

## **4.9 HAZARDS AND HAZARDOUS MATERIALS**

### **4.9.1 INTRODUCTION**

This section analyzes the potential impacts of any existing environmental safety hazards that may adversely affect the proposed Project. Information for this analysis was obtained from the *EDR Radius Map™ Report with Geo Check* (EDR Report), prepared by Environmental Data Resources, Inc. (EDR) in March 2009, and on information about the Newport Banning Ranch property provided to the property owner and their representatives. The Executive Summary of the EDR Report is included in this document as Appendix H; the report in its entirety is on file with the City of Newport Beach and is available for review during regular business hours.

### **4.9.2 REGULATORY SETTING**

A “hazardous material” is defined by the California Environmental Protection Agency as a material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released (Title 26 California Code of Regulations [CCR], §25501). A material is also considered hazardous if it appears on a list of hazardous materials prepared by a federal, State, or local agency. Specific chemical and physical properties, including toxicity, ignitability, and reactivity, can cause a substance to be considered hazardous (22 CCR 66261.20-66261.24).

Because hazards and hazardous materials management involve diverse topics and overlapping agency jurisdiction, for ease of readability this section is organized to describe regulatory oversight by topic, rather than by jurisdiction.

#### **Regulatory Oversight of Oil Field Operations**

No past or present oil field activities have occurred on the 13.7-acre portion of the Project site. However, the park access road is proposed within a 5.2-acre portion of the Newport Banning Ranch property. There are no active or planned oil operations within the 5.2-acre portion of the Project site. Oil field operations on the 401-acre Newport Banning Ranch property are governed by regulations of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The DOGGR has specific guidelines for the abandonment, or reabandonment if necessary, of oil wells. DOGGR also has a process called the Construction Site Review that must be followed for oilfields that are abandoned for future development purposes.

The property has a history of environmental oversight by both the State Regional Water Quality Control Board – Santa Ana Region (Santa Ana RWQCB) and the Orange County Health Care Agency (OCHCA). Since about 1992, both agencies have been involved in overseeing certain aspects of cleanup activities and operations. The lead regulatory agency for Newport Banning Ranch – the Santa Ana RWQCB – has approved a Remedial Action Plan and is overseeing remediation efforts to recover an isolated pocket of crude oil (outside of the boundaries of the Sunset Ridge Park site). This remediation area is not in or near the 5.2 acre portion of the Newport Banning Ranch property being used to access the Sunset Ridge Project site. No other area currently requires remediation under its present use as an operating oilfield.

Because the oil operations predated the establishment of the California Coastal Act and other related regulatory definitions and codes, oilfield operations at the property were granted a permit exemption by the California Coastal Commission in 1973 that covers ongoing and future oil

production operations including abandonments and equipment/pipeline removals and cleanup as exempt activities (Geosyntec 2009).

The existing oversight structure, described above, is expected to continue through any future oil field abandonment and remediation activities.

### **Hazardous Materials Transportation Act**

The Hazardous Materials Transportation Act administered by the U.S. Department of Transportation governs the transport of hazardous materials, such as contaminated soil, asbestos, or lead-containing materials. The California Department of Transportation (Caltrans) implements the federal regulations published as Title 49 of the Code of Federal Regulations (CFR), which is known as the Hazardous Materials Transportation Act. These laws regulate the handling and transport of hazardous waste materials.

### **City of Newport Beach**

#### ***General Plan Safety Element***

The primary goal of the Safety Element is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from natural and human-induced hazards. The City's Safety Element recognizes and responds to public health and safety risks that could affect Newport Beach residents. The Safety Element specifically addresses coastal hazards, geologic hazards, seismic hazards, flood hazards, wildland and urban fire hazards, hazardous materials, aviation hazards, and disaster planning. These goals and policies are provided in Table 4.1-2 in Section 4.1, Land Use and Related Planning Programs, with a Project consistency analysis. The Project's consistency with the City's Coastal Land Use Plan and the California Coastal Act is evaluated in Tables 4.1-3 and 4.1-4, respectively, in Section 4.1.

### **4.9.3 EXISTING CONDITIONS**

The EDR Report identifies sites with known or potential environmental issues related to hazardous materials or wastes within a two-mile radius of the Project site based on a search of federal, State, local, tribal, and other databases. The Project site was not listed on any of the databases searched by EDR.

