

3.7 HAZARDOUS MATERIALS

This EIR section analyzes the potential for adverse impacts on human health and the environment from exposure to hazardous materials located on site due to previous land uses. A hazardous material is defined as any material that due to its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the work place or environment. Hazardous materials include, but are not necessarily limited to, inorganic and organic chemicals, solvents, mercury, lead, asbestos, paints, cleansers, or pesticides that were used in previous activities at the site as well as activities on neighboring sites. Specifically, previous activities at the project site include the operation of former oil or gas wells, and building and grounds maintenance. The Initial Study (Appendix A) identified that the potential for impacts from hazardous materials would be limited to those associated with former uses on site, particularly whether the proposed project would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Issues scoped out from detailed analysis in the EIR include creation of a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials or upset and accident conditions involving the release of hazardous materials into the environment, as the proposed project would not introduce any unusual hazardous materials to the area, and any commercial uses involving the handling or storing of certain amounts of hazardous materials would be required to comply with local, State, and federal regulations; possible safety hazard resulting from hazardous emissions or hazardous material handling in proximity to a school or airport, as the project is not located within 0.25 mile of an existing or proposed school or in proximity to an airport or private airstrip; impairment of emergency response plan implementation, as none of the vehicular access points to the project site are located along major thoroughfares, and no constraints to emergency response plans would result from the proposed project; and exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires since the project site is located in an urban area that is not subject to wildland fires.

Data used to prepare this section were taken from various sources, including but not limited to documentation from asbestos abatement associated with demolition of The Grinder Restaurant and buildings associated with the Huntington Shores Motel; 1995 Phase I Environmental Site Assessment (ESA) prepared for the Huntington Shores Motel site; 1996 Phase II Investigation Report/Remediation Plan; 1997 Letter Report regarding the excavation and disposal of lead-impacted soil on the project site; 1998 Phase I ESA for the project site; 2002 Remediation Plan, Revision 3 (Conditional Use Permit 00-36, Coastal Development Permit 00-09); and 2003 regulatory database search for the project site and surrounding area. Appendix E includes a chronology and summary of the reports prepared for the project site, in addition to

other information on hazardous materials. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

3.7.1 Existing Conditions

The project site is adjacent to the following uses:

- *North:* Atlanta Avenue, beyond which are single- and multifamily residential uses
- *South:* Pacific Coast Highway (PCH), beyond which is the City of Huntington Beach public beach, open space, vehicle parking, and beach-related uses
- *East:* Huntington Street, beyond which is the Hilton Waterfront Beach Resort and the Pacific Mobile Home Park
- *West:* First Street, beyond which are vacant lots, oil production and storage facilities, small apartment units and single-family homes, and a fast food restaurant

Within the general vicinity of the project site, neighboring land uses primarily include mobile homes and single-family homes to the east, the Huntington Beach Pier to the west, the City beach and the Pacific Ocean to the south, and apartment and single-family homes to the north.

Historical Review of Project Site and Adjacent Uses

The Phase I Environmental Site Assessment (available for review at the City) prepared by Aqua Science Engineers in 1998 for the project site included site reconnaissance, and review of files, aerial photographs, and previous environmental documentation to identify former uses on the project site. Past uses of the project site are described in Table 3.7-1.

Table 3.7-1 Historical On-Site Uses

<i>Dates</i>	<i>On-Site Uses</i>
Pre 1927 to 1958	Railroad tracks extending south from the northwestern corner of the project site curved towards the east to the southern corner of the project site, and two rectangular-shaped buildings located at the northern end of the tracts
1932 to 1958	Several small buildings near the western corner of the project site
1947 to 1986	A mobile home park in the vicinity of where the subsequent Huntington Shores Motel and associated restaurant buildings were located. The mobile home park is later extended to the west from Huntington Street along PCH, immediately north of PCH-fronting commercial area.
1950s to 1990	Oil field facilities are present. Aerial photographs from 1966 show a few above-ground storage tanks (ASTs) located approximately 300 feet west of Huntington Street and approximately 700 feet northeast of PCH. Additionally, the same photographs show that all of the property north of the motel, restaurant, and mobile home park is unpaved and undeveloped with some paved roads for oil fields. Aerial photographs from 1983 show that an AST is observed near the middle of the northern end of the project site.
1958 to at least 1966	Railroad tracks, as indicated above, but no structures at the northern end of the tracks

Table 3.7-1 Historical On-Site Uses

<i>Dates</i>	<i>On-Site Uses</i>
1960 to 2000	The Huntington Shores Motel and associated restaurant buildings are located on the western side of the project site along PCH. Aerial photographs from 1975 show that a long rectangular-shaped parking lot on the northwestern border of the subject property along First Street is constructed, and that a square-shaped area of approximately 20,000 square feet at the northwestern corner of the subject property is graded. Aerial photographs from 1981 show that the asphalt paved parking lot for the motel and restaurant appear to have been recently paved. Aerial photographs from 1989 show that all of the mobile homes are removed from the project site. Aerial photographs from 1997 show that a large soil pile was formed on the western side of the project site.
1991 to present	No ASTs remain on site.

The former uses of adjoining properties and surrounding areas were also identified in the 1998 Phase I Environmental Site Assessment through review of historical aerial photographs and environmental impact reports previously prepared. Past uses that once occupied adjoining properties and surrounding areas are described in Table 3.7-2.

