
Hazards and Hazardous Materials

This chapter evaluates the potential hazards and hazardous materials impacts of the proposed Specific Plan. It describes existing conditions in and around West Oakland and evaluates the impacts and mitigation needs of development allowed by the Specific Plan.

Physical Setting

Hazardous Materials¹

West Oakland was one of the first industrial locations in the San Francisco Bay Area, later became a center for defense related industries, and continues to be a major transportation hub and industrial zone. Over the years, many transportation and industrial uses have relocated or closed and many of the industrial properties have been abandoned and left contaminated.

West Oakland today contains a mix of industrial, commercial and residential uses. Industrial uses are often located adjacent to or near residential and other sensitive land uses, such as schools and parks. Many ongoing industrial operations use, store or transport hazardous materials, and there continue to be instances of hazardous materials releases contaminating soil or groundwater, posing a hazard to human health and the environment.

Contamination of soil and groundwater not only poses a hazard to human health and the environment, but also deters redevelopment. Faced with the unknown costs associated with cleanup of contamination and the risks of taking on long-term liability associated with contamination at a property, developers have often preferred development in other areas where there are no contamination concerns. Remediation can be expensive and its cost can exceed the land value, leading landowners to abandon the property in a contaminated condition. Regulatory enforcement and litigation to compel landowners to clean up their property can be time-consuming, often dragging out for years. Even after remediation is completed, the cleanup standards may limit how the property can be redeveloped and reused.

A number of initiatives have been undertaken to promote reuse of these “brownfields” by facilitating cleanup of identified environmental cases, as well as generally encouraging reuse of

¹ Materials and waste may be considered hazardous if they are poisonous (toxic), can be ignited by open flame (ignitable), corrode other materials (corrosive), or react violently, explode or generate vapors when mixed with water (reactive). The term “hazardous material” is defined in the State Health and Safety Code (Chapter 6.95, Section 25501[o]) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. A hazardous waste, for the purpose of this EIR, is any hazardous material that is abandoned, discarded, or recycled, as defined in the State Health and Safety Code (Chapter 6.95, Section 25125).

abandoned, idled, and underutilized properties, whether contaminated or not. The Federal National Priorities List/Superfund program designates funding for high priority sites where public health may be in jeopardy. Federal and State brownfields programs provide grants to support environmental assessment, cleanup, and related job training activities. Also, as surrounding properties are redeveloped and market demand grows, there is greater potential for private capital investment in the cleanup and reuse of contaminated sites.

Environmental Cases (i.e., the “Cortese List”)

In California, regulatory databases listing hazardous materials sites provided by numerous federal, state, and local agencies are consolidated in the “Cortese List” pursuant to Government Code Section 65962.5. The Cortese List is located on the California Environmental Protection Agency’s (Cal EPA) website and is a compilation of the following lists:

- the list of Hazardous Waste and Substances sites from the California Department of Toxic Substances Control (DTSC) “EnviroStor” database;
- the list of Leaking Underground Storage Tank Sites (LUSTs) from the California Water Resource Control Board’s (WRCB) “GeoTracker” database
- the list of solid waste disposal sites identified by WRCB with waste constituents above hazardous waste levels outside the waste management unit
- the list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

Additionally, the Alameda County Department of Environmental Health (ACDEH) maintains a list of site for which it is the administrative agency responsible for coordination and enforcement of local, state, and federal hazardous materials management and environmental protection programs, as recognized by the State of California Department of Toxics Substances Control.

The following discussion of environmental conditions is based on information from environmental regulatory databases maintained by numerous federal, state, and local agencies.² This database list has been supplemented by current (2013) research on the internet sites provided through the DTSC EnviroStor database, State Water Resources Control Board’s Geotracker database, and the San Francisco Bay Regional Water Quality Control Board (RWQCB) Spills, Leaks, Investigations, and Cleanup database (SLIC) and Alameda County DEH databases. This aggregated list comprises the “Cortese List” of properties within the West Oakland Planning Area.

Federally Maintained Lists

Federal CERCLIS List

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons. It contains sites which are either proposed for listing as a Superfund site and sites which are in the screening and

² Environmental Data Resources, Inc., 2011.

assessment phase for possible inclusion on the Superfund list.³ CERCLIS is an automated inventory of site information for potential or confirmed hazardous waste sites addressed under the Superfund program. Over 46,000 sites have been added to CERCLIS nationally, although most of these sites have been evaluated and do not require further federal Superfund work.

- Federal National Priority List (NPL): The National Priority List is also known as the Superfund, the name given to the environmental program established to address abandoned hazardous waste sites. It is also the name of the fund established by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). This law allows the EPA to clean up contaminated sites and to compel responsible parties to perform cleanups or reimburse the government for EPA cleanups. It involves the steps taken to assess sites, place them on the National Priorities List, and establish and implement appropriate cleanup plans. In addition, the EPA has the authority to conduct removal actions where immediate action needs to be taken; to enforce against potentially responsible parties; to ensure community involvement; involve states; and ensure long-term protectiveness.⁴
- Federal "No Further Remedial Action Planned List (NFRAP): A perceived threat of Superfund liability was associated with many sites no longer of federal Superfund interest. EPA addressed this issue by implementing the CERCLIS archiving effort in early 1995 as part of the Agency's Brownfields Economic Redevelopment Initiative. The CERCLIS archiving effort initiated a means to designate sites in the CERCLIS inventory as "archive." An archive designation means that a site does not require cleanup under the federal Superfund program based on information available at the time of the designation. Additional Superfund assessment work at an archive site may be necessary if site conditions change or if new information warranting further Superfund attention is identified. An archive designation does not necessarily mean a site is free of contamination; rather, it focuses on EPA's cleanup intentions at sites addressed under the federal Superfund program.⁵
- Resource Conservation and Recovery Act (RCRA) Lists: The Resource Conservation and Recovery Act (RCRA) gives the EPA authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste, and to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. Provisions of RCRA focus on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.
- Corrective Action Activity List (CORRACTS): The RCRA Corrective Action Activity List (CORRACTS) is a list of hazardous materials handlers with RCRA Corrective Action activity, showing which nationally-defined corrective action events have occurred for every handler that has had corrective action activity.

³ <http://cumulis.epa.gov/supercpad/cursites/srchsites.cfm>

⁴ <http://www.epa.gov/superfund/about.htm>

⁵ Accessed at <http://www.epa.gov/superfund/programs/reforms/reforms/2-4c.htm>

State of California Data Base Lists

Department of Toxic Substances Control (DTSC) ENVIROSTOR List

The ENVIROSTOR list is derived from the DTSC's Site Mitigation and Brownfields Reuse Program's ENVIROSTOR database, and identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database's public web site provides access to detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. EnviroStor allows you to search for information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted or have been completed under DTSC's oversight.⁶

- DTSC Priority List (RESPONSE): The RESPONSE list identifies confirmed release sites in California where the California Department of Toxic Substances Control (DTSC) is involved in remediation, either as the lead agency or in an oversight capacity. These confirmed release sites are generally high-priority and high potential risk.
- Voluntary Cleanup Sites (VCP): This list contains low-threat level properties with either confirmed or unconfirmed releases of hazardous materials, and where project proponents have request that DTSC oversee investigation and/or cleanup activities, and have agreed to provide coverage for DTSC's costs for investigation and/or cleanup.
- Local Land Records (DEED): The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes.