The EDR Report identifies database listings for the Project area. There were approximately 350 database listings reported on surrounding properties within the 2-mile search radius of the Project site. Listed sites include both permitted facilities whose operations use, produce, or transport hazardous materials, and the locations of reported releases and/or clean up operations (remediation). A single site can be listed in multiple databases. The Project site is located within an urbanized area and is immediately bordered by multi-family residential developments, roads, oil field operations and undeveloped open space. There are a variety of listed business types in the search area, including but not limited to gas stations, auto repair shops, industrial uses, manufacturers, and dry cleaners.

The following database listings were used in preparation of the EDR Report:

- Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned (CERCLIS-NFRAP),
- Orange County Industrial Site,

- Resource Conservation and Recovery Act – Large Quantity Generator (RCRA-LQG),
- Underground Storage Tank (UST), California Facility Inventory Database UST, and the Statewide Environmental Evaluation and Planning System UST (UST, CA-FID UST, and SWEEPS UST),
- Facility Index System (FINDS),
- Aerometric Information Retrieval System (AIRS),
- Integrated Compliance Information System (ICIS),
- Spills, Leaks, Investigations, Cleanup (SLIC), and
- Hazardous Waste Information System (HAZNET).

### **Newport Banning Ranch Background and Existing Land Uses**

Since 1944, oil operations, including exploration, development and production, have been continuously conducted (Geosyntec 2009). The property is within the 1,125-acre West Newport Oil Field, which is located along the Newport-Inglewood Fault System between the Cities of Huntington Beach and Newport Beach, and lies near the southwestern edge of the Los Angeles Basin. Oil was reportedly discovered in the West Newport Oil Field in 1943 with the drilling of the Banning #1 on the Newport Banning Ranch property. The majority of the property has been developed for oil operations and is currently in active oil and gas production operations. At present, the property contains over 470 producing/potentially producing and abandoned oil well sites and related infrastructure. Of the approximately 470 oil well sites, the City operates 16 wells and an oil processing facility at the West Coast Highway entrance area of Newport Banning Ranch. The West Newport Oil Company (the current operator of the oil field) has approximately 90 producing/idle oil wells available for oil operations with approximately 50 oil wells operational at any one time (Geosyntec 2009).

The proposed Sunset Ridge Park would be accessed via the Newport Banning Ranch property to the west. Within that portion of Newport Banning Ranch proposed for use as a part of the Project for the park access road, there are two abandoned oil well sites and oil field access roads that are located on the western portion of the Project site in the vicinity of the proposed access road. There are also two abandoned oil well sites located within the area proposed for the haul road and export soil sites on the Newport Banning Ranch property. The oil wells have been abandoned as part of the abandonment and remediation program at Newport Banning Ranch known as the Environmental Restoration Plan (ERP), which began during the 1990s in order to abandon the least productive wells at that time. As part of this effort, the ERP was developed to cleanup soils associated with abandoned oil wells (Klancher, Aera Energy, 2009). The oil field access roads in these areas may contain gravel, crude oil hydrocarbons, tank bottoms, or other structures/materials that were used in the past as road base materials associated with oil field operations.

### **Previous Newport Banning Ranch Investigations**

The Newport Banning Ranch property owner has noted that the 401-acre Newport Banning Ranch property is primarily impacted by petroleum hydrocarbons (i.e., specifically degraded and weathered crude oil), and that these impacts are generally confined to specific operating areas, including oil well locations, pipelines, tank farms, sumps, and roadways.

Numerous environmental sampling and testing events have been performed as part of the oil and gas production activities between 1986 and the present. A comprehensive, site-wide Phase

II Environmental Assessment (EA) was initiated by Geosyntec in 2000, with field sampling conducted between May and August 2001. The Phase II EA represents a comprehensive field investigation of the impacts from the historic oil operations. The final Phase II EA was submitted to the Santa Ana RWQCB in November 2001. More recently, a Phase I ESA Update was prepared in 2008 (Geosyntec 2008). The results of these two most recent investigations are summarized below, in chronological order.