Table 3.7-2 Historical Adjacent Uses

<i>Dates</i>	<i>Adjacent Uses</i>
Pre 1960s to present	Single-family homes and apartment buildings located in the areas west, northwest, north, and northeast of the project site.
Pre 1960s to present	Aerial photographs from 1966 show a vacant lot on the northeastern corner of Atlanta Avenue and First Street. The same photograph shows several rectangular-shaped buildings east of the eastern corner of PCH and Huntington Street. Oil wells and above-ground storage tanks on properties west across First Street. Aerial photographs from 1966 show six ASTs located northwest of First Street and north of Walnut Avenue. Aerial photographs from 1981 show nine ASTs located at the same location, approximately 500 feet northeast of PCH.
1960s to present	A large mobile home park in the area east of Huntington Street.
1970s to late 1980s	A gasoline station on the eastern corner of PCH and Huntington Street. Aerial photographs from 1986 show that the gas station was removed, leaving an unpaved graded lot.
1980s to present	City of Huntington Beach facilities and parking located south across PCH. Aerial photographs from 1981 show a fast-food restaurant building constructed and located on the eastern corner of PCH and First Street. Aerial photographs from 1983 show a single-family housing tract located east of the mobile home park across Huntington Street. Aerial photographs from 1989 show the northeastern corner of Atlanta Avenue and First Street being graded for construction and the eastern corner of PCH and Huntington Street being excavated. Aerial photographs from 1991 show an apartment complex constructed on the northeastern corner of Atlanta Avenue and First Street. The Hilton Hotel complex is constructed on the eastern corner of PCH and Huntington Street.

Database Searches

In 2003, Environmental Data Resources, Inc. completed a search of federal, State, and local regulatory databases to determine if any known contaminated sites were located on the property. The project site was identified in the Haznet Database, where data are extracted from the copies of hazardous waste manifests received each year by the California Department of Toxic Substance Control (DTSC). The disposal of asbestos-containing waste as a result of demolition of former structures at the project site warranted its

inclusion in this database. In addition, the databases also identified contamination or potential sources of contamination located off site in the vicinity of the project site. These properties include one Resource Conservation and Recovery Act (RCRIS) hazardous waste generator site, two California Hazardous Material Incident Report System (CHMIRS) sites, six Cortese sites, 10 Leaking Underground Storage Tank (LUST) sites, two Underground Storage Tank (UST) sites, two California Facility Inventory Database (CA FID) UST sites, one Historical UST (HIST UST) site, and nine Haznet sites within approximately one mile of the project site.

A summary of the listed sites, including the project site itself, generated by the EDR report is shown in Table 3.7-3. The EDR report is provided in Appendix E (Hazardous Materials).

Table 3.7-3 Regulatory Database Search Results for Sites within One Mile

<i>Facility Name</i>	<i>Proximity to Project Site (Miles)</i>	<i>Location</i>	<i>Database¹</i>
Capitol Pacific Holdings	N/A	21002 Pacific Coast Highway	HAZNET
West Coast Auto Paint Shop	0.13	303 3rd Street	RCRIS
Huntington Beach Maintenance Yard	0.13	44 Huntington Street	CORTESE LUST UST CA FID HIST UST
City of Huntington Beach	0.13	44 Huntington Street	LUST
Residence	0.13	1301 Monterey Boulevard	UST
Pelican Hill Golf Club	0.13	6195 Pacific Coast Highway	CA FID
Leading Edge Yacht Services	0.13	2439 Pacific Coast Highway	HAZNET
Black Diamond Marine	0.13	2439 Pacific Coast Highway	HAZNET
Leading Edge Yacht Services	0.13	2439 Pacific Coast Highway	HAZNET
Gray Trust/Wells Fargo Bank	0.13	2633 Pacific Coast Highway	HAZNET
Domino Realty	0.13	3333 Pacific Coast Highway	HAZNET
Newport Imports, Inc.	0.13	3100 Pacific Coast Highway	HAZNET
Huntington Pier Colony Homeowners Association	0.13	200 Pacific Coast Highway	HAZNET
Playa Apartments	0.13	401 Atlantic Avenue, No. 12	HAZNET
HB German Car Import	0.13	303 Third Street	HAZNET
Not reported	0.25	204 5 th Street	CHMIRS
United States Postal Service	0.25	316 Olive Avenue	CORTESE
City of Huntington Beach	0.25	122 5 th Street	CORTESE
Huntington Beach Post Office	0.25	316 Olive Street	LUST
Huntington Beach Post Office	0.25	316 Olive	LUST
City of Huntington Beach	0.25	301 Main Street	LUST
City of Huntington Beach	0.25	122 5 th Street	LUST
Terry Buick Inc.	0.25	122 5 th Street	LUST

Table 3.7-3 Regulatory Database Search Results for Sites within One Mile

<i>Facility Name</i>	<i>Proximity to Project Site</i>		<i>Database¹</i>
	<i>(Miles)</i>	<i>Location</i>	
Wind & Sea Surfboards	0.25	520 Pacific Coast Highway	LUST
Wind and Sea Surfboard Shop	0.25	520 Pacific Coast Highway	LUST
Java Jungle	0.25	602 Pacific Coast Highway	LUST
Not reported	0.50	414 11 th Street	CHMIRS
Old Lake Fire Station	0.50	704 Lake Street	CORTESE
Arco (Abandon)	0.50	21302 Pacific Coast Highway	CORTESE
Action Boats	0.50	21622 Coast Highway	CORTESE

Database acronyms:

RCRIS—The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the act. The source of this database is the U.S. EPA.

CHMIRS—The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

CORTESE—This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

LUST—The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

UST—The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

CA FID—The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

HIST UST—Historical UST Registered Database.

HAZNET—The data are extracted from the copies of hazardous waste manifests received each year by the DTSC. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. The source is the Department of Toxic Substance Control.

SOURCE: Environmental Data Resources, Inc., 2003

As shown in Table 3.7-3, 10 LUST cases are within one mile of the project site. Of these 10 cases, all but one (Java Jungle) has been closed (i.e., the tank has been either replaced or removed, and contamination has been remediated). A preliminary site assessment is currently underway at the one remaining facility.