State Water Resources Control Board's (SWRCB) GeoTracker List

GeoTracker is the Water Boards' data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, and Site Cleanup Program) as well as permitted facilities such as operating underground storage tanks (USTs) and land disposal sites. GeoTracker records include data from multiple State Water Board programs and other agencies, helping the Water Board, regional Boards and the USEPA to monitor progress of cases throughout the State. GeoTracker provides most of the public record for a site to the public through its Document Manager Module.⁷

- State Leaking Underground Storage Tank List (LUST): The State Water Resources Control Board provides assistance to local agencies enforcing UST requirements. The Leaking Underground Storage Tank Incident reports contain an inventory of reported leaking underground storage tank incidents. The data comes from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

Alameda County Department of Environmental Health Lists

The Alameda County Environmental Health Department (DEH) provides regulatory authority to require property owners and responsible persons to investigate and cleanup petroleum fuel and

⁶ <http://www.envirostor.dtsc.ca.gov>.

⁷ http://www.waterboards.ca.gov/water_issues/programs/gama/docs/geotracker_factsheet.pdf

byproducts that have leaked from underground storage tanks. The County may initiate enforcement action when necessary in collaboration with the County District Attorney, the RWQCB or other appropriate enforcement agencies. The County works with both the SWRCB and with the RWQCB to ensure protection of human health and safety and the protection of the environment. County oversight for investigation and cleanup is maintained under the following databases:

- Leaking Underground Fuel Tanks (LUFT): LUFT sites are those sites that have or had leaking underground fuel tanks.
- Spills, Leaks Investigation and Cleanup (SLIC): SLIC sites are those that have had chemical releases that have contaminated soil and/or groundwater.

Cortese List Status

Regulatory databases contain relatively current information about environmental cases involving suspected or confirmed releases of hazardous materials to the subsurface soil or groundwater. The status of each environmental case can be either active (ongoing investigations or remediation), closed (remediation or cleanup completed and approved by the regulatory agency), or unknown. The information and status of identified sites changes as characterization, cleanup and monitoring of contamination occurs. Sites are typically closed once it has been demonstrated that existing or intended site uses combined with the levels of identified contamination present no significant risk to human health or the environment. Regulatory databases are updated frequently and would need to be revisited prior to construction for development facilitated by the Specific Plan.

Environmental Cases in West Oakland

Potential sources of contaminated or hazardous materials within West Oakland include those previous land uses which involved the use of hazardous materials, older buildings which were constructed with materials now identified as being hazardous (i.e., asbestos, lead-based paint, etc.), as well as users of hazardous materials in cases where such uses result in leakage into the ground, including underground storage tanks (USTs) and permitted handling of hazardous wastes.

It's important to note that not all users of hazardous materials result in contamination, as current laws and best practices employed by businesses which use hazardous materials as part of their operations are specifically intended to prevent such contamination. However, sites where soil or groundwater has been affected or is suspected to be affected by a chemical release from past or present land uses (referred to as "environmental cases") are identified on federal, state and local regulatory agency lists, such as the State of California's Cortese list. These lists are developed to document and record site disturbance activities such as removal or repair of an underground storage tank, a spill of hazardous substances, or excavation for construction. The status of each environmental case varies and can be either active (with ongoing investigations or remediation), closed (remediation or clean-up completed and approved by the regulatory agency "No Further Action" documentation), or inactive/unknown (usually indicating that efforts toward remediation have stalled or been suspended). The status of each case changes with time, and new cases are periodically added to the databases. There are also cases of suspected or identified contamination at sites that are not yet entered into regulatory agency lists.

According to current database lists, the majority of reported environmental cases within West Oakland are attributed to leaking underground storage tanks, most of which contain, or used to contain motor oil, gasoline or other similar petroleum products. However, there are also a number of reported cases of more complex and hazardous incidents where toxic chemicals have been spilled or otherwise released into the soils and groundwater, resulting in potential health and safety concerns for residents and employees of the area.

Soil and/or groundwater contamination poses a constraint to redevelopment of affected properties. Federal, state and local regulations prohibit activities such as grading or new development prior to cleanup or remediation at sites where contamination may present hazards to human health or the environment.

Environmental Cases by Opportunity Area

Mandela/West Grand Opportunity Area

There are a total of 123 reported environmental cases within the Mandela/West Grand Opportunity Area. Of that total, there are only 54 sites that currently remain open or unresolved, indicating that 69 sites (or nearly 60% of all reported environmental cases within this Opportunity Area) have been remediated and closed in a manner that meets regulatory agency standards for the protection of environmental health and safety.

- Of the 54 open or unresolved cases in the Mandela/West Grand Opportunity Area, there are only 8 sites identified on the California Department of Toxic Substances Control (DTSC) EnviroStor database as either “active” or inactive and in need of further investigation. These are sites that are either contaminated or believed to be contaminated with some level of toxic substances. The DTSC has issued closure certifications or no further action notice to 29 total cases within this Opportunity Area.
- In addition to the 8 DTSC sites, there are 30 other “open” sites identified on the State Water Resources Control Board’s (SWRCB) GeoTracker database, indicating sites that have had an unauthorized release of pollutants that may adversely affect groundwater and surface water. The majority of these sites are underground petroleum storage tanks suspected of a leak. The RWQCB has issued closure on 52 total cases within this Opportunity Area.
- The Alameda County Department of Environmental Health (ACEH) works with the RWQCB to ensure protection of human health and safety and the protection of the environment, and assumes jurisdiction on certain underground storage tank cases as well as other spills, leaks, investigations and other cleanups. There are 15 total cases identified as being under current ACEH jurisdiction.
- There are 5 closed sites which carry deed restrictions preventing future use of those sites for residential or other more sensitive uses without further remediation efforts.

Figure 4.5-1 shows the location of all currently active environmental cases within the Mandela/West Grand Opportunity Area.

