establishes and enforces remediation requirements and schedules. Although LAWA oversees the status of remediation activities on the airport, individual tenants are generally responsible for ensuring that groundwater contamination is remediated to the satisfaction of the Los Angeles RWQCB.

Table 4.5-1 summarizes known contamination sites within the hazardous materials study area that are currently undergoing remediation or are expected to in the future, and that could be affected by Project construction. The locations of these sites are identified in **Figure 4.5-1**. Sites that pose the greatest threat to human health and the environmental are National Priorities List (NPL) sites, also known as "Superfund" sites. There are no NPL-listed or NPL-candidate sites located within the hazardous materials study area. As shown in Table 4.5-1, there are three sites with known contamination within the proposed Project improvement areas. The status of current investigation, remediation, and/or monitoring efforts at these sites is discussed below.

AlliedSignal/Honeywell

The EDR Report includes several listings for the AlliedSignal Aerospace Company and the Honeywell International Company at the Park One site (9851 Sepulveda Boulevard). Table 4.5-1 provides a summary of the site, and its location is depicted in Figure 4.5-1 (see Site 1). Information and reports posted to GeoTracker indicate that the property was previously used for various manufacturing operations by Garrett AiResearch, which was subsequently purchased by AlliedSignal (now known as Honeywell). The site is currently occupied by LAX-it, LAX's passenger pickup area for taxis and TNCs like Uber and Lyft and was previously used as a commercial parking lot (operated under lease as Park 'N Fly @ Park One LAX). It is the proposed location for Concourse 0.

Thirteen USTs were previously used at the facility to store petroleum products, waste oil, and spent solvents. Some of the USTs were removed in the 1980s; the remaining USTs were removed in 1990-1991. The site has been under environmental investigation since 1989, when an initial site investigation was conducted and found that soil and groundwater at the site were impacted by VOCs (including chlorinated hydrocarbons) and 1, 4-dioxane.[11] The majority of contamination is located in the northwest quadrant of the site. The status of remediation efforts at the AlliedSignal/Honeywell site is detailed below.

Soil Contamination

During 1990-1991, shallow soil at the site was selectively excavated to remove VOC-impacted soils. In addition, a shallow soil vapor extraction (SVE) system (generally less than 70 feet below ground surface) was installed throughout the site during this time, which ultimately resulted in the removal of approximately 375,000 pounds of VOCs. Soil closure for three of the four quadrants on the site was received in 1993.[12] A deeper (below 65 feet) SVE/VER (vapor enhanced recovery) system was installed in 2000 that focused on remaining soil contamination in the northwest quadrant of the site. This SVE system operated almost continuously until 2010. Currently, due to the relatively low levels of VOCs remaining in the soil, it is only operated on a periodic basis. Between 2000 and 2018, the SVE/VER system removed approximately 36,200 pounds of VOCs.[13] In addition, VOCs have been removed from selected dewatered perched groundwater zones.

---

11 MACTEC Engineering and Consulting, Inc., *Second 2007 Semiannual Groundwater Monitoring Report Former Honeywell Sepulveda Site, Los Angeles, California*, October 15, 2007.

12 Wood Environmental & Infrastructure Solutions, Inc., *2018 Soil Vapor Extraction System Progress Report Former AlliedSignal Park One Site*, December 2018.

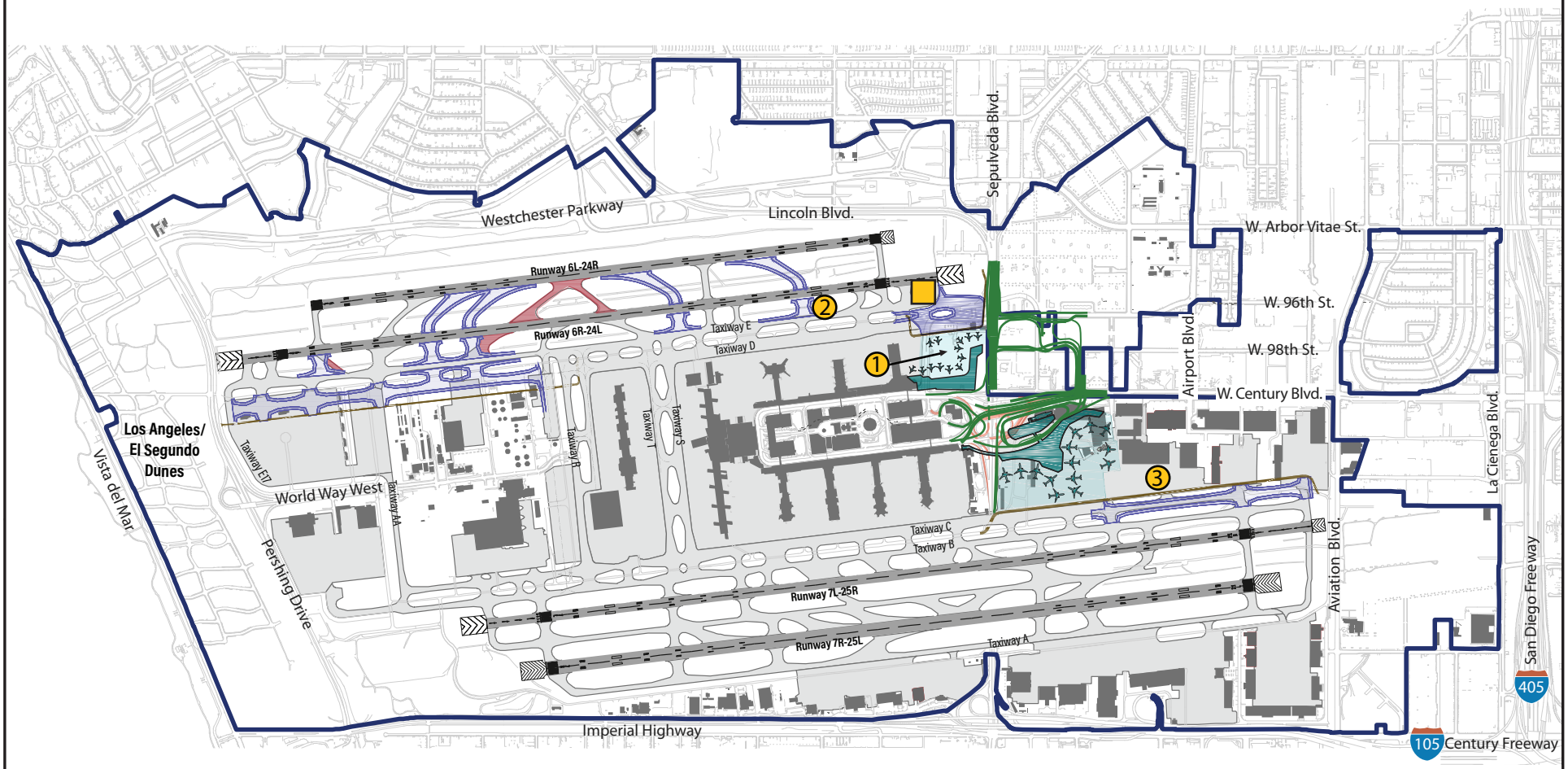
13 Wood Environmental & Infrastructure Solutions, Inc., *2018 Soil Vapor Extraction System Progress Report Former AlliedSignal Park One Site*, December 2018.