### **Phase II EA**

The objective of the Phase II EA (2001) was to characterize the nature and extent of potential impacts to soil and groundwater at areas determined to be a potential environmental concern (PECs), and to evaluate location and potential volumes of impacted materials that may require remediation. Twenty-three areas were identified as PECs.

### **Phase I ESA Update**

The Phase I ESA Update (2008) updated and incorporated by reference information contained in Phase I ESA reports prepared by Geosyntec in 1993, 1999, and 2005. In November 2006, the U.S. Environmental Protection Agency (USEPA) issued regulations establishing new standards for the conduct of “all appropriate inquiries” (AAI), as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as the USEPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312). These AAI standards codified for the first time specific tasks and approaches for conducting environmental due diligence (i.e., AAI or Phase I ESAs). As such, the purpose of the Phase I ESA Update was to identify, to the extent feasible pursuant to the processes described in American Society Testing and Materials (ASTM) Standard E 1527-05, Standard Practice for Environmental Assessments: Phase I Environmental Site Assessment Process, recognized environmental conditions (RECs) in connection with the Newport Banning Ranch property and to ensure that the Phase I ESA reporting on the property meets the 2006 USEPA AAI standard (Geosyntec 2008).

### **REC/PEC Findings**

RECs are defined under ASTM Standard E 1527-05 as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property” (Geosyntec 2008). The Phase I ESA Update identified 27 RECs (or PECs), 3 historical RECs, and 4 off-site facilities as RECs, for a total of 34 RECs. The 27 RECs/PECs on Newport Banning Ranch include one REC within the boundaries of the Sunset Ridge Park Project site (REC No. 27). REC No. 27 is noted as having impacted soil. However, the 2001 testing program did not focus on this area and the amount of soil that would need to be removed was not determined.

The Newport Banning Ranch property also may include road materials made up of varying amounts of gravel, asphalt, crude oil, or crude oil tank sediments, and large amounts of concrete used in oil field operations and facilities. The data also indicates that some areas of the entire property contain soils impacted by generally low concentrations of chemicals other than crude oil, such as volatile organic compounds and metals.

## 4.9.4 PROJECT DESIGN FEATURES AND STANDARD CONDITIONS

### Project Design Features

No Project Design Features related to hazards or hazardous materials have been identified.

### Standard Conditions

No standard conditions have been identified.

## 4.9.5 METHODOLOGY

EDR conducted a search of available environmental records. The EDR Report meets national record review requirements in accordance with both (1) the American Society for Testing and Materials E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and (2) the USEPA Standards and Practices for All Appropriate Inquiries (40 Code of Federal Regulations [CFR] Part 312). These rules establish specific regulatory requirements for conducting an inquiry into the previous ownership, uses, and environmental conditions of a property. Additionally, the property owner for Newport Banning Ranch was contacted in order to obtain information regarding oil activities on the portion of the Project site located on the Newport Banning Ranch property (i.e., the proposed park access road, haul road, and export soils sites).

## 4.9.6 THRESHOLDS OF SIGNIFICANCE

Threshold criteria for evaluating land use effects are based on the review of applicable provisions of the City of Newport Beach Initial Study Checklist. The Project would result in a significant impact related to hazards and hazardous materials if it would:

- Threshold 4.9-1** Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- Threshold 4.9-2** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

As previously discussed in Section 2.3.3, Effects Found Not to be Significant, the City through the preparation of the Initial Study determined that the proposed Project would not have a significant impact for the following thresholds and that no further analysis was required:

- Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no schools located within one-quarter mile of the Project site.

- Would the Project be located within an airport land use plan or within two miles of an airport, interfere with an adopted emergency response plan or expose people or structures to threat of wildland fires?

The Project site is not located within an adopted Airport Land Use Plan or in the vicinity of a private airstrip, heliport, or helistop. The nearest airport/airstrip is the John Wayne Airport located approximately four miles northeast of the Project site. Implementation of the proposed Project would not impact the airport facilities or their operation.

The City of Newport Beach has an adopted Emergency Management Plan, which details the responsibilities of federal, State, and local agencies and private organizations in the event of a disaster (City of Newport Beach General Plan's Safety Element). Implementation of the proposed Project would not interfere with this Plan.