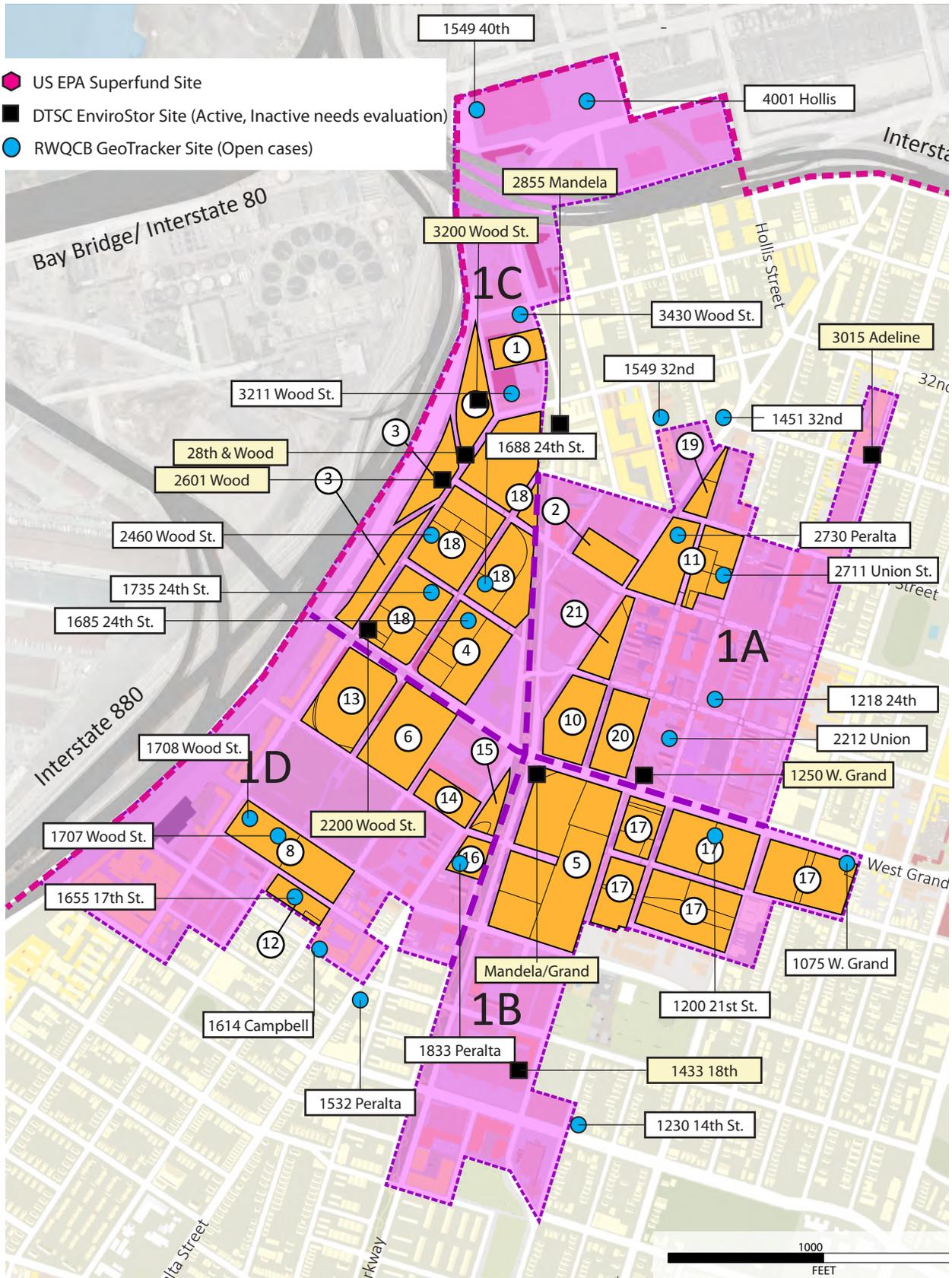


Figure 4.5-1
"Cortese List" Sites, Mandela/Grand Opportunity Area



Sources: US EPA Superfund database; DTSC EnviroStor databases, and RWQCB Geotracker database

Table 4.5-1: Mandela/Grand Opportunity Area – Environmental Cases

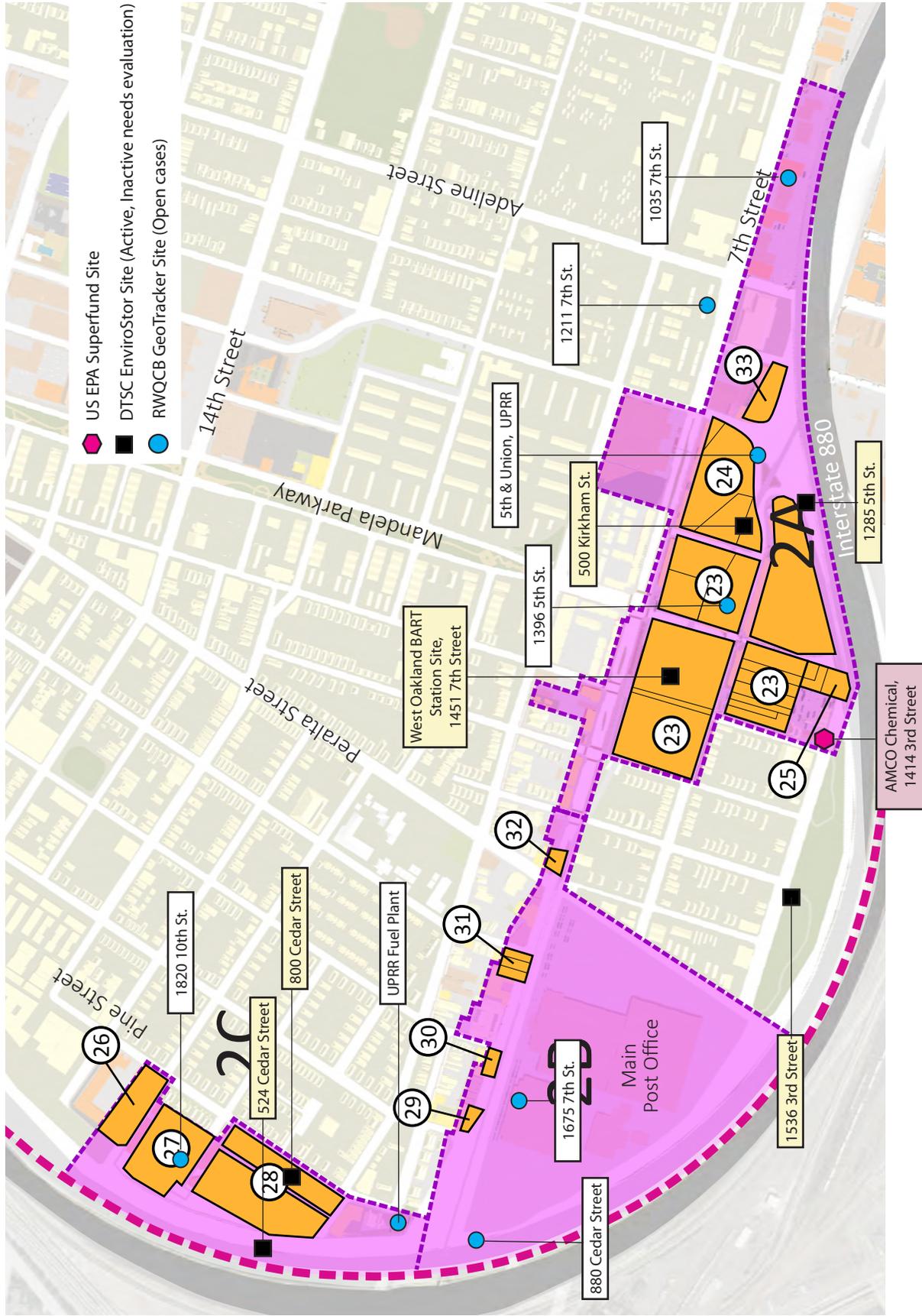
	Open Cases	Closed Cases
Federal Environmental Cases	0	8
State and Local Data Bases Cases:		
DTSC EnviroStor Database	8	29
SWRCB GeoTracker Database	30	52
ACEH Cases	15	
	54	88
Total Environmental Cases	123 (Total cases does not equal the sum of database records due to multiple agency jurisdiction over certain sites)	

7th Street Opportunity Area

There are a total of 52 reported environmental cases within the 7th Street Opportunity Area. Of that total, there are only 18 sites that currently remain open or unresolved, indicating that 34 sites (or nearly 65% of all reported environmental cases within this Opportunity Area) have been remediated and closed in a manner that meets regulatory agency standards for the protection of environmental health and safety.

- One major environmental case, the former AMCO Chemical facility at 1414 3rd Street, remains “open” on the US EPA federal list, the DTSC list, the SWRCB list and the local ACEH lists. It is a National Priorities List site, indicating that its potential hazards to human health and the environment remain of national significance.
- Of the other 17 open or unresolved cases in the 7th Street Opportunity Area, there are 7 active or on-going sites identified on the DTSC EnviroStor database that are either contaminated or believed to be contaminated with some level of toxic substances. The DTSC has issued closure certifications or no further action notice to 24 total cases within this Opportunity Area.
- In addition to these 8 federal or DTSC sites, there are 9 other “open” sites identified on the SWRCB GeoTracker database, the majority of which are underground storage tanks suspected of a leak. The RWQCB has issued closure on 10 total cases within this Opportunity Area.
- There are also 3 additional cases identified as being under current ACEH jurisdiction.
- There are 2 sites which carry deed restrictions preventing future use of those sites for residential or other more sensitive uses without further remediation efforts.