Table 4.5-1
Sites with Planned or Ongoing Remediation in the Vicinity of Project Components

Site No. (see Figure 4.5-1)	Site Name	Project Component				Contaminant	Media	Comments
		Airfield	C0	T9	Roadways			
1	AlliedSignal/Honeywell 9851 Sepulveda Boulevard		X		X	Hydrocarbons, halogenated VOCs, and related compounds	Soil and Groundwater	Soil remediation is largely complete; a soil vapor extraction system in the northwest quadrant of the site is operated intermittently to address remaining VOCs. Groundwater contamination exists beneath the site and off-site to the east and is monitored by a system of wells. Groundwater remediation is anticipated to occur in the future. EDR numbers 125-131.
2	Terminal 1 Fuel Valve Vault 250 World Way West	X				Jet fuel and related compounds	Soil and Groundwater	Located in the vicinity of the easternmost runway exit improvements. Assessment, monitoring, and remediation (i.e., free product removal) are ongoing. EDR number G42.
3	United Airlines Maintenance Operations Center 6000-6024 Avion Drive			X		Hydrocarbons, VOCs, Stoddard solvents, and related compounds	Soil and Groundwater	Remediation completed on much of the site, but ongoing in a small area with jet fuel recovery. Groundwater flow direction is to the east, away from the proposed Terminal 9. EDR grouping AE281-285, 295, 296.

Sources: **Appendix E** of this EIR; MACTEC Engineering and Consulting, Inc., *Second 2007 Semiannual Groundwater Monitoring Report Former Honeywell Sepulveda Site, Los Angeles, California*, October 15, 2007; Wood Environmental & Infrastructure Solutions, Inc., *2018 Soil Vapor Extraction System Progress Report Former AlliedSignal Park One Site*, December 2018; Wood Environmental & Infrastructure Solutions, Inc., *Work Plan for Interim Groundwater Containment System Former AlliedSignal Park One Site*, June 2019; Alta Environmental, *Conceptual Site Model Terminal 1 and 2 Fuel Hydrant Vaults*, prepared for Los Angeles World Airports, October 10, 2018; Environmental Resources Management, *Human Health Risk Assessment, United Airlines Maintenance Operations Center, Los Angeles International Airport*, January 2011.

Key:
C0 = Concourse 0
T9 = Terminal 9
VOC = volatile organic compound



Legend

- LAX Property Boundary
- Airfield Improvements
- Terminal and Related Improvements
- Taxiway to be Removed or Decommissioned
- Vehicle Service Road
- Roadway Improvements
- Roadway to be Demolished
- Hazardous Materials Site of Concern
  Note: Numbers correspond to Table 4.5-1
- PFAS Investigation Site
  PFAS = Per- and Poly-Fluoroalkyl Substances

0 1,500 3,000 Feet
Scale

Source: CDM Smith, June 2020
Prepared by: CDM Smith, October 2020

LAX Airfield and Terminal Modernization Project	Known Hazardous Materials Sites of Concern	Figure 4.5-1

Groundwater Contamination

From 1990 through 1992, investigations were performed to assess the extent of contamination in the groundwater, which confirmed the presence of VOCs and 1,4-dioxane in the groundwater (approximately 90 to 100 feet below ground surface) and perched water on the site, as well as groundwater off-site to the east (groundwater generally flows to the east).[14,15] The source of the groundwater contamination appears to be located in the northwest quadrant of the Park One site. Concentrations of groundwater contaminants at the site have generally decreased since 1997.[16] Since then, additional monitoring wells have been placed on-site and off-site to delineate the extent of contaminant migration, and to monitor concentrations over time. Honeywell is working with the Los Angeles RWQCB and LAWA to identify a long-term groundwater remediation system location that would be compatible with LAWA's plans to redevelop the site (i.e., the proposed Concourse 0). As noted above, groundwater beneath LAX, including the AlliedSignal/Honeywell site, is not a source of drinking water.