Other Contaminants on Adjacent Properties

The property north of the project site, located at First Street and Atlanta and currently occupied by residential uses, was reportedly occupied by a former gas plant, as identified by an individual interviewed as part of the 1995 site investigation process for the Huntington Shores Motel (HLA 1995). Sanborn Insurance Maps identify the adjacent property as used by Federal Supply Company in 1922 and Richfield Oil Company in 1939 (de Barros and Crull 2002). The map dated 1939 contains buildings indicating oil uses on the property, but no documentation exists to support the existence of a gas plant. If a gas plant did exist on property adjacent to the project site, toxic contaminants associated with gas condensate from a gas plant could remain in the soil. However, these contaminants would be localized on the site and would not be expected to have migrated across First Street through the soil to the project site. The Phase I ESA for the project site did not identify any potential concerns regarding these possible contaminants. As such, these

contaminants are not expected to exist on the northwestern portion of the site or otherwise affect soils on the project site.

Contamination at the Project Site

Environmental concerns at the project site are typical of that of former oil field properties and include residual total petroleum hydrocarbon (oil) contamination in the soil, possible methane (natural gas) emissions, unclosed oil wells, and small quantities of chemical and/or heavy metal-impacted soil. The Phase II Investigation Report prepared in 1996 for the project site identified 10 AST settings, former locations of pipelines and pipeline headers (only one pipeline header was actually found during this field investigation), 20 abandoned oil wells, and one abandoned water well at the project site. In addition, no use, storage, or disposal of hazardous substances or materials was present on the project site at the time the Phase II Investigation Report was prepared. According to the subsequent Phase I analysis prepared in 1998, a site reconnaissance indicated that no USTs and ASTs remained on the project site.

Overview of Site Remediation Process

As the project site is undergoing remediation, and the site remediation process involves several steps to document contamination, remediation, and site cleanup, this section provides an overview of this process to facilitate an understanding of the previous and current investigations. As a first step, a Phase I Environmental Site Assessment (ESA) is used for information purposes by identifying potential environmental impacts related to hazardous materials through historical record searches, visual inspection, aerial photograph review, etc. This assessment is conducted in general accordance with E1527-00 – American Society for Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Initial Site Assessment Process.” The Phase I ESA must be conducted by a qualified environmental professional (e.g., Registered Environmental Assessor, Registered Geologist, Professional Engineer, etc.). The necessity of further investigation (i.e., a Phase II ESA) is based on the findings of the Phase I ESA. A Phase II ESA consists of analytical testing of potentially contaminated soil, groundwater, or other materials. If contamination is identified, then a project sponsor or property owner would enter into a corrective action agreement with the local oversight agency after confirmation of any identified environmental concerns from the Phase II ESA. The local oversight agency is the City of Huntington Beach Fire Department for this project. Concurrence of appropriate remedial action with the oversight agency must be obtained when impacts to soil, groundwater, or other materials have been identified above acceptable local, State, or federal contaminant levels or preliminary remedial goals. The target cleanup levels for the proposed project site are 1,000 milligrams per kilogram (mg/kg) total recoverable petroleum hydrocarbons (TRPH) for residential uses and 2,000 mg/kg TRPH for commercial uses. These remediation goals are in

accordance with City Specification 431-92. Soil remediation generally entails excavation and treatment. Bottom grade soils are then resampled to identify if contamination remains. If results from the samples are below City Specifications, then excavation is halted. If results of the samples exceed City Specifications, then additional soils are excavated and treated. This process is repeated until soil samples are below City Specification criteria. After all contaminated soils have been excavated, areas are backfilled to return the site to grade. Remediation for contaminated groundwater typically involves pumping the water out either for treatment on site or for disposal. The disposal of contaminated groundwater would be carried out in accordance with federal, State, or local regulatory guidelines. Upon completion of the remediation program, approval of a Site Closure Report by the oversight agency is required prior to redevelopment of any site with identified environmental concerns.

Oil-Impacted Soils

The Phase II Investigation prepared in 1996 studied and sampled various locations at the project site that were suspected of potentially containing hazardous materials and/or containing large quantities of oily soil. As the property was part of a former oil field operated by Chevron, the Phase II investigated the locations of former ASTs, sumps, pipelines, and wells. During the field investigation, 60 soil samples were collected from pothole excavations and eight soil borings were advanced at the potential oily soil locations to identify the extent of oily soil at the project site. The site investigation revealed the presence of oil-impacted soil with total recoverable petroleum hydrocarbon (TRPH⁵) levels above allowable limits in several areas. As a result, a soil remediation plan for the project site was prepared. The site investigation and remedial efforts are governed by City of Huntington Beach Specification 431-92, Soil Clean-Up Standard (City Specification 431-92), dated July 30, 1992. The Huntington Beach Fire Department (HBFD) serves as the local oversight agency for soil remediation at the project site.

Figure 3.7-1 illustrates the status of the remediation efforts for oil-impacted soils on the project site. Areas on the site are classified as one of the following: (a) remediation complete; (b) remediation underway; (c) remediation to be completed during project construction; or (d) further investigation necessary. These areas are subsequently referred to in this EIR as areas A through D.

Area A includes remediation completed in the northern portion of the site. In 1999 approximately 200,000 cubic yards of soil material was exported from the northern portion of the project site to the area east of the project site for use as fill material. This remediated fill material was used for the development of the nearby Hyatt Regency Resort. During the soil export activities, the area was sampled

⁵ TRPH is defined as those hydrocarbons that are recovered using a solvent extraction procedure.