Figure 4.5-2 shows the location of all currently active environmental cases within the 7th Street Opportunity Area.



Sources: US EPA Superfund database; DTSC EnviroStor databases, and RWQCB GeoTracker database



Figure 4.5-2
“Cortese List” Sites, 7th Street Opportunity Area

Table 4.5-2: 7th Street Opportunity Area – Environmental Cases

	Open Cases	Closed Cases
Federal Environmental Cases	1	5
State and Local Data Bases Cases:		
DTSC EnviroStor Database	7	24
SWRCB GeoTracker Database	10	10
ACEH Cases	3	
	21	39
Total Environmental Cases	52 (Total cases does not equal the sum of database records due to multiple agency jurisdiction over certain sites)	

3rd Street Opportunity Area

There are 31 reported environmental cases within the 3rd Street Opportunity Area. Of that total, there are only 12 sites that currently remain open or unresolved, indicating that 19 sites (or over 60% of all reported environmental cases within this Opportunity Area) have been remediated and closed in a manner that meets regulatory agency standards for the protection of environmental health and safety.

- Of these 31 open or unresolved cases in the 7th Street Opportunity Area, there are only 2 active or on-going sites identified on the DTSC EnviroStor database that are either contaminated or believed to be contaminated with some level of toxic substances. The DTSC has issued closure certifications or no further action notice to 7 total cases within this Opportunity Area.
- In addition to these 2 DTSC sites, there are 10 other “open” sites identified on the SWRCB GeoTracker database, the majority of which are underground storage tanks suspected of a leak. The RWQCB has issued closure on 14 total cases within this Opportunity Area.
- There are no additional cases identified as being only under current ACEH jurisdiction.
- There is 1 site which carries a deed restriction preventing future use of this site for residential or other more sensitive uses without further remediation efforts.

Figure 4.5-3 shows the location of all currently active environmental cases within the 3rd Street Opportunity Area.

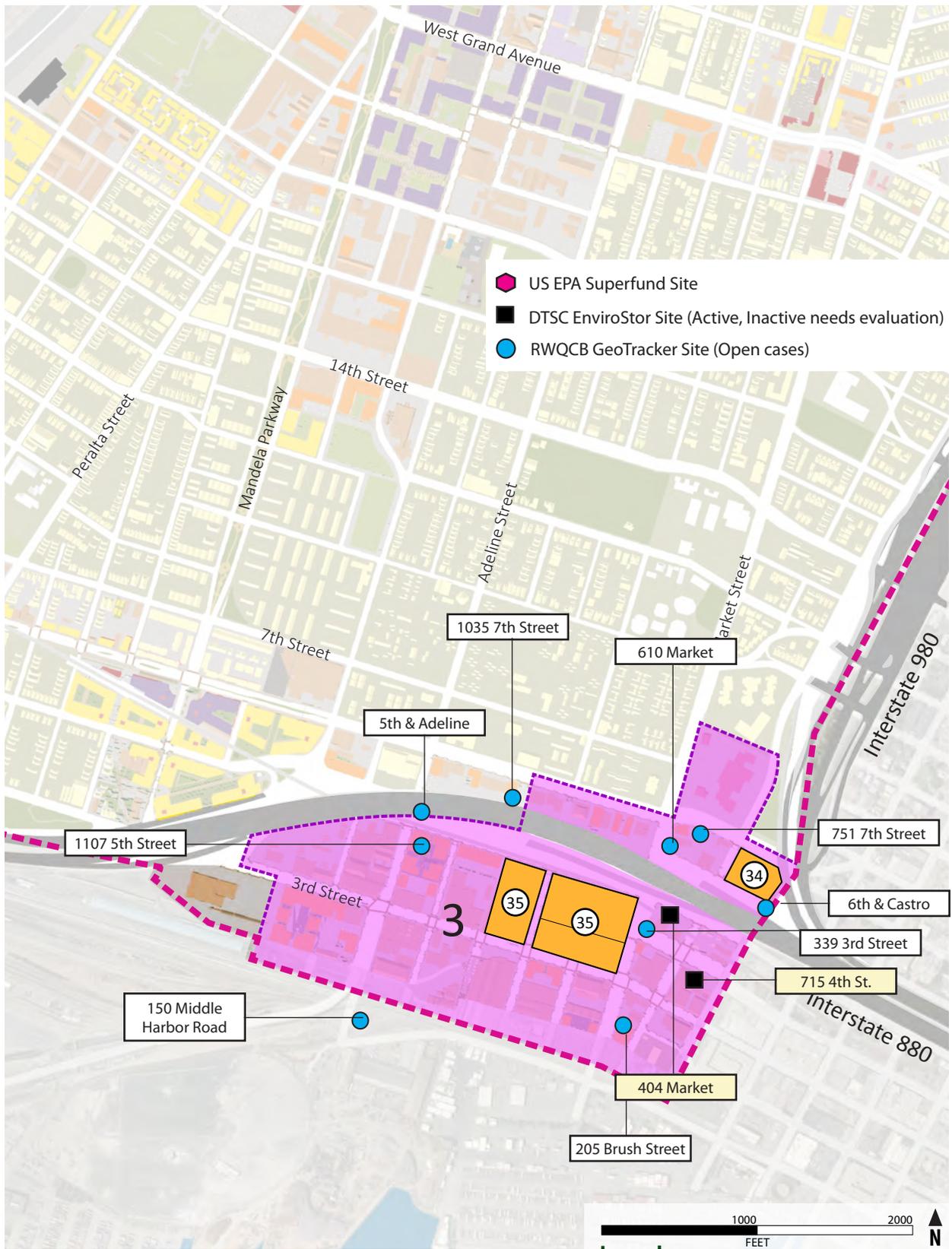


Figure 4.5-3
“Cortese List” Sites, 3rd Street Opportunity Area



Sources: US EPA Superfund database; DTSC EnviroStor databases, and RWQCB Geotracker database

Table 4.5-3: 3rd Street Opportunity Area – Environmental Cases

	Open Cases	Closed Cases
Federal Environmental Cases	0	3
State and Local Data Bases Cases:		
DTSC EnviroStor Database	2	7
SWRCB GeoTracker Database	11	14
ACEH Cases	0	
	13	24
Total Environmental Cases	31 (Total cases does not equal the sum of database records due to multiple agency jurisdiction over certain sites)	

San Pablo Avenue Opportunity Area

There are 29 reported environmental cases within the San Pablo Avenue Opportunity Area. Of that total, there are 13 sites that currently remain open or unresolved, indicating that 16 sites (or over 55% of all reported environmental cases within this Opportunity Area) have been remediated and closed in a manner that meets regulatory agency standards for the protection of environmental health and safety.

- There are no sites reported on federal databases.
- Of the 29 open or unresolved cases in the San Pablo Opportunity Area, there are only 4 active or on-going sites identified on the DTSC EnviroStor database that are either contaminated or believed to be contaminated with some level of toxic substances.
- In addition to these 4 open DTSC sites, there are 7 other “open” sites identified on the SWRCB GeoTracker database, nearly all of which are underground storage tanks suspected of a leak. The RWQCB has issued closure on 17 total cases within this Opportunity Area.
- There are 2 additional current cases identified as being under current ACEH jurisdiction.
- There are no sites which carry deed restrictions preventing future use of those sites for residential or other more sensitive uses.

Figure 4.5-4 shows the location of all currently active environmental cases within the San Pablo Avenue Opportunity Area.