Terminal 1 Fuel Valve Vault

As identified in the EDR Report, a jet fuel spill occurred at the Terminal 1 Fuel Valve Vault, which is located along the east end of the north airfield between Runway 6R-24L and Taxiway E. As shown on Figure 4.5-1 (Site 2), this site is located in close proximity (approximately 80 feet) to the easternmost proposed Runway 6L-24R exit. The fuel spill occurred on March 8, 2015 when a valve flange gasket leaked at the Terminal 1 Valve Vault, causing fuel to overflow to the surrounding soil.[17] Soil and groundwater sampling conducted in the vicinity of the Terminal 1 Fuel Valve Vault in 2016 and 2017 showed that the fuel spill had migrated through the soil to groundwater, which lies approximately 100 feet below ground surface. Isopleths[18] of the soil and groundwater concentrations presented in a technical report prepared for the site indicate that the migration is limited to the area in the vicinity of the valve vault.[19] Chemicals of concern include elevated levels of total petroleum hydrocarbons (TPH) in soil and groundwater, including in shallow soils; relatively low levels of VOCs in soil and groundwater; and low levels of 1,4-dioxane in soil. In addition, there is free product[20] (i.e., jet fuel) in groundwater beneath the site. Regular free product removal events using a submersible pump have occurred to remove free product from groundwater. Additional assessment is necessary to further delineate the extent of groundwater contamination.[21] A summary of the Terminal 1 Fuel Valve Vault site is provided in Table 4.5-1.

United Airlines Maintenance Operations Center

The United Airlines (UAL) Maintenance Operations Center (MOC), which has been in operation since the 1940s, contains two hangars used for light aircraft and vehicle maintenance, former USTs, active and abandoned jet fuel hydrant systems, and various other aboveground and underground features.[22] As shown in Figure 4.5-1 (see Site 3), the UAL MOC is located adjacent to and east of the proposed Terminal

---

14 MACTEC Engineering and Consulting, Inc., *Second 2007 Semiannual Groundwater Monitoring Report Former Honeywell Sepulveda Site*, *Los Angeles, California*, October 15, 2007.

15 Wood Environmental & Infrastructure Solutions, Inc., *2019 Annual Groundwater Monitoring Report Former AlliedSignal Park One Site*, October 2019.

16 Wood Environmental & Infrastructure Solutions, Inc., *2018 Soil Vapor Extraction System Progress Report Former AlliedSignal Park One Site*, December 2018.

17 Alta Environmental, *Conceptual Site Model Terminal 1 and 2 Fuel Hydrant Vaults*, prepared for Los Angeles World Airports, October 10, 2018.

18 An isopleth is a line on a map connecting places registering the same amount or ratio of some geographical or meteorological phenomenon or phenomena.

19 Alta Environmental, *Conceptual Site Model Terminal 1 and 2 Fuel Hydrant Vaults*, prepared for Los Angeles World Airports, October 10, 2018.

20 Free product, also referred to as non-aqueous phase liquid (NAPL), is petroleum contamination that exists as a discrete substance and that does not mix with or dissolve in water. Because petroleum is lighter than water, free product floats on top of groundwater.

21 California Water Boards, Los Angeles Regional Water Quality Control Board, *Conceptual Site Model Review and Comments Terminal 1 and Terminal 2 Hydrant Vaults*, May 15, 2019.

22 Environmental Resources Management, *Human Health Risk Assessment, United Airlines Maintenance Operations Center, Los Angeles International Airport*, January 2011.

9 site. The easterly portion of the proposed Terminal 9 site would be located on a portion of the current MOC site. The EDR report identified several listings for leaking USTs at the UAL MOC (6020 Avion Drive), as well as a listing showing an open assessment in one remaining area. Information and technical reports for the UAL MOC (posted to GeoTracker) indicate the presence of VOCs and petroleum hydrocarbons in the soil and groundwater associated with jet fuel that lies beneath the site. Groundwater generally flows in an easterly direction beneath the UAL MOC (i.e., away from the proposed Terminal 9) and is approximately 95 feet below the ground surface. Table 4.5-1 provides a summary of the site.

Site investigations have identified an area with measurable free product in the groundwater located beneath the easterly hangar on the UAL leasehold, approximately 600 feet east of the Terminal 9 improvement area and approximately 325 feet north of the proposed relocated south airfield vehicle service road. This area was recommended for further remedial actions (active soil remediation and continued free product recovery). However, remediation of dissolved-phase groundwater contamination in this area was determined to be unwarranted due to the contained nature of the plume on the site and the lack of nearby receptors.[23] A free product recovery system has been operating at the MOC since 2004 and has removed over 6,470 gallons of product/liquid.[24] In addition, annual groundwater monitoring is conducted on the site. Three of the monitoring wells are located within the Terminal 9 site. One of these wells (MW-6) is located at the northwest corner of the LAX Records Retention Building, just east of the proposed easterly Terminal 9 gates; one well (MW-7) is located southwest of the existing American Eagle terminal, south of the proposed westerly Terminal 9 gates; the third well (MW-12) is located near the northwest corner of UAL's westerly hangar, beneath a proposed aircraft parking space. Recent groundwater monitoring showed no contaminants of concern exceeding California Maximum Contaminant Levels (MCL) at well MW-6. The monitoring showed elevated levels of trichloroethene at well MW-7 and MW-12.[25] These wells lie to the west of the UAL MOC contaminant plume; as noted above, groundwater in this portion of the airport flows to the east (i.e., groundwater beneath the UAL MOC flows away from wells MW-7 and MW-12).