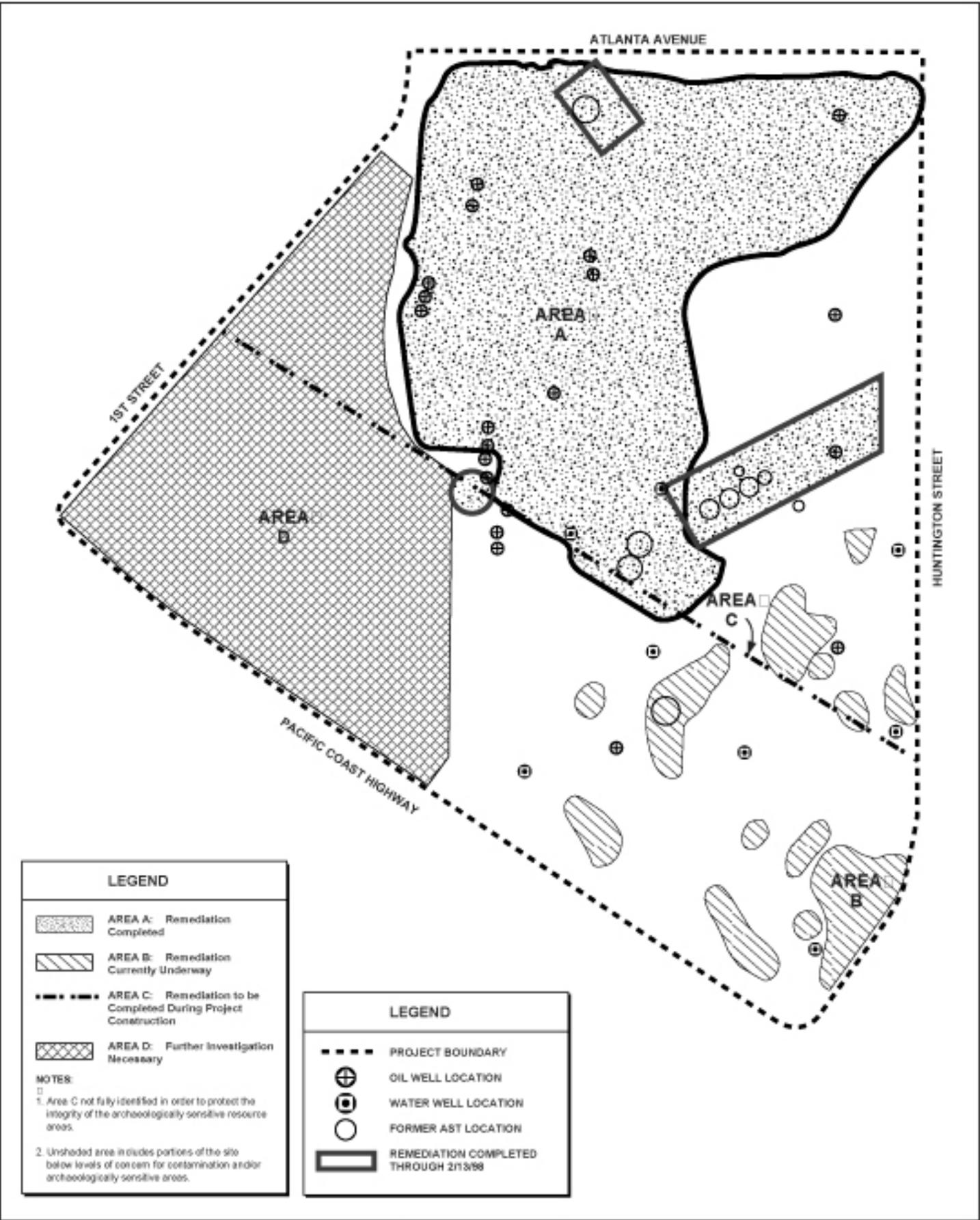


FIGURE 3.7-1
Site Investigation/Remediation Status

Not to Scale

SOURCE: Harding ESE 2002b



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to identify whether oily soil was present. All affected soil exhibiting concentrations above City Specification 431-92 criteria were either excavated from the site or mechanically treated to meet the criteria. The excavations were then backfilled with soil that met City Specification 431-92 criteria. As of October 1999, remediation efforts in this portion of the project site have been completed, although no closure report has been submitted to the local oversight agency.

In addition to the soil export to the Hyatt Regency Resort site, Area A also includes limited remediation operations performed by Chevron beginning in 1997 and continuing through February 1998. This remediation occurred in three discrete areas identified on Figure 3.7-1 and involved the surgical excavation of the oil-impacted soil areas identified in the Phase II Investigation. Field personnel were present onsite to provide oversight of the remediation activities. Approximately 20,000 cubic yards of oily soil was excavated from the project site during this timeframe. The oil-impacted soils were then mechanically blended with clean fill soil to achieve TRPH concentrations in compliance with those specified in City Specification No. 431-92. After treatment, these soils were used to backfill the excavated areas.

Soil remediation is currently underway by Chevron in the southeastern portion of the site (Area B), and remediation efforts are expected to be completed in early 2004. According to the site investigation history provided by Harding ESE in revision 3 to their remediation plan for the project site, this remediation is the result of additional soil investigation performed on behalf of Chevron from July to September 1999, to evaluate if further soil remediation efforts were required. Trenches were cut, and soil samples were collected at shallow and deep locations within the trenches to test whether their TRPH concentrations were above City Specification 431-92 criteria. Approximately 87 shallow soil and 129 deep soil samples were taken in the southeastern portion of the project site. Of the shallow soil samples taken, 23 samples were identified that exceeded the TRPH concentration standard of City Specification 431-92, where TRPH concentrations ranged from 1,000 mg/kg to 130,000 mg/kg. Of the deep soil samples taken, 17 samples were identified that exceeded the TRPH concentration standard of City Specification 431-92, where TRPH concentrations ranged from 1,200 mg/kg to 68,000 mg/kg. In addition, six of the 17 deep soil samples with contamination consisted of oily soil. The remediation plan estimated a total of 12,686 cubic yards of oily soil to be excavated at the site in order to meet identified remediation goals of 1,000 mg/kg in residential areas and 2,000 mg/kg in commercial areas. Chevron has retained Blasland Bouck & Lee, Inc (BBL) to oversee and complete site remediation.

Remediation to be completed during project construction includes locations in Area C, as the current remediation effort does not address all remaining contamination on the site. The areas identified as archaeologically sensitive still require remediation, as does the area surrounding the existing water pipeline

located within the site. Remediation of these areas is proposed to occur concurrent with project construction since remediation of the areas would entail grading of the site. The location of the archaeologically sensitive areas is not disclosed in this EIR in order to protect the integrity of the resource. As such, the precise location of this portion of Area C is not identified.