The Sunset Ridge Park site (both within the City and its Sphere of Influence) is located in an urbanized area and is not identified by the City Fire Department as being in a Special Fire Protection Area, as defined in the Newport Beach Fire Code Section 9.04.030 (as adopted). No wildlands are intermixed or are adjacent to the site. Therefore, the proposed Project would not result in a significant risk of loss, injury, or death involving wildland fires.

#### 4.9.7 ENVIRONMENTAL IMPACTS

***Threshold 4.9-1: Is the project located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

The Project site was not identified specifically on the Cortese List (pursuant to *California Government Code* §65962.5). A review of the listings in the EDR Report did not indicate any evidence of a direct negative impact on the Project site.

As stated above, there are active oil operations on the Newport Banning Ranch property, including two abandoned oil well sites and oil field access roads that are located on the western portion of the Project site in the vicinity of the proposed access road. There are also two abandoned well sites located within the area of the proposed haul road and export soil sites on the Newport Banning Ranch property. The oil wells have been abandoned and soil around the wells were cleaned (Klancher, Aera Energy, 2009). However, the oil field access roads in these areas may contain gravel, crude oil hydrocarbons, tank bottoms, or other features that were used in the past as road base materials associated with oil field operations. These materials are similar to asphalt in character and quality (i.e., containing aggregate in a hydrocarbon binder).

In the 1990s, the West Newport Oil Company, the oil operator, commenced abandonment of its least productive wells. As part of this effort, and based on results of testing from 1986 to 2000, a basic hydrocarbon cleanup plan (initially referred to as the Environmental Restoration Plan, or ERP) was developed to clean up soils associated with abandoned oil wells. The ERP outlined basic hydrocarbon cleanup levels and a bioremediation pilot-scale treatment area to remediate impacted soils; the ERP was submitted to the OCHCA who approved it in October 1992. The ERP was also submitted to and reviewed by the Santa Ana RWQCB and other agencies, including the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS). The plan was updated in 1994 and was used to excavate and manage oil well abandonment soils from 1994 to about 2001 (Geosyntec 2009).

The results of investigations performed to date indicate that the Newport Banning Ranch property is primarily impacted by petroleum hydrocarbons, specifically degraded and weathered crude oil, and that these impacts are generally confined to specific operating areas, including oil

well locations, pipelines, tank farms, sumps, and roadways (Geosyntec 2008, 2009). No hazardous levels of any materials were found during the various sampling events and assessments. The property also includes road materials made up of varying amounts of gravel, asphalt, crude oil, or crude oil tank sediments, and large amounts of concrete used in oil field operations and facilities (Geosyntec 2009). The data also indicates that some areas of the Newport Banning Ranch property contain soils impacted by generally low concentrations of chemicals other than crude oil, such as volatile organic compounds (VOCs) and metals (Geosyntec 2008).

Within that portion of the Project site proposed for the access road, the two abandoned well sites are located in a portion of the park site not proposed for grading. One of the wells is near the access road's east-west leg into the park and is very near the grading limits. If modifications to the grading plan occur that could result in cuts greater than six feet, the casing pipe associated with the well abandonment would need to be lowered to remain below ground surface (bgs).

With respect to the other two well sites, one is located within the proposed haul road alignment, and one is within a location identified for soil export. The well casing tops for both of these wells are approximately eight feet bgs. Because no site disturbance to that depth is proposed as a part of the Project, no impacts would be anticipated. With respect to all of the abandoned well sites, any alterations would require approval from the regulatory agencies. Any changes to an abandoned well casing would also require repair, testing of the repairs, and re-approval from DOGGR.

As a part of prior well abandonment activities on the Newport Banning Ranch property, all known active pipes were removed. However, it is possible that older subsurface pipes or other equipment could be present that have not been recorded. Records and aerial photos do not show the presence of any oil sumps in this area. However, there could be small isolated areas of crude oil remnants near the surface associated with past oil operations. Should any subsurface equipment or crude oil hydrocarbons be discovered, the equipment and contaminated soil would need to be removed. The remediation and modification of well casings, as necessary, would be required in compliance with regulatory agency rules and regulations (see Mitigation Measures [MM] 4.9-1 and 4.9-2). Previous cleanups on the Newport Banning Ranch property have established Santa Ana RWQCB and OCHCA regulatory-approved clean-up levels for each constituent of concern.