4.5.3.2.3 Other Areas of Interest

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) are fluorinated organic chemicals that are part of a larger group of man-made chemicals referred to as per- and poly-fluoroalkyl substances (PFAS). Neither USEPA nor the State of California has established enforceable Maximum Contaminant Levels (MCLs) or human health risk-based cleanup goals for soil or groundwater impacted by PFAS.[26] In 2016, the USEPA established the drinking water health advisory level of 70 parts per trillion (ppt) for PFOA and PFOS individually or combined.[27] These concentrations are considered screening levels only. In August 2019, the SWRCB's Division of Drinking Water issued drinking water notification levels for PFOS and PFOA at 6.5 ppt and 5.1 ppt, respectively, per recommendations from California's Office of Environmental Health Hazard Assessment (OEHHA). The Division of Drinking Water's PFOS/PFOA response level is a total PFOS and PFOA concentration of 70 ppt.[28] Note that groundwater beneath LAX is not a

---

23 Environmental Resources Management, *Human Health Risk Assessment, United Airlines Maintenance Operations Center, Los Angeles International Airport*, January 2011.

24 Environmental Resources Management, *2018 Annual Groundwater Monitoring, System O&M, and Well Destruction Report, January 1 through December 31, 2018 United Airlines Maintenance Operations Center*, April 16, 2019.

25 Environmental Resources Management, *2018 Annual Groundwater Monitoring, System O&M, and Well Destruction Report, January 1 through December 31, 2018 United Airlines Maintenance Operations Center*, April 16, 2019.

26 City of Los Angeles, Los Angeles World Airports, *Per- and Polyfluoroalkyl Substances (PFAS) Investigation Report – Los Angeles International Airport*, prepared by Geosyntec Consultants, Inc., October 30, 2019.

27 In issuing a lifetime health advisory level (LHA), USEPA advised municipalities that they should notify their customers of the presence of levels over 70 nanograms per liter (or parts per trillion) in community water supplies. The LHA is the level, or amount, calculated to offer a margin of protection against adverse health effects to the most sensitive populations. USEPA has not set health advisory levels for the other PFAS chemicals.

28 California State Water Resources Control Board, *Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)*. Available: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html, accessed December 3, 2019.

source of drinking water, therefore, these health advisory levels and notification levels are not presently known to be applicable to levels of PFAS found at the airport and vicinity.

PFAS can be found in fire-fighting foams (referred to as aqueous film-forming foam or AFFF) at airports and has been identified by USEPA as a source of groundwater contamination at airports where firefighting training and activities occur.[29] Accordingly, the SWRCB identified airport facilities in California that have accepted, stored, or used materials that may contain PFAS (in the form of fire suppression foams) and, through the Los Angeles RWQCB, issued an Order in March 2019 to the City of Los Angeles to prepare and submit a preliminary site investigation report of PFAS impacts at LAX.[30]

In response to the March 2019 order, LAWA completed a PFAS site investigation at LAX and submitted a preliminary report to the Los Angeles RWQCB in October 2019.[31] The objective of the investigation was to evaluate the potential presence of PFAS in soil and groundwater at locations at LAX where PFAS-containing chemicals were potentially used or released to the environment. A total of four locations were investigated in response to the order.[32] One of these locations is in proximity to the proposed Taxiway D and Taxiway E improvements associated with Concourse 0 (see Site 4 on Figure 4.5-1). In 1978, a Continental Airlines aircraft experienced a tire blowout and reportedly went off the east end of Runway 6R-24L, resulting in a rupture in the aircraft's fuel tank and ignition of a fire. Water and AFFF solution were used to extinguish the fire.

Of the four locations at LAX that were investigated for PFAS in response to the order, samples from the aforementioned Continental Airlines incident site contained the lowest level of PFAS impacts. PFAS detections at this site were less common and more sporadic, and no trend was observed at depth. The majority of the soil samples taken at the site had non-detectable levels of PFAS compounds. The highest detected concentrations of PFOS and PFOA in soil samples at this location were 1.1 microgram/kilogram (µg/kg) and 0.24 µg/kg, respectively. PFOS and PFOA were detected in groundwater at 2,800 ppt and 320 ppt, respectively.[33] In recent groundwater monitoring reports for the Terminal 1 Fuel Valve Vault and Terminal 2 Fuel Hydrant Loop, PFOS and PFOA were detected in groundwater at concentrations ranging from 1,900 to 2,520 ppt and from 370 to 371 ppt, respectively.[34] Both the Continental Airlines incident site and the Terminal 1 Fuel Valve Vault/Terminal 2 Fuel Hydrant Loop site are located under pavement, preventing direct exposure to PFAS-impacted soil or groundwater (although not precluding percolation through the PFAS-impacted zone). Moreover, as noted above, no drinking water sources are located in proximity to the sites.