The area where further investigation is necessary is Area D, in the southwestern portion of the site, where the former Grinder Restaurant and Huntington Shores motel were located. These areas do not include identified former oil wells or storage tanks. Sampling completed as part of the 1996 Phase II Investigation delineated the areas where remediation was necessary. Test results from that sampling effort did not detect that the contamination on the northern and eastern portions of the site had migrated to this area on the western portion of the site. BBL intends to perform sampling in Area D to ensure that all potential contamination has been identified.

According to the 2002 Remediation Plan, further soil investigations were conducted on the project site to evaluate the depth of petroleum hydrocarbon-impacted soils near groundwater. The detailed report (i.e., boring logs, etc.) on this soil investigation has not been completed. Three samples were extended 4 to 5 feet past groundwater in three of the areas previously identified as containing elevated concentrations of petroleum hydrocarbons. In cases where petroleum hydrocarbons in the soil have extended to groundwater, the extent of soil impacted with petroleum hydrocarbons is generally limited to within one to two feet of first encountered groundwater and the petroleum hydrocarbon impacted soil appears to have minimal impact on groundwater (Harding ESE 2002b). As discussed in Section 3.8 (Hydrology and Water Quality), groundwater beneath the project site is also brackish due to saltwater intrusion, and, as such, is not used as potable water by the City.

Lead-Impacted Soils

Aside from oil-impacted soils, the 1996 Phase II Investigation also indicated the detection of lead-impacted soil in the south-central portion of the project site. In May 1997, approximately 10 cubic yards of lead-impacted soil were excavated to a depth of approximately 4 feet from a 12-foot by 7-foot area at the project site. All soil samples collected from the excavation, following the removal of the impacted soil, contained soluble lead at concentrations below the California Code of Regulations (CCR) Title 22 action level of 5 parts per million (ppm). The excavation area was backfilled with clean native soil located on the project site. In June 1997, the excavated lead impacted soil was transported under a non-Resource Conservation and Recovery Act (RCRA) hazardous waste manifest to the Laidlaw Class I Landfill in Buttonwillow, California. Completion of removal of lead-impacted soil has also been documented (BBL 1997).

Asbestos

The now-demolished Huntington Shores Motel and associated buildings, and the Grinder Restaurant that were formerly located on the project site were constructed in 1960, and the materials used for the construction of these buildings contained asbestos. In year 2000, the asbestos containing materials from these buildings were removed and disposed. Asbestos removal from the Huntington Shores Motel buildings occurred in January and February 2000. All work was performed in accordance with all federal, State, and local regulations, under the supervision of an environmental consultant. Asbestos abatement and removal activities for the Grinder Restaurant began in late 2000, followed by demolition of the restaurant. No residual asbestos contamination remains from these uses. Completion of asbestos abatement is detailed in the final clearance reports (Marcor 2000 and BAS 2000b).

PCBs

According to the 1998 Phase I ESA, three small transformers mounted on a utility pole located on the western part of the project site could contain polychlorinated biphenyls (PCBs), but the transformers appeared to be in good condition and not leaking. Additionally, the report identified that a metal electrical enclosure located on the western part of the project site could possibly contain a transformer that could contain PCBs. The metal enclosure was observed partially submerged in standing water, which could corrode any transformer that may be contained inside of the enclosure. The utility poles have been removed by Southern California Edison. The metal enclosure remains on the site, but there is no source of electricity to the enclosure.

Other Chemicals and Gases

Low concentrations of 2-butanone, acetone, and styrene, which are very odorous volatile organic compounds (VOCs), were detected in soil samples collected in the northern half of the project site during the 1996 Phase II Site Investigation. All three chemicals were several orders of magnitude below the applicable U.S. Environmental Protection Agency preliminary remediation goals (PRGs). The Phase II investigation also collected one soil sample in the southern central portion of the proposed residential component area that had a pH of 4.7, which was not representative of the other samples taken at the project site that ranged in pH values from 7.0 to 9.6. A substance is considered hazardous by virtue of its corrosivity if the pH is less than 2.0 (HLA 1996). Thus, with a pH of 4.7, this soil sample result is not indicative of hazardous contamination for this sample. Mercury was detected in a soil sample collected from the northeastern portion of the project site, although it was not detected in the extract at or above the laboratory detection limit. As such, the concentration of mercury at the project site was not considered to be hazardous based on standards for detection.

The site is also entirely within a methane gas overlay district designated by the City. As such, methane gas, commonly known as natural gas, may underlay the site. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable substance, and human health risks associated with natural gas poisoning. Special development regulations apply to projects located in methane overlay districts.

3.7.2 Regulatory Framework

The management of hazardous materials and hazardous wastes, which includes chemicals, radioactive, and biohazardous materials, is accomplished pursuant to numerous laws and regulations at all levels of government.

Federal

Primary federal agencies with responsibility for hazardous materials management include the Environmental Protection Agency (EPA), Department of Labor (Federal Occupational Health and Safety Administration [OSHA]), Department of Transportation (DOT), and Nuclear Regulatory Commission (NRC). Major federal laws and issue areas include the following statutes (and regulations promulgated there under):

- *Resources Conservation and Recovery Act (RCRA)*—hazardous waste management
- *Hazardous and Solid Waste Amendments Act (HSWA)*—hazardous waste management
- *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*—cleanup of contamination
- *Superfund Amendments and Reauthorization Act (SARA)*—cleanup of contamination
- *Emergency Planning and Community Right-to-Know (SARA Title III)*—business inventories and emergency response planning

State

Primary State agencies with jurisdiction over hazardous chemical materials management are the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB). Other State agencies involved in hazardous materials management are the Department of Industrial Relations (State Occupational Health and Safety Administration [OSHA] implementation), State Office of Emergency Services (OES—California Accidental Release Prevention implementation), Department of Fish and Game (DFG), Air Resources Board (ARB), Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment (OEHHA—Proposition 65 implementation), and the California Integrated Waste Management Board (CIWMB).