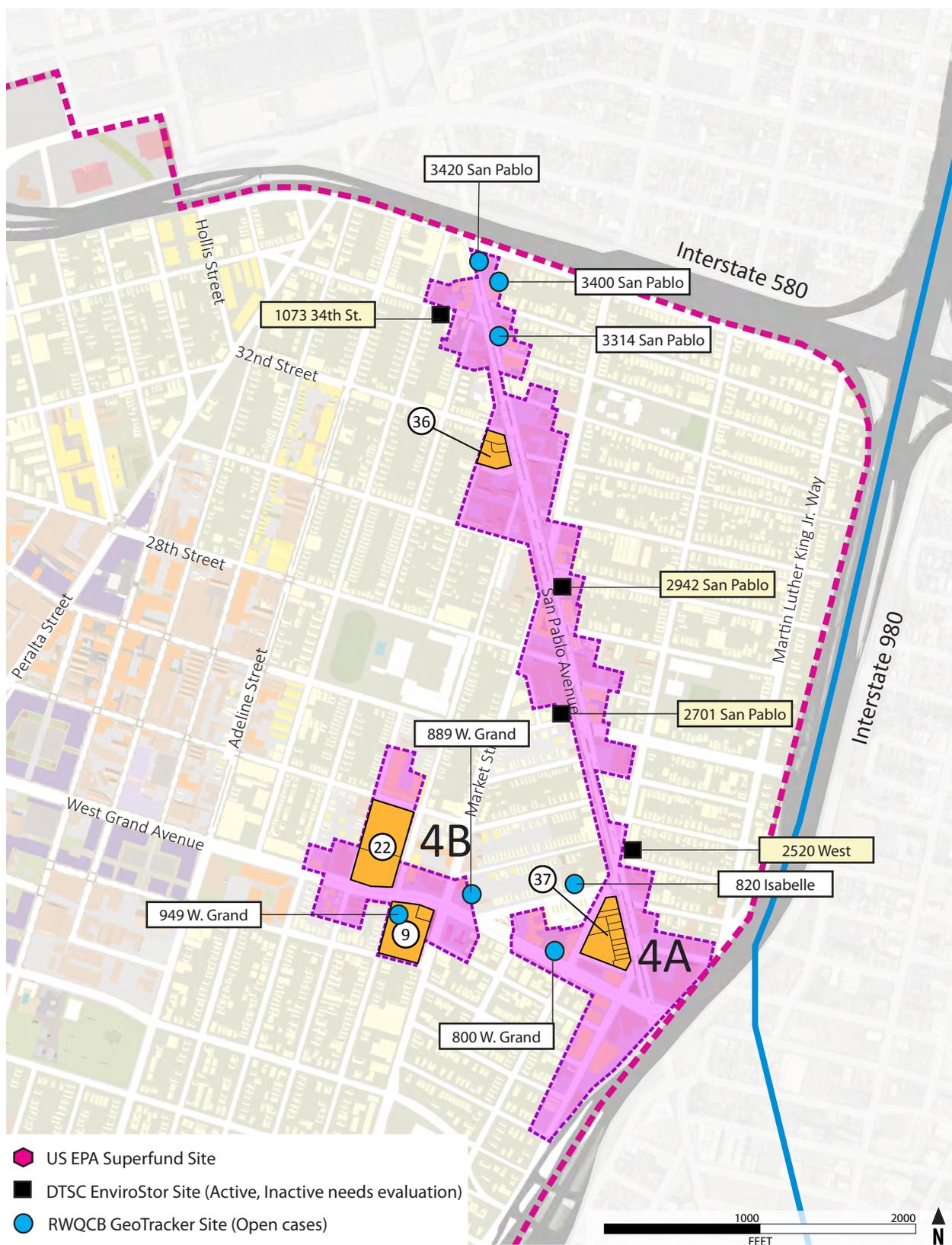


Figure 4.5-4
“Cortese List” Sites, San Pablo Opportunity Area

Sources: US EPA Superfund database; DTSC EnviroStor databases, and RWQCB Geotracker database

Table 4.5-4: San Pablo Avenue Opportunity Area – Environmental Cases

	Open Cases	Closed Cases
Federal Environmental Cases	0	0
State and Local Data Bases Cases:		
DTSC EnviroStor Database	4	0
SWRCB GeoTracker Database	7	17
ACEH Cases	2	
	13	17
Total Environmental Cases	29 (Total cases does not equal the sum of database records due to multiple agency jurisdiction over certain sites)	

Summary

Within the West Oakland Opportunity Areas there are a total of 123 reported environmental cases. Nearly 65% of these reported cases have been closed by the respective oversight agencies. Of those cases that remain open, remediation efforts are still needed before new development can occur. Within those closed case sites, the level of prior clean-up efforts may vary and may be appropriate only for commercial or industrial use, may have deed restrictions preventing sensitive uses, or may stipulate additional agency oversight should development proposals be considered.

Environmental Cases by Opportunity Sites

As shown in **Table 4.5-5**, 21 of the 37 Opportunity Sites have had reported releases of hazardous materials and many contain multiple environmental cases. The majority of these cases involve LUSTs. Of the 21 Opportunity Sites with environmental cases:

- 15 have currently open cases with site assessment, remediation and/or monitoring underway or needed.
- The environmental cases on the other six Opportunity Sites have all been closed, with remediation completed and approved, or site assessment revealed that conditions pose no significant threat to human health or the environment and no further action is required.
- One of the sites where cases have been closed carries a deed restriction precluding future residential or other sensitive land uses.

Mandela/West Grand Opportunity Sites

Of the 19 Opportunity Sites in the Mandela/West Grand Opportunity Area, 15 have reported hazardous materials releases, and 10 of these 15 sites contain open cases.

3rd Street Opportunity Sites

Of the 2 Opportunity Sites in the 3rd Street Opportunity Area, 1 of these Opportunity Sites has a reported hazardous materials releases but its case has been closed.

San Pablo Opportunity Sites

There are no reported hazardous materials releases on the two Opportunity Sites within the San Pablo Avenue Opportunity Area. Of the 2 Opportunity Sites in the San Pablo Avenue Opportunity Area, 1 of these Opportunity Sites has a reported hazardous materials release, and this case is now closed.

7th Street Opportunity Sites

Of the 11 Opportunity Sites in the 7th Street Opportunity Area, 6 Opportunity Sites have reported hazardous materials releases, and each of these 6 sites remains as open cases. There is one federal National Priorities List (Superfund) site within the Planning Area, the former AMCO Chemical facility, located within the 7th Street Opportunity Area at 1414 3rd Street (Opportunity Site 25), which is discussed separately below.

Former AMCO Chemical Facility⁸

The 7th Street Opportunity Area contains one property on the National Priorities List (NPL) of federal Superfund sites, the former AMCO Chemical facility located at 1414 3rd Street, within the 7th Street Opportunity Area, one block south of the West Oakland BART Station.

From the 1960s to 1989, the site was owned and operated by AMCO as a chemical distribution facility. Concern about environmental conditions arose in 1995 when utility workers encountered strong chemical odors while digging in the area. Preliminary sampling at the site and on 3rd Street indicated the presence of vinyl chloride and other chlorinated solvents in soil, soil gas, and groundwater. In 1997, the EPA began operating a treatment system to remove vinyl chloride-contaminated groundwater and soil vapors but turned it off in 1998 in response to community concern over potential exposure to contaminants from the system's exhaust stack.