On September 15, 2020, the Los Angeles RWQCB issued a second Order to the City of Los Angeles to further evaluate and delineate the lateral and vertical extent of PFAS compounds in soil (to non-detect levels or until groundwater is encountered) and in groundwater (to background or non-detect levels) in areas where previous PFAS compounds were detected.[35] LAWA is in the process of preparing a work plan in compliance with the September 2020 Order.

---

29 U.S. Environmental Protection Agency, *Basic Information on PFAS*. Available: https://www.epa.gov/pfas/basic-information-pfas, accessed October 22, 2019.

30 California Water Boards, Los Angeles Regional Water Quality Control Board, *Water Code Section 13267 Order WQ 2019-0005-DWQ for the Determination of the Presence of Per- And Polyfluoroalkyl Substances at Los Angeles Intl, Airport ID LAX, Los Angeles County, T10000012773*, March 20, 2019.

31 City of Los Angeles, Los Angeles World Airports, *Per- and Polyfluoroalkyl Substances (PFAS) Investigation Report – Los Angeles International Airport*, prepared by Geosyntec Consultants, Inc., October 30, 2019.

32 The Los Angeles RWQCB also requested information regarding PFAS at the Terminal 1 Valve Vault and Terminal 2 Fuel Hydrant Loop site and the Former National Car Rental Facility site, which was included in the Investigation Report.

33 City of Los Angeles, Los Angeles World Airports, *Per- and Polyfluoroalkyl Substances (PFAS) Investigation Report – Los Angeles International Airport*, prepared by Geosyntec Consultants, Inc., October 30, 2019.

34 City of Los Angeles, Los Angeles World Airports, *Second Semiannual 2019 Groundwater Monitoring Report For Terminal 1 & Terminal 2 – Los Angeles International Airport*, prepared by Alta Environmental, January 15, 2020.

35 California Water Boards, Los Angeles Regional Water Quality Control Board, *Water Code Section 13267 Order No. R4-2020-0020 For the Subsurface Investigation of Per- And Polyfluoroalkyl Substances at Los Angeles International Airport*, September 15, 2020.

4.5.4 Thresholds of Significance

A significant hazardous materials impact would occur if the proposed Project would:

Threshold 4.5-1 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.

Threshold 4.5-2 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, create a significant hazard to the public or the environment.

These thresholds are from Appendix G of the State CEQA Guidelines.

4.5.5 Project Impacts

4.5.5.1 Impact 4.5-1

Summary Conclusion for Impact 4.5-1: The proposed Project would not 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 associated with existing soil and/or groundwater contamination remediation activities. This would result in a *less than significant impact* for construction and *no impact* for operations.

As discussed in Section 4.5.1, the potential for the proposed Project to 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 was determined to consist of three types of risks: inadvertent releases of hazardous or regulated materials during construction or operation; releases of hazardous building materials during demolition; and releases of hazardous materials related to existing soil and/or groundwater contamination. As noted in that section, the potential for the proposed Project to create a significant hazard associated with inadvertent releases of hazardous materials or releases of hazardous building materials was determined to be less than significant in the Initial Study. In addition, the potential for the proposed Project to create a significant hazard by encountering contaminated soils or groundwater during construction was also determined to be less than significant in the Initial Study. The discussion below focuses on the potential for the proposed Project to 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 due to interference with the remediation of soil and/or groundwater contamination.

4.5.5.1.1 Construction

Construction of Airfield Improvements

The proposed airfield improvements, including construction of the Taxiway D Extension to the west, reconfiguration of three of the four proposed runway exits from Runway 6L-24R, relocation of the vehicle service road, relocation and/or replacement of navigational aids, and other related enabling projects, would occur in areas of the airport that are not located in proximity to any active contamination remediation activities. Moreover, these improvements would be located at the ground surface and would not require excavation to the water table (groundwater is estimated to be approximately 90 to 100 feet below ground surface)[36] or groundwater dewatering. Therefore, construction of the above-mentioned

[36] Depth to groundwater was estimated based on information in the following: AECOM, *Semi-Annual Groundwater Level Monitoring Summary Report*, *Los Angeles International Airport*, 2017; and Alta Environmental, *Conceptual Site Model Terminal 1 and 2 Fuel Hydrant Vaults*, prepared for Los Angeles World Airports, October 10, 2018.

proposed airfield improvements would not result in releases of hazardous materials related to existing soil and/or groundwater contamination and would have ***no impact*** on ongoing soil and/or groundwater contamination remediation activities.

As discussed in Section 4.5.3.2.2, a past fuel spill at the Terminal 1 Fuel Valve Vault has resulted in soil and groundwater contamination located along the west end of the north airfield between Runway 6R-24L and Taxiway E in close proximity to the proposed easternmost runway exit from Runway 6L-24R. Several groundwater monitoring wells have been installed in the vicinity of the Terminal 1 Fuel Valve Vault site. Remediation at the site is not currently underway and future remediation plans have not been established. Therefore, the proposed Project would not interfere with any known remediation activities. Construction of the proposed easternmost runway exit from Runway 6L-24R could hinder future remediation activities, if such remediation is required to be undertaken. However, because future remediation plans have not been established, the potential of the proposed Project to interfere with future remediation is too speculative for evaluation. Regardless, because the Terminal 1 Fuel Valve Vault site is located in an area that is largely paved, and no drinking water sources are located in proximity to the site, construction of the easternmost runway exit from Runway 6L-24R would not create a significant hazard to the public or the environment from a release of hazardous materials related to existing soil and/or groundwater contamination. Impacts from the easternmost runway exit from Runway 6L-24R would be ***less than significant***.