Based on groundwater assessments performed on Newport Banning Ranch by the property owner, no groundwater impacts have been identified in the area proposed for the park, and no mitigation is required.

Any required remediation would involve on-site handling and remediation of contaminated soils (primarily petroleum hydrocarbon impacts) as well as off-site transport of contaminated soils. None of the contaminants (primarily petroleum hydrocarbons with some VOCs and metals) are considered unusually hazardous and are commonly present in older urban areas. These contaminants are also routinely remediated as directed by the applicable oversight agencies without adverse effect to workers or the surrounding population.

**Impact Summary:** *Less than Significant With Mitigation.* The Project site is not listed on federal, State, local, tribal, or other hazardous materials databases. The oil well sites within the boundaries of the Project site have been abandoned and remediated. Any impacted oil field equipment would be removed and soil remediation would occur, as necessary. All potential

impacts can be mitigated to a level that is less than significant with the implementation of MM 4.9-1 and MM 4.9-2.

**Threshold 4.9-1**     ***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Remedial activities may result in some potential release of contaminants, predominantly hydrocarbons, into the air during soil disturbance due to aeration during handling (i.e., earth moving) of the contaminated soils than occurs in the existing condition. Off-site transport of impacted materials would be minimized to the degree feasible. An accident or upset condition during handling and transport could result in the release of contaminated soils into the surrounding environment. Any contaminated soils or other hazardous materials removed from the Project site shall be transported only by a Licensed Hazardous Waste Hauler in compliance with all applicable State and federal requirements. Hazardous materials are routinely transported through Southern California, in compliance with these requirements, and accidents and/or releases are quite rare. Therefore, with implementation of MM 4.9-1, there would be a less than significant impact related to the potential need to transport soils.

**Impact Summary:**     ***Less than Significant With Mitigation.*** With the implementation of MM 4.9-1, there would be a less than significant impact associated with the potential need to transport of soils.

#### **4.9.8 CUMULATIVE IMPACTS**

Identified impacts related to hazardous materials represent site-specific impacts that would be remediated to levels considered less than significant. Additionally, the proposed Project as well as potential future projects would be required to comply with applicable local, State, and federal requirements concerning hazardous materials. Therefore, the proposed Project would not contribute to any significant cumulative hazardous materials impacts.

#### **4.9.9 MITIGATION PROGRAM**

##### **Project Design Features**

No Project Design Features for hazards and hazardous materials have been identified.

##### **Standard Conditions**

No Standard Conditions have been identified.

##### **Mitigation Measures**

**MM 4.9-1**     Any contaminated soils or other hazardous materials removed from the Project site shall be transported only by a Licensed Hazardous Waste Hauler who shall be in compliance with all applicable State and federal requirements, including U.S. Department of Transportation regulations under Title 49 of the CFR (Hazardous Materials Transportation Act), California Department of Transportation standards, Occupational Safety and Health Administration standards, and the Resource Conservation and Recovery Act (42 United States Code §6901 et seq.). The City of Newport Beach Planning Department shall



verify that only Licensed Haulers who are operating in compliance with regulatory requirements are used to haul hazardous materials.

- MM 4.9-2** The State Regional Water Quality Control Board – Santa Ana Region (Santa Ana RWQCB), through its regulatory authority to meet the Water Quality Control Plan (Basin Plan) objectives set forth in compliance with the Porter-Cologne Water Quality Control Act, shall oversee contaminated soil mitigation efforts including but not limited to on-site treatment, as necessary, confirmation of impacted soil delineation, excavation, and final report review and approval. The Orange County Health Care Agency (OCHCA) may also provide oversight of soil remediation and mitigation efforts as determined by the Santa Ana RWQCB. Interim storage and handling of impacted materials shall be performed under the Santa Ana RWQCB oversight responsibilities including the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and erosion control requirements through the County M34 National Pollutant Discharge Elimination System (NPDES) permit requirements as well as compliance with air quality construction emission requirements of the South Coast Air Quality Management District (SCAQMD).

#### **4.9.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Implementation of the Mitigation Program would mitigate any potentially significant impacts to a less than significant level.