Hazardous chemical and biohazardous materials management laws in California include the following statutes (and regulations promulgated thereunder):

- *Hazardous Materials Management Act*—business plan reporting
- *Hazardous Waste Control Act*—hazardous waste management
- *Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)*—releases of and exposure to carcinogenic chemicals
- *Hazardous Substances Act*—cleanup of contamination
- *Hazardous Waste Management Planning and Facility Siting (Tanner Act)*
- *Hazardous Materials Storage and Emergency Response*
- *California Medical Waste Management Act*—medical and biohazardous wastes

State regulations and agencies that are specifically applicable to the project site include the Hazardous Materials Management Act and the Occupational Health and Safety Administration, which are further described below.

Hazardous Materials Management Act

A hazardous material is any substance that possesses qualities or characteristics that could produce physical damage to the environment and/or cause deleterious effects upon human health (Title 22, CCR). The Hazardous Materials Management Act (HMMA) requires that businesses handling or storing certain amounts of hazardous materials prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure require HMBPs. Plans must be prepared prior to facility operation and are reviewed/updated biennially (or within 30 days of a change).

Occupational Health and Safety Administration (OSHA)

Site safety requirements are generally based on the specifications of Cal-OSHA. Applicable specifications prepared by OSHA related to earth resources consist of Section 29 CFR Part 1926 (Department of Labor 1989), which focuses on worker safety during excavation, shoring, and trenching.

Local Regulations

General Plan Hazardous Materials Element

The City of Huntington Beach General Plan Hazardous Materials Element identifies various policies and programs addressing hazards from hazardous materials and hazardous waste, and the potential methods to reduce risks associated with those hazards. The key goal of the Hazardous Materials Element is to “reduce, to the greatest degree possible, the potential for harm to life, property and the environment from hazardous materials and hazardous waste.” Since the site would not use substantial quantities of hazardous materials or generate hazardous waste, none of the goals and objectives in this element would be applicable to the proposed project.

General Plan Coastal Element

The City of Huntington Beach Coastal Element identifies policies to ensure the community’s public health and safety from hazards. Table 3.7-4 identifies goals and objectives presented in the Coastal Element of the General Plan related to energy that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project’s consistency with the policies adopted in support of these goals and objectives.

Table 3.7-4 General Plan Coastal Element—Policies Applicable to Hazardous Materials

<i>Policy</i>	<i>Project Consistency</i>
Goal C 10 Minimize risks to life and property in areas of high hazards (e.g. geologic, flood and fire) within the Coastal Zone and ensure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.	Conformance with implementing policy, as discussed below, results in conformance with this goal.
Objective C 10.1 Identify potential hazard areas in the City and manage/mitigate potential risks and impacts through land use regulation, public awareness and retrofitting where feasible.	Conformance with implementing policy, as discussed below, results in conformance with this objective.
Policy C 10.1.9 Maintain and revise as necessary, standards of construction (consistent with this LCP) within identified Methane Overlay Districts.	Section 3.7.4 (Project Impacts) discusses potential hazards that could result because of the proposed project’s location in a Methane Overlay District. The project would comply with City specifications necessary to maintain standards of construction required within the Methane Overlay District.

City Specification 431-92

The City of Huntington Beach Specification 431-92, Soil Clean-Up Standard (City Specification 431-92), dated July 30, 1992 governs investigation and remedial efforts of contaminated soils. The Huntington Beach Fire Department (HBFD) is the local oversight agency for soil remediation. Depending on the history of a site and other environmental factors submitted, a developer may be required to demonstrate that the soil meets the Soil Clean-Up Standard. If soil remediation is required, a remediation plan is required to be submitted to the City Planning, Public Works, and Fire Department for review and approval in accordance with City Specification No. 431-92. Soil cleanup standards for TRPH-impacted soils are set at less than 500 mg/kg and 1,000 mg/kg for residential and commercial sites, respectively. However, at sites where EPA Test Methods 8015M, 8020 and 8270 are met, as expected at the project site, the soil cleanup standard is less than 1,000 mg/kg for residential sites and 2,000 mg/kg for commercial sites.

3.7.3 Thresholds of Significance

Impacts of the proposed project on hazards would be considered significant if the following were to occur:

- Project is 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, creates a significant hazard to the public or the environment

3.7.4 Project Impacts

Although the site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, due to the site history, for the purposes of this analysis, hazards to the public would be considered significant if the project construction or operation would increase the frequency or severity of exposure to a health hazard from existing or former on-site or adjacent uses.

Impact HAZ-1 Grading and excavation of the site could expose construction personnel and the public to contamination present in the soil associated with former on-site uses.

Grading and excavation activities associated with project development at the proposed project site could result in the exposure of construction personnel and the public to hazardous substances in the soil. Remediation activities would occur during grading and excavation in the areas of archaeological sensitivity and in the area surrounding the existing water pipeline that would be relocated as part of the proposed project. Receptors could be exposed to hazardous materials from any of the following:

- Potential residual contaminants in areas already remediated or currently undergoing remediation

- Contaminated areas near the water line and archaeological sensitive areas
- Potential unidentified contamination in the southwestern portion of the site

Exposure pathways include the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

Environmental concerns at the project site primarily stem from previous oil production activities and former structures. As is typical of former oil field properties, construction activities involving grading and excavation could expose workers to contaminated soils and other hazards associated with abandoned oil wells, including the potential presence of methane, which is commonly associated with abandoned oil wells. The standard conditions of approval for the City of Huntington Beach include compliance with all applicable State and local regulations pertaining to abandonment of oil wells and remediation of associated hazards. City of Huntington Beach requirements include City Specification 422, which in addition to all procedures contained therein, requires that an applicant obtain a permit to abandon or re-abandon each oil well from the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) prior to commencing any operations (the DOGGR would, therefore, act as a responsible agency for any actions pertaining to oil well abandonment); City Specification 429, which specifies requirements for permits for construction within methane districts (i.e., in the vicinity of abandoned oil wells), including the provision of methane barriers for structures; and City Specification 431-92, which establishes soil cleanup standards. Compliance with all applicable State and local regulations and permit conditions, minimizes risks during construction associated with oil contamination at the project site.