Construction of Concourse 0

Concourse 0 would be designed to connect with the eastern end of Terminal 1. The Concourse 0 site is currently between 5 and 15 feet below the Terminal 1 apron elevation, which would require construction of retaining walls and placement of fill on much of the Concourse 0 site. As part of the site preparation for Concourse 0, existing infrastructure on the site would be demolished and the area would be cleared prior to fill placement and compaction. The extensive site preparation activities required for Concourse 0 would affect ongoing monitoring and remediation of contamination at the AlliedSignal/Honeywell site. Specifically, site preparation and construction would require the closure and removal of the existing SVE system, including wells, associated pipelines, and small aboveground vessels; removal and/or abandonment of groundwater monitoring and extraction wells; and removal of other underground infrastructure and aboveground equipment associated with the characterization, monitoring, and treatment of contamination at the site. As noted in Section 4.5.3.2, due to low levels of contamination remaining in the soil, the SVE system is only operated periodically. Moreover, Honeywell is working with LAWA to identify potential long-term groundwater remediation system options that would be compatible with the Concourse 0 improvements to enable Honeywell to continue to meet its remediation obligations. Modifications to the groundwater remediation system would be coordinated with, and would be subject to approval by, the Los Angeles RWQCB.

As noted above, Honeywell is required to remediate contamination associated with its past operations and implementation of the Concourse 0 improvements would not prevent Honeywell from undertaking this remediation. Groundwater beneath the site is not used for drinking water purposes. For these reasons, impacts to existing monitoring and remediation systems would not create a significant hazard to the public or the environment from a release of hazardous materials. This impact would be ***less than significant***.

Construction of Terminal 9

There are no past or present hazardous materials releases at the Terminal 9 site or the location of the associated airfield improvements that are currently undergoing characterization or remediation. However, the Terminal 9 site and the airfield improvements are located respectively west and south of the UAL MOC, which is undergoing remediation to recover free product in the groundwater beneath the

site. Construction of Terminal 9 would not directly affect the UAL MOC remediation activities, although construction would require closure of up to three monitoring wells located on the Terminal 9 site. Closure of the monitoring wells would not interfere with free product removal at the UAL MOC site as they are located upstream of the contamination and are only used to conduct groundwater monitoring, not in the remediation process. Moreover, the Terminal 9 facility would not preclude additional monitoring wells from being installed in the future should they be required. Consequently, the removal of these monitoring wells would not have an impact on human health or the environment. Therefore, construction of Terminal 9 and its associated airfield improvements adjacent to a site with known contamination would not result in releases of hazardous materials related to existing soil and/or groundwater contamination and impacts would be ***less than significant***.

Construction of Landside Access Improvements

The landside access improvements include various roadway improvements, some of which would be elevated, requiring construction of retaining walls in some locations and support piles in other locations. There are no ongoing remediation activities along the proposed roadways. However, the new roadway improvements would include a section that is located partially along the eastern boundary of the AlliedSignal/Honeywell site. There are several groundwater monitoring wells along the eastern edge of this site, and construction of this portion of the roadway improvements could require closure of one or more of these groundwater monitoring wells. Closure of monitoring wells would not interfere with remediation at the AlliedSignal/Honeywell site as they are not used in the remediation process. Moreover, the landside access improvements would not prohibit additional monitoring wells from being installed in the future should they be required. Consequently, the removal of these monitoring wells would not have an impact on human health or the environment. Therefore, construction of roadway improvements on and adjacent to a site with known contamination would not result in releases of hazardous materials and the impacts would be ***less than significant***.

Other Areas of Interest

PFAS

As noted above, a preliminary investigation conducted by LAWA did not detect PFAS in the majority of samples taken at the site of a 1978 Continental Airlines incident, although PFOA and PFOS were detected in some samples. This site is located in proximity to the proposed Taxiways D and E improvements associated with Concourse 0. Neither the state nor the federal government has established cleanup levels for PFAS found in soil and groundwater. LAWA is in the process of delineating the lateral and vertical extent of PFAS compounds in soil and groundwater, as required by the Los Angeles RWQCB in their September 2020 Order. Future remedial actions that may be required by the Los Angeles RWQCB are unknown at this time. As PFAS was not detected in the majority of samples at the Continental Airlines incident site, and no remediation activities to address PFAS contamination at the 1978 Continental Airlines site are planned at this time, construction of the improvements to Taxiways D and E associated with Concourse 0 would not damage or physically interfere with ongoing or planned future contamination monitoring or remediation activities. It is possible that the Taxiway D and E improvements could hinder future remediation activities, if such remediation is required to be undertaken. However, because future remediation plans have not been established, the potential of the proposed Project to interfere with future remediation is too speculative for evaluation. Regardless, because the Continental Airlines incident site is located in a paved area, and no drinking water sources are located in proximity to the site, this would not create a significant hazard to the public or the environment from a release of hazardous materials related to existing soil and/or groundwater contamination. Impacts from the Taxiway D and E improvements would be ***less than significant***.