A Remedial Investigation and Human Health Risk Assessment were performed to characterize the nature and extent of contamination and health risks to construction workers, employees, and residents. These studies found that the primary continuing source of contamination to groundwater, soil, and soil gas is several feet of light non-aqueous-phase liquid (LNAPL) containing tetrachloroethene (PCE), trichloroethene (TCE), other volatile organic compounds (VOCs), SVOCs, pesticides, and dioxins/furans, floating on groundwater beneath the former AMCO facility. The highest concentrations of contaminants were observed in the central and south-central areas of the former AMCO facility, corresponding with the known locations of former chemical storage units and buried distribution piping. Several contaminants in groundwater currently exceed risk criteria for ingestion; however, groundwater is not currently used nor is it likely to be used in the future as a source of drinking water.

The distributions of contaminants in soil are less centralized and more widespread than in groundwater, suggesting multiple industrial, non-industrial, and non-point sources. Many contaminants in soil at the former AMCO facility and off-facility locations (the parking lot, large vacant lot, and small vacant lot occupying the same block), particularly lead, exceed risk criteria for industrial and residential receptors. The current concrete pavement at the former AMCO

⁸ United States Environmental Protection Agency, Pacific Southwest, Region 9, Superfund website, <http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/db29676ab46e80818825742600743734/ab06578104c4a569882571bd00755ed0!OpenDocument>, viewed October 16, 2012.

facility and off-facility locations provides a protective layer that isolates on-site workers from the contaminated soil, soil gas, and groundwater underneath. Elevated lead concentrations at levels that posed an immediate risk to residents, particularly children, were detected at several residential properties adjacent to or near the former AMCO facility. A soil removal action to address the lead contamination was performed at all residential parcels occupying the same block as the former AMCO facility.

Sampling of crawl space and ambient air in residences adjacent to and near the AMCO facility indicates that vapor intrusion was occurring in crawl spaces at the homes. None of the VOCs detected exceeds its acute reference concentration, indicating that there is no immediate health threat to residents. As a precautionary measure, mitigation systems including vapor barriers and additional ventilation have been installed in selected homes nearest the site. The source of the VOCs found inside homes is difficult to determine. Risks for the majority of residences sampled are similar to the risks and hazards estimated from background samples collected three blocks upwind of the site and outdoor air samples collected at Prescott Park. This indicates that air quality is poor in the whole area due to other sources of contamination (such as exhaust from freeway traffic, etc.).

Summary by Opportunity Sites

Table 4.5-5 provides more detailed information for each Opportunity Site that contains an environmental case.

**Table 4.5-5
Environmental Cases – Opportunity Sites**

Oppty Site	Name, Address	Federal Data Base List				DTSC EnviroStor List				WRCB GeoTracker List	County/ SLIC
		NPL	CERCLIS	CORRACTS	NFRAP	RESPONSE	ENVIROSTOR	VCP	DEED		
Mandela/Grand Opportunity Area											
1	1685 34 th Street, TASCO									Closed	
	3211 Wood, General Transport									Open	
2	2601 Peralta Street, CASS						NFA				
	2601 Peralta, Oakland Scavenger									Closed	
3	2233 Wood Street, Army-Navy Distributing Center						NFA				
	2601 Wood Street, Former Hall						Inactive				
	Wood Street & West Grand Avenue, BNSF Wood Street Yard						Certified O&M			X	
4	1735 24 th Street, Pacific Supply									Open	
5	Mandela Parkway at Grand, Mandela/Grand,						Inactive	X		X	
6-7	no cases reported										
8	1708 Wood Street,									Open	X

**Table 4.5-5
Environmental Cases – Opportunity Sites**

Oppty Site	Name, Address	Federal Data Base List				DTSC EnviroStor List				WRCB GeoTracker List	County/ SLIC
		NPL	CERCLIS	CORRACTS	NFRAP	RESPONSE	ENVIROSTOR	VCP	DEED		
	Roadway Express										
	1707 Wood Street, SP Transportation					X	Refer to RWQCB?				Open
9	905 Grand, Mac Auto									Closed	X
	949 Grand, Burke									Open	X
10	no cases reported										
11	2730 Peralta, CASS									Open	X
12	1655 17 th Street, ACME Galvanizing		X								Open
13	no cases reported										
14	2121 Peralta, PG&E									Closed	
15	no cases reported										
16	1833 Peralta, Cadomartori Truck									Open	X
17	1200 21 st Street, EBMUD									Open	X
	2130 Adeline, EBMUD									Closed	X
	1075 Grand, EBMUD									Open	
18	2525 Wood, P&B								Certified		

**Table 4.5-5
Environmental Cases – Opportunity Sites**

Oppty Site	Name, Address	Federal Data Base List				DTSC EnviroStor List				WRCB GeoTracker List	County/ SLIC
		NPL	CERCLIS	CORRACTS	NFRAP	RESPONSE	ENVIROSTOR	VCP	DEED		
	Dismantlers										
	2526 Wood, Elliot Roofing									Closed	X
	2510 Wood, Wood St. Warehouses									Closed	X
	2200 Wood, Lucchesi										Open
	2230 Willow, Crown Zellerbach									Closed	X
	1735 24 th Street, Pacific Supply									Open	X
19-20	no cases reported										
21	2400 Peralta, Ctrl Concrete Supply									Closed	X
22	2400 Filbert, Cal West Periodicals									Closed	X
7th Street Opportunity Area											
23	1451 7 th Street, BART Station							Refer to Local Agency		Closed	
	1455 7 th Street, Eastlake									Open	X
24	1395 7 th Street, Truckers Friend										X
	1396 5 th Street,										Open

**Table 4.5-5
Environmental Cases – Opportunity Sites**

Oppty Site	Name, Address	Federal Data Base List				DTSC EnviroStor List				WRCB GeoTracker List	County/ SLIC
		NPL	CERCLIS	CORRACTS	NFRAP	RESPONSE	ENVIROSTOR	VCP	DEED		
	Red Star Yeast										
	500 Kirkham, J&A Trucking									Open	
	5 th & Kirkham, SP Transportation									Open	X
	500 Kirkham, Smilo Chemical									Open	
25	349 Mandela, SF BART					Certified					
	355 Mandela, California Soda						No Further Action				
	1414 3 rd Street, AMCO Chemical	X					Active				
26	no cases reported										
27	1832 9 th Street, Batavia				X		No Further Action				
28	524 Cedar, Phoenix Iron Works						Open	X		Certified	
	800 Cedar, Phoenix 800						Open				
	Shorey Street, Vacant Auto Repair					X	No Further Action				
	1823 Shorey, B&A Auto Dismantle						Closed	X			

**Table 4.5-5
Environmental Cases – Opportunity Sites**

Oppty Site	Name, Address	Federal Data Base List				DTSC EnviroStor List				WRCB GeoTracker List	County/ SLIC
		NPL	CERCLIS	CORRACTS	NFRAP	RESPONSE	ENVIROSTOR	VCP	DEED		
29-32	no cases reported										
33	1225 7 th , All Merc. Dismantler									Closed	X
3rd Street Opportunity Area											
34	NA										
35	333 Filbert, East Bay Ford Truck									Closed	X
	333 Market, Marine Terminals									Closed	X
San Pablo Avenue Opportunity Area											
36											
37											

NPL	National Priorities List (i.e., Superfund Sites). The NPL is “the list compiled by EPA of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response, pursuant to 40 C.F.R. § 300.5 (2001)
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System), a database maintained by the US EPA. CERCLIS contains information such as the current status of cleanup efforts, cleanup milestones reached, and amounts of liquid and solid media treated at sites on the National Priorities List (NPL) or under consideration for the NPL.
CORRACTS	Resource Conservation and Recovery Act, Corrective Action Sites (US EPA)
NFRAP	No Further Remedial Action Planned. Determination made by EPA following a preliminary assessment that a site does not pose a significant risk and so requires no further activity under Comprehensive Environmental Response and Liability Act (CERCLA).
RESPONSE	State Response: DTSC’s Site Mitigation and Brownfields Reuse Program oversees the cleanup of State Superfund Sites. State Superfund sites are also called State Response Sites or Annual Work plan sites. These are sites with evidence of a hazardous substance release or releases that could pose a significant threat to public health and/or the environment. DTSC issues Orders to responsible parties to compel the cleanup of these sites. Where no responsible parties can be found or where they do not take proper and timely action, the Department may use State funds to undertake the cleanup. If necessary, emergency actions may be taken.