As described in Section 3.7.1 (Existing Conditions), asbestos contamination at the project site in the areas where the former Huntington Shores Motel and Grinder Restaurant were located, and lead contamination in the south-central portion of the project site, have been remediated according to federal, State, and local regulations. Furthermore, the presence of low concentrations of three VOCs (2-butanone, acetone, and styrene) in the soil located in the northern half of the project site is not considered an environmental concern, as the concentrations of all three chemicals are several orders of magnitude below U.S. Environmental Protection Agency preliminary remediation goals. In addition, the presence of a low pH in one soil sample and mercury in another soil sample taken from the project site are not considered hazardous by virtue of their levels. As such, impacts during construction associated with soil contamination from

asbestos, lead, VOCs, mercury, and low pH levels, with respect to the areas on-site where these contaminants have been identified below regulatory limits, are considered to be less than significant.

As discussed in Section 3.7.1 (Existing Conditions), exposure of construction personnel and the public to hazardous substances could occur at the project site in relation to potential soil contamination from PCBs associated with former transformers and electrical enclosures. As previously discussed, three transformers mounted on a utility pole and a metal electrical enclosure on the western portion of the project site were observed on site. The metal enclosure remains on the site. However, it has not been determined if this enclosure contains a transformer or other unit that could result in PCB contamination. As such, the risk exists for residual contamination of the soil resulting from PCB leakage, and this impact would be potentially significant.

Due to the site history, the potential remains for soil contamination to be present. Residual oil could be present in the areas remediated, and this cannot be confirmed until closure reports have been submitted and accepted by the City Fire Department that verify the site has been satisfactorily remediated. Soil contamination could occur from various sources, although the primary concern is residual oil contamination. As noted above, PCBs may also be present in the soil in the location of the metal electrical enclosure. In addition, full characterization of the soils in the southwestern portion of the site has not been completed. The site cleanup process overseen by the City of Huntington Beach Fire Department would ensure that soils are characterized for potential contamination and that remediation is completed in compliance with City Specification 431-92. Further, once the area adjacent to the existing water main and areas of archaeological sensitivity have been remediated as part of project construction, verification of successful remediation in these areas would be necessary. Residual contamination would remain a possibility in these areas until closure reports are submitted that verify the site has been remediated, and impacts would be potentially significant.

While not anticipated once closure reports have been submitted, the possibility remains for unidentified soil contamination (which were not encountered during the soil sampling activities), or for unidentified underground storage tanks to be encountered during grading or excavation activities associated with the proposed project. It is possible that underground tanks may have been in use at the project site prior to permitting and record keeping requirements.

If any unidentified sources of contamination are encountered during grading or excavation, the removal activities required could pose health and safety risks, such as the exposure of workers, materials handling personnel, and the public to tank contents, hazardous materials, or vapors. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. In

addition, exposure to contaminants could occur if these contaminants migrated from the contaminated zone to surrounding areas either before or after the surrounding areas were developed, or if contaminated zones were disturbed by future development at the contaminated location. Although it is not anticipated, due to the extensive testing, characterization and remediation already completed to date, the potential exposure of construction personnel or the public to remnant hazardous substances from former on-site uses and facilities at the project site exists, and this would be a potentially significant impact.

Impact HAZ-2 Grading and excavation of the site could result in damage to existing abandoned oil wells.

As discussed in Section 3.7.1 (Existing Conditions), 20 abandoned oil wells are located throughout the project site. Wells were re-abandoned in accordance with DOGGR standards between 1997 and 1999. Because development would occur over a majority of these wells with the proposed project, the potential exists for grading and excavation activities to damage these abandoned oil wells during construction of the project. In addition, the proposed underground parking structures serving the project would extend down to approximately 22 feet below ground level. There is the possibility that some abandoned oil wells at the site may be located above the proposed floor grade of these structures. In this case, these abandoned oil wells would need to be cut and reabandoned. If the existing oil wells are damaged, health and safety risks could be posed to construction workers and the public through exposure to well contents (by direct dermal contact and/or ingestion) or vapors, as well as contamination of the soil at the project site. In addition, soil contamination resulting from damage to existing abandoned oil wells could also spread from the contaminated zone to surrounding areas either before or after the surrounding areas are developed. As such, impacts associated with risks from existing abandoned oil wells on the project site are considered to be potentially significant.

Impact HAZ-3 No residual contamination is anticipated that would affect visitors and residents of the proposed project.

Although remediation of oil-impacted soils at the project site resulting from former oil production activities have mostly been completed, there remains a possibility that some contaminated soil could remain that may not have been detected. Remediation remains underway, and some remediation would occur during project construction in conjunction with monitoring of the areas of archaeological sensitivity and relocations of the existing water pipeline. Due to the migratory nature of oil in the soil, the risk remains for oil contamination to exist in soil areas that have not been previously trenched for sampling and investigation. Impact HAZ-1 identifies risks to construction workers and the public due to potential on-site contaminants. Mitigation measures detailed below would ensure that any remaining contamination risks are addressed during grading and excavation activities. As such, any residual oil contamination remaining in the soil would be detected

and properly mitigated prior to operation of the proposed project. Therefore, impacts associated with residual oil contamination at the project site during project operations would be less than significant.

3.7.5 Cumulative Impacts

This cumulative impact analysis considers development of the proposed project, in conjunction with other development within the vicinity of the project in the City of Huntington Beach. Risks associated with hazardous materials are largely site specific and localized, and are thus limited to the project site. Additionally, site-specific investigations would be conducted at sites where contaminated soils or groundwater could occur to minimize the exposure of workers to hazardous substances. As such, the potential for cumulative impacts to occur is limited.