4.5.5.1.2 Operations

Operation of the proposed Project would involve continuation of aircraft operations on the improved north airfield, new passenger accommodations at Concourse 0 and Terminal 9, and reconfigured vehicular access to and from the CTA via the improved roadway system and new APM station. Project operations would not involve excavation, extraction of groundwater, or any activity that could damage or physically interfere with ongoing contamination monitoring or remediation activities. As such, Project operations would not result in releases of hazardous materials and would result in ***no impact*** to soil and/or groundwater contamination monitoring or remediation activities.

4.5.5.1.3 Mitigation Measures

Because the proposed Project would result in a ***less than significant impact*** related to the potential to 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 from a site with known soil and/or groundwater contamination, no mitigation is required for construction or operations.

4.5.5.1.4 Significance of Impact After Mitigation

As indicated above, no mitigation is required to address the potential for the Project to 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 from a site with known soil and/or groundwater contamination. The proposed Project would result in a ***less than significant impact*** for construction and operations.

4.5.5.2 Impact 4.5-2

Summary Conclusion for Impact 4.5-2: Although the proposed Project would be located on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other government databases, the Project would not create a significant hazard to the public or the environment. This would result in a *less than significant impact* for construction and *no impact* for operations.

As identified in Section 4.5.3.1.2, CalEPA has identified a number of data sources that provide information regarding facilities or sites identified as meeting the requirements of Government Code Section 65962.5. These data sources were queried with the following results:

- The Hazardous Waste and Substance Sites List maintained by the DTSC on the EnviroStor website was reviewed, and the proposed Project component sites are not listed.[37]
- The Open Active Leaking Underground Storage Tank Sites contained in the SWRCB's GeoTracker database was queried by zip code and city, and the Project component sites are not listed.[38]
- The list of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit, as provided by CalEPA, was reviewed, and the Project component sites are not listed.[39]

---

[37] California Department of Toxic Substances Control, *Hazardous Waste And Substances Site List (Cortese*). Available: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29, accessed October 15, 2019.

[38] State Water Resources Control Board, *GeoTracker – Open/Active Leaking Underground Storage Tank Search Results.* Available: https://geotracker.waterboards.ca.gov/search?CMD=search&case_number=&business_name=&main_street_name=&city=&zip=&county=&SITE_TYPE=LUFT&oilfield=&STATUS=+Open%2COpen+-+Active%2COpen+-+Assessment+%26+Interim+Remedial+Action%2COpen+-+Eligible+for+Closure%2COpen+-+Inactive%2COpen+-+Referred%2COpen+-+Remediation%2COpen+-+Reopen+Case%2COpen+-+Site+Assessment%2COpen+-+Verification+Monitoring&BRANCH=&MASTER_BASE=&Search=Search, accessed October 15, 2019.

[39] California Environmental Protection Agency, *Sites Identified With Waste Constituents Above Hazardous Waste Levels Outside The Waste Management Unit*. Available: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf, accessed October 15, 2019.

- The list of "active" CDOs and CAOs from the SWRCB was downloaded and reviewed, and the Project component sites are not listed.[40]
- The DTSC list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code contains only two facilities, and the Project component sites are not among them.[41]

As noted in Section 4.5.2, *Methodology*, a government records search was performed by EDR to identify potential areas of groundwater and/or soil contamination within the hazardous materials study area. The EDR search included lists that are additional to the ones identified above. These lists include, but are not limited to, the following:

- The CalEPA Office of Emergency Information's Historic Cortese List includes sites contained in other hazardous waste databases; this list is no longer being updated by the state.
- The Recovered Government Archive Leaking Underground Storage Tank (RGA LUST) database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.
- The SWRCB's Cleanup Program Sites list, formerly known as the Spills, Leaks, Investigations, and Cleanups list, and referred to as the CPS-SLIC list, includes unauthorized discharges from spills and leaks, other than from USTs or other regulated sites.

Although the proposed Project component sites are not included on any of the current CalEPA Cortese list data resources, the AlliedSignal/Honeywell site is listed on the Historic Cortese, RGA LUST, and CPS-SLIC lists and the UAL MOC site is included on the RGA LUST and CPS-SLIC lists. These sites are currently undergoing monitoring and remediation, as described in Section 4.5.5.1. Because they are included on government lists of hazardous materials sites, for purposes of this EIR, the AlliedSignal/Honeywell site and the UAL MOC site are considered to be sites that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

4.5.5.2.1 Construction

Concourse 0, Terminal 9, and a portion of the roadway improvements would be located on sites which are included on lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other government databases. As described in Section 4.5.5.1.1 above, construction of these components of the proposed Project would not have an adverse effect on remediation activities at the listed sites that would create a significant hazard to the public or the environment. Therefore, this impact would be ***less than significant***.

4.5.5.2.2 Operations

Although Concourse 0, Terminal 9, and a portion of the roadway improvements would be located on sites which are included on lists compiled pursuant to Government Code Section 65962.5 or other government databases, operation of these Project components would not involve excavations, extraction of groundwater, or any activity that could damage or physically interfere with ongoing or future contamination monitoring or remediation activities at the listed sites. As such, Project operations would result in ***no impact*** to the public or the environment.

---

[40] California Environmental Protection Agency, *Site Cleanup-Cortese List-Current List.* Available: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx, accessed October 15, 2019.

[41] California Environmental Protection Agency, *Cortese List: Section 65962.5(a)*. Available: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/, accessed October 18, 2019.