**Table 4.5-5
Environmental Cases – Opportunity Sites**

Oppty Site	Name, Address	Federal Data Base List				DTSC EnviroStor List				WRCB GeoTracker List	County/ SLIC
		NPL	CERCLIS	CORRACTS	NFRAP	RESPONSE	ENVIROSTOR	VCP	DEED		
ENVIROSTOR	EnviroStor is a search tool for the DTSC that contains information on contaminated sites in California, as well as information on permit documents. EnviroStor's site database contains both a list of contaminated sites as well as lists of facilities that process or transfer toxic waste.										
LUST	Leaking Underground Storage Tanks, database managed by the SF Regional Water Quality Control Board										
VCP	Voluntary Cleanup Program. DTSC's Voluntary Cleanup Program allows motivated parties who are able to fund the cleanup, and DTSC's oversight, to move ahead at their own speed to investigate and remediate their sites.										
DEED	Deed Restricted Site. Sites where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site.										
County/SLIC	Spills, Leaks Investigation and Cleanup. These are sites that have had chemical releases that have contaminated soil and/or groundwater, and which Alameda County Environmental Health (ACEH) provides regulatory oversight for investigation and cleanup.										
X:	Indicates site is on the identified database list										
Open/Inactive:	Indicates the lead agency <u>has not determined</u> that all necessary and appropriate steps have been taken to ensure the site is no longer a threat to human health or the environment , and that site characterization, work plan development, remediation or monitoring results are still pending.										
Closed/Certified/No Further Action:	Indicates the lead agency has determined that all necessary and appropriate steps have been taken to ensure the site is no longer a threat to human health or the environment.										

Source: Environmental Data Resources, Inc. 2012; DTSC EnviroStor 2013; SF RWQCB Geotracker, 2013

Hazardous Building Materials

Development facilitated by the Specific Plan would in many cases involve the demolition or substantial rehabilitation of existing structures. Many older buildings within the Planning Area may have been constructed with hazardous building materials, including asbestos, lead-based paint and polychlorinated biphenyls (PCBs), which if disturbed, could present a potential hazard to workers or the public.

Asbestos

Asbestos is a naturally occurring fibrous material that was extensively used as a fireproofing and insulating agent in building construction materials before such uses were banned by the U.S. EPA in the 1970s. Asbestos was commonly used for insulation of heating ducts as well as ceiling and floor tiles to name a few typical types of materials. Contained within the building materials asbestos fibers present no significant health risk but once these tiny fibers are disturbed they become airborne and create potential exposure pathways. The fibers are very small and cannot be seen with the naked eye. Once they are inhaled they can become lodged into the lung potentially causing lung disease or other pulmonary complications.

Lead Based Paint

Prior to a U.S. EPA ban in 1978, lead-based paint was commonly used on interior and exterior surfaces of buildings. Through such disturbances as sanding and scraping activities, renovation work, or gradual wear and tear, old peeling paint or paint dust particulates have been found to contaminate surface soils or cause lead dust to migrate and affect indoor air quality. Exposure to residual lead can cause severe adverse health effects, especially in children.

Polychlorinated Biphenyls (PCBs)

PCBs are organic oils that were formerly used primarily as insulators in many types of electrical equipment including transformers and capacitors. After PCBs were determined to be a carcinogen the mid to late 1970s, the U.S. EPA banned PCB use in most new equipment and began a program to phase out certain existing PCB-containing equipment. Fluorescent lighting ballasts manufactured after January 1, 1978, do not contain PCBs and are required to have a label clearly stating that PCBs are not present in the unit.

Hazardous Materials Transport, Use or Disposal

Permitted Hazardous Materials Sites

Permitted users of hazardous materials within the Planning Area are tracked by regulatory agencies and include facilities that have permitted or historic USTs; have registered aboveground storage tanks; have reported releases of hazardous materials to the air, water, or land; generate, transport, store, or dispose of PCBs; manufacture or handle materials regulated under the Toxic Substances Control Act (TSCA); are registered pesticide producing facilities; or conduct dry cleaner-related operations. Permitted uses associated with handling of hazardous wastes includes generators, transporters, and disposal facilities permitted under the federal Resource Conservation and Recovery Act (RCRA) and facilities that have submitted hazardous waste manifests to DTSC. In addition, the City of Oakland maintains an inventory of sites that have filed a Hazardous Materials Business Plan or Risk Management and Prevention Plan,

have registered USTs, or have registered as a hazardous waste generator or hazardous waste treatment facility. These sites are categorized by approximate risk to the public.

Environmental databases also record land uses (both current and past) that involve the use of hazardous materials or that handle hazardous wastes. Permitted hazardous materials uses must operate in accordance with current hazardous materials and hazardous waste regulations, and are tracked by regulatory agencies. Permitted hazardous materials uses include facilities that:

- have permitted or historic underground storage tanks (USTs);
- have registered above-ground petroleum storage tanks;
- generate, transport, store, or dispose of polychlorinated biphenyls (PCBs);
- manufacture or handle materials regulated under the Toxic Substances Control Act (TSCA);
- are registered pesticide producing facilities; or
- conduct dry cleaner-related operations;

Permitted uses associated with handling of hazardous wastes include generators, transporters, and disposal facilities permitted under the federal Resource Conservation and Recovery Act (RCRA) and facilities that have submitted hazardous waste manifests to the California Department of Toxic Substances Control (DTSC). In addition, the City of Oakland maintains an inventory of sites that have filed a Hazardous Materials Business Plan or Risk Management and Prevention Plan, have registered USTs, or have registered as a hazardous waste generator or hazardous waste treatment facility. These sites are categorized by approximate risk to the public; sites considered high hazard sites (sites which store acutely hazardous chemicals or hazardous chemicals in high quantities or are sites with an independent operator with on-site contamination or a poor inspection history) are designated P1, sites considered medium hazard sites (such as auto body shops and drycleaners) are designated P2, and sites considered low hazard sites are designated P3.

The use and handling of hazardous materials at permitted sites is subject to strict regulation, and the potential for a release of hazardous materials from these sites is considered low unless there is a documented chemical release. However, permitted sites, even without documented releases, are potential sources of contamination of soil and/or groundwater (compared to sites where there are no hazardous materials) because of accidental spills, incidental leakage or spillage that may have gone undetected.

Within the Planning Area, many sites appear in more than one permitted hazardous materials database. A brief summary of the types of databases where permitted hazardous materials uses are recorded follows.

Federal RCRA Non-CORRACTS List

This listing is derived from the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Federal RCRA Generators List

The RCRA Generator List database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. The small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

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.

AST

The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

CA FID UST

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

Drycleaners

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; dry cleaning plants except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.

Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromats, cleaning/laundry, wash & dry etc.