The related development projects in the City of Huntington Beach include uses similar to the proposed project, such as hotel, retail, and residential. Related development in the City and the adjacent communities could result in development on land previously used for oil production activities, and/or the demolition of existing structures, which may contain hazardous materials. Adherence to applicable regulations and guidelines pertaining to abatement of, and protection from, exposure to oil, asbestos, lead, and other hazardous materials would ensure that impacts from those activities would not be cumulatively considerable.

Development of cumulative projects could expose construction workers and the general public to potentially hazardous substances. For example, if demolition of existing buildings is required, short-term increases in hazardous materials generation, due to the presence of lead-based paints and asbestos-containing materials in existing facilities could occur. However, projects would be required to comply with applicable federal, State, and local regulations. All demolition activities that would involve asbestos or lead based paint would comply with SCAQMD Rule 1403 and OSHA Construction Safety Orders that would ensure hazardous materials impacts would be less than significant. Site-specific investigations would be conducted at sites where contaminated soils could occur to minimize the exposure of workers to hazardous substances. Adherence to these requirements would ensure that impacts from exposure to substances in the soil would not be cumulatively considerable. Since the proposed project would not require the demolition of any structures on the project site, the project would not contribute to this cumulative impact.

3.7.6 Mitigation Measures and Residual Impacts

The following standard City requirements (CR) would apply to the project.

- CR HAZ-A *Prior to issuance of grading permits, the project shall comply with all provisions of the Huntington Beach Fire Code and Fire Dept. City Specifications 422 and 431 for the abandonment of oil wells and site restoration.*
- CR HAZ-B *Prior to the issuance of grading permits and during construction, the project shall comply with all provisions of the HBMC Section 17.04.085 and Fire Dept. City Specification 429, Methane District Building Permit Requirements.*
- CR HAZ-C *The development shall comply with all applicable provisions of the Municipal Code, Building Division, and Fire Department as well as applicable local, State and Federal Fire Codes, Ordinances, and standards.*

In addition to the standard City requirements listed above, mitigation measures (MM) would be required to address project impacts. The following mitigation measures would be required to address potentially significant impacts associated with exposure of construction personnel and the public to contaminated soil, as described under Impact HAZ-1. The overall intent of these mitigation measures is to ensure remediation of contaminated soils prior to proposed development.

- MM HAZ-1 *Prior to the issuance of a grading permit, a Registered Environmental Assessor shall perform a site inspection to identify the potential for presence of PCBs on the site. If the potential for PCBs exists, then the Applicant shall, in consultation with the City of Huntington Beach, sample soil surrounding the affected areas to identify the extent of contamination. Contamination shall be remediated in accordance with MM HAZ-3 and MM HAZ-4.*
- MM HAZ-2 *Prior to the issuance of a grading permit, sampling shall be performed in the area identified in Figure 3.7-1 as “Area D.” The extent of sampling shall be determined by the Huntington Beach Fire Department as that which is appropriate to characterize the extent of any potential contamination in Area D. Contamination shall be remediated in accordance with MM HAZ-3 and MM HAZ-4.*
- MM HAZ-3 *Prior to issuance of a grading permit, the Applicant shall, in consultation with the City of Huntington Beach and other agencies, as required, formulate a remediation plan for further soil contamination that exists on the project site. The plan shall include procedures for remediation of the project site to the City of Huntington Beach standards. Plans shall be submitted to the Planning, Public Works, and Fire Departments for review and approval in accordance with City Specification No. 431-92. The plan shall include methods to minimize remediation-related impacts on the surrounding properties, including processes by which all drainage associated with the remediation effort shall be retained on site and no wastes or pollutants shall escape the site and requirements to provide wind barriers around remediation equipment.*

Qualified and licensed professionals shall perform the remediation activities and all work shall be performed under the supervision of the City of Huntington Beach.

MM HAZ-4 Closure reports or other reports acceptable to the City Fire Department that document the successful completion of required remediation activities for contaminated soils, in accordance with City Specification 431-92, shall be submitted and approved by the City Fire Department prior to issuance of grading permits for site development. No construction shall occur on-site until reports have been accepted by the City. Closure reports will not be required in the area identified in Figure 3.7-1 as "Area C" until remediation of this area has occurred as part of project construction; these reports will be required pursuant to MM HAZ-6. If remediation is necessary pursuant to MM HAZ-3, then grading permits for this remediation shall be issued.

MM HAZ-5 In the event that previously unknown soil contamination that could present a threat to human health or the environment is encountered during construction, construction activities in the immediate vicinity of the contamination shall cease immediately. A risk management plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., City of Huntington Beach Fire Department). A site health and safety plan that meets OSHA requirements shall be prepared and in place prior to the commencement of work in any contaminated area. The developer shall ensure proper implementation of the health and safety plan.

MM HAZ-6 Closure reports documenting the successful completion of required remediation activities for (1) areas adjacent to the existing water main on site and (2) areas of archaeological sensitivity shall be submitted and approved by the City Fire Department prior to issuance of building permits in these areas.

The following mitigation measures would be required to address potentially significant impacts associated with damage to existing abandoned oil wells at the project site, as described under Impact HAZ-2.

MM HAZ-7 Where construction is proposed over abandoned oil wells, the developer shall consult with DOGGR to determine if plug or replug of wells is necessary. Prior to the issuance of grading permits, the Applicant shall submit evidence of consultation with DOGGR indicating wells have been plugged or abandoned to current DOGGR standards.

MM HAZ-8 In the event that abandoned oil wells are damaged during construction, construction activities shall cease in the immediate vicinity immediately. Remedial plugging operations would be required to re-plug the affected wells to current Department of Conservation specifications. Depending on the nature of soil contamination, if any, appropriate agencies shall be notified (e.g., City of Huntington Beach Fire Department). The developer shall ensure proper implementation of the reabandonment operation in compliance with all applicable laws and regulations.

Implementation of MM HAZ-1 through MM HAZ-8 would address risks during construction due to previous uses of the project site. Impacts associated with hazards and hazardous materials would be reduced to a less-than-significant level. Impact HAZ-3 would be less than significant, as described above.