4.5.5.2.3 Mitigation Measures

Because the proposed Project would result in a ***less than significant impact*** related to the potential to create a significant hazard to the public or the environment due to the location of Project components on sites included on lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other government databases, no mitigation is required for construction or operations.

4.5.5.2.4 Significance of Impact After Mitigation

As indicated above, no mitigation is required to address the potential for the Project to create a significant hazard to the public or the environment due to the location of Project components on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other government databases. The proposed Project would result in a ***less than significant impact*** for construction and operations.

4.5.6 Cumulative Impacts

Hazardous materials contamination impacts are typically site or area specific, and new projects do not generally interact with other development projects to produce cumulative effects, unless the other development projects are on the same sites or in close proximity to each other. Therefore, the geographic area of the cumulative impacts analysis for hazardous materials includes the proposed Project site and immediately adjacent areas. Table 3-1 in Chapter 3, *Overview of Project Setting*, identifies development projects at or adjacent to LAX. These projects are shown in Figure 3-1. As can be seen in Figure 3-1, with the exception of the United Airlines East Aircraft Maintenance and GSE Project, none of the development projects is located on or near any proposed Project component site and, therefore, the remaining cumulative projects would not result in impacts that are additive to proposed Project impacts with respect to hazardous waste delineation, monitoring, and/or remediation activities associated with past releases of hazardous materials into the environment. Cumulative impacts associated with the United Airlines East Aircraft Maintenance and GSE Project are discussed below.

Both the Terminal 9 component of the proposed Project and the United Airlines East Aircraft Maintenance and GSE Project are located at or adjacent to the UAL MOC site. As noted in Section 4.5.5.1.1, construction of Terminal 9 would require the removal of up to three groundwater wells that are associated with the UAL MOC remediation system. Closure of the monitoring wells would not interfere with free product removal at the UAL MOC site and, consequently, would not have an impact on human health or the environment. Therefore, impacts from construction of Terminal 9 and its associated airfield improvements adjacent to a site with known contamination would be less than significant***.***

Implementation of the United Airlines East Aircraft Maintenance and GSE Project would also have impacts to the UAL MOC remediation system. Under that project, the existing UAL maintenance facility is being reconfigured and redeveloped to better serve and maintain the airline's aircraft and ground support equipment. All of the buildings on the site will be demolished and a new aircraft hangar and GSE facility will be constructed.[42] In association with the United Airlines East Aircraft Maintenance and GSE Project, United Airlines received approval from the Los Angeles RWQCB to abandon six groundwater monitoring wells and one free-product recovery well on the east side of the UAL MOC site, and to temporarily suspend the free product recovery system during project demolition and construction. Upon completion of the project, the system will be re-installed and the remaining wells will be reconstructed and

[42] City of Los Angeles, Los Angeles World Airports, *Final Environmental Impact Report for Los Angeles International Airport (LAX) United Airlines East Aircraft Maintenance and Ground Support Equipment Project*, (SCH 2017121019), Chapter 2 – Project Description, October 2018. Available: https://www.lawa.org/en/lawa-our-lax/environmental-documents/documents-certified/united-airlines-east-aircraft-maintenance.

recommissioned.[43] The Los Angeles RWQCB did not identify any environmental impacts to the long-term remediation of the UAL MOC due to the temporary suspension of the free product recovery system or the abandonment of some of the groundwater monitoring and free-product recovery wells. The temporary suspension and subsequent resumption of remediation activities at the UAL MOC would be carried out under the supervision of the Los Angeles RWQCB, which has assumed lead regulatory authority over this clean-up. Therefore, impacts associated with implementation of the United Airlines East Aircraft Maintenance and GSE Project on the UAL MOC remediation program will be less than significant.

Because impacts of the proposed Project on the UAL MOC remediation program would be less than significant, and disruption of the UAL MOC remediation program from the United Airlines East Aircraft Maintenance and GSE Project will be temporary, the cumulative impact would be ***less than significant***.

4.5.7 Summary of Impact Determinations

Table 4.5-2 summarizes the impact determinations of the proposed Project related to hazardous materials, as described above in Sections 4.5.5 and 4.5.6. Impact determinations are based on the significance criteria presented in Section 4.5.4, and the information and data sources cited throughout Section 4.5.

Table 4.5-2
Summary of Impacts and Mitigation Measures Associated with the Proposed Project Related to Hazardous Materials

Environmental Impacts	Impact Determination	Mitigation Measures	Level of Significance After Mitigation
Impact 4.5-1: The proposed Project would not 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 associated with existing soil and/or groundwater contamination remediation activities. This would result in a ***less than significant impact*** for construction and ***no impact*** for operations.	Construction: Less than Significant Impact Operation: No Impact	Construction: No mitigation is required Operation: No mitigation is required	Construction: Less than Significant Operation: No impact
Impact 4.5-2: Although the proposed Project would be located on sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other government databases, the Project would not create a significant hazard to the public or the environment. This would result in a ***less than significant impact*** for construction and ***no impact*** for operations.	Construction: Less than Significant Impact Operation: No Impact	Construction: No mitigation is required Operation: No mitigation is required	Construction: Less than Significant Operation: No impact

[43] California Water Boards, Los Angeles Regional Water Quality Control Board, *Well Abandonment Approval United Airlines Maintenance Operation Center*, December 6, 2018.

This page intentionally left blank.