Table 4.5-6 shows the number of permitted hazardous materials sites by type within each Opportunity Area. Many of the facilities are permitted for the use of more than one hazardous material. The majority of facilities that transport, use or dispose of hazardous materials are located within the Mandela/West Grand Opportunity Area but there are a number of permitted sites throughout the Opportunity Areas. The great majority of federally-listed hazardous waste generators within the Opportunity Areas are Small Quantity Generators, which generate between 100 kg and 1,000 kg of hazardous waste per month. There are only five federally-listed Large Quantity Generators, which generate over 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month. Most of the USTs and Aboveground Storage Tank (ASTs) within the Opportunity Areas are located within the Mandela/West Grand Opportunity Area. The San Pablo Avenue Opportunity Area contains a concentration of auto-related permitted hazardous materials sites.

**Table 4.5-6
Number of Permitted Hazardous Materials Sites by Type**

	Mandela/West Grand Opportunity Area	7th Street Opportunity Area	3rd Street Opportunity Area	San Pablo Avenue Opportunity Area
Large Quantity Generators	2	1	2	1
Small Quantity Generators	43	15	11	4
Storage Tanks	62	4	14	10
Dry Cleaners	26	35	10	16
Auto Related	<u>17</u>	<u>14</u>	<u>5</u>	<u>36</u>
TOTAL	166	48	48	69

Source: Environmental Data Resources, Inc. (EDR) 2012; Lamphier-Gregory 2012.

Large Quantity Generators are sites which generate over 1,000 kilograms (kg) of hazardous waste (as defined by the Resource Conservation and Recovery Act – RCRA), or over 1 kg of acutely hazardous waste per month.

Small Quantity Generators generate between 100 kg and 1,000 kg of hazardous waste per month.

Storage Tanks includes registered Underground Storage Tanks (USTs) or Aboveground Storage Tank (ASTs) listed in the State Water Resources Control Board’s Hazardous Substance Storage Container Database.

Dry Cleaners include related facilities that have EPA identification numbers, including power laundries, family and commercial; garment pressing and cleaners’ agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants except rugs; carpet and upholstery cleaning; industrial launderers; and laundry and garment services.

Auto Related is based on an EDR search of selected business directories and listings of potential gas station, service station, and auto repair sites.

Because the use and handling of hazardous materials at permitted sites are subject to strict regulation, the potential for a release of hazardous materials from these sites is considered low unless there is a documented chemical release at that same site. In such cases, the site would be also tracked in the environmental databases as an environmental case. Permitted sites without documented releases are nevertheless potential sources of hazardous materials releases to soil or groundwater (compared to sites where there are no hazardous materials) because of accidental spills, or incidental leakage or spillage that may have gone undetected.

Hazardous Materials Emergency Incidents

Emergency incidents involving hazardous materials can threaten human life, damage property, contaminate the environment, require the evacuation of nearby populations and block off major transportation routes. Potential hazards include accidental releases of toxic substances, industrial fires and explosion of petroleum products and other chemicals.

A 1997 analysis of the number, location, nature and outcome of hazardous materials emergency incidents in Oakland found there was an average of 96 hazardous substances spills reported each year in

Oakland during the period reviewed, of which 17percent occurred in West Oakland.⁹ Approximately two events each year resulted in one or more injuries requiring a hospital visit. The most people injured during a single year were 36 in 1994. One release from a plating shop culminated in a fire that resulted in the evacuation of several hundred people. The most commonly spilled substance was a petroleum product, accounting for 41 percent of all spills. Chemicals and unknown materials accounted for 24 percent and 16 percent of the spills, respectively. Other substances spilled include, waste, paint, gas, asbestos, sewage, and radioactive materials. Of the chemical spills reported, 21 involved the release of transformer and PCB containing materials. Other chemicals released include acids and cyanides used by the plating industries, asbestos, drug lab wastes, and chemicals used to make polyurethane foam. Gases involved in accidental gas releases included liquefied petroleum gas, ammonia, and chlorine; ammonia and chlorine are considered acutely toxic gasses. Four releases of radioactive materials were reported; one involved a leaking container of radioactive materials, two involved the theft of radioactive materials, and one involved the illegal dumping of a cylinder commonly used by hospitals to hold radioactive materials. Illegal dumping is the largest reported cause of spills within Oakland. Over 50 percent of the spills were reported by someone other than the responsible party. Other causes of spills include freight accidents, spills, releases from vessels, public observations, human error and equipment failure, traffic accidents, fires, fumes, and buried utilities.

Emergency Response Plan/Emergency Evacuation Plan

Emergency Evacuation Routes

The OES has identified a network of evacuation routes and potential emergency shelters as identified in Figure 2.1 of the General Plan Safety Element.¹⁰ Emergency Evacuation Routes are typically along major thoroughfares. The Emergency Evacuation Routes within West Oakland are 7th Street, 14th Street, 12th Street, 27th Street, 35th Street, Adeline Street, Market Street, Martin Luther King Jr. Boulevard, San Pablo Avenue, and West Grand Avenue. Many of the development Opportunity Sites under the proposed Specific Plan are located along streets identified as Emergency Evacuation Routes.

Office of Emergency Services (OES)

The OES is the certified unified program agency (CUPA) for the City, enforcing federal, State, and local legislation related to hazardous materials.¹¹ The OES operates the City's Emergency Operations Center (EOC) from which centralized emergency management would be performed during a disaster. The Standardized Emergency Management System (SEMS) is a framework for standardizing emergency-response procedures in California to facilitate the flow of information and resources among agencies in responding to multi-agency emergencies. The City has adopted the SEMS emergency plan along with five other emergency management plans.

⁹Neighborhood Information on Chemical Hazards in the Environment (NICHE) Project, 1997, An Analysis of 1,076 Spills in Oakland, California that Were Reported to the Emergency Response Notification System from 1987 to 1996, <http://home.earthlink.net/~clearh2orev/ernsweb.html>, accessed July 3, 2002. The analysis included only spills reported to the Emergency Response Notification System, a database of spills reported to federal agencies. The analysis did not consider releases reported only to state or local agencies.

¹⁰ City of Oakland, City of Oakland General Plan Safety Element, 2004, Figure 2.1.

¹¹ City of Oakland, City of Oakland General Plan Safety Element, 2004.

OFD is responsible for on-scene management of hazardous-materials incidents (though public-works staff respond to small-scale spills and complaints about illegal dumping.) Responding fire engines are assisted by OFD's hazardous materials response team, which is dispatched to the scene with a van equipped with specialized apparatus and personal protection equipment from Fire Station 3, located at 1445 14th Street at Mandela Parkway in West Oakland. The hazmat team includes specialists from the OES, and is able to provide technical expertise in the areas of isolation, identification of chemicals, hazard assessment, containment, mitigation, decontamination and disposal.

Oakland's hazardous materials area plan for emergency response outlines specific procedures for an organized response to hazmat emergencies. The document contains guidelines and instructions on plan activation; fire and police dispatch; immediate response; situation assessment; evacuation, crowd and traffic control, and sheltering; notification to the public, regional, state and federal agencies, and medical facilities; internal and mutual-aid coordination and communication; training, drills and exercises; maintenance of supplies and equipment; and incident critique and follow-up. The plan also lists the specific responsibilities of city departments and county, state, federal and non-governmental agencies that could be expected to play a role in the event of a hazmat incident.

Emergency Alerting and Notification System

In 2002, the Cities of Oakland, Alameda, and San Leandro, and the University of California at Berkeley installed a network of outdoor warning sirens to alert the public in the case of an emergency. The Oakland Office of Emergency Services (OES) has implemented an Emergency Alerting and Notification System, which uses outdoor warning sirens to alert the public in the event of an impending emergency including a toxic release, threat of flooding or mudslides, major fire, secondary problems caused by earthquakes, or other natural or technological disasters. The public is alerted to tune into the local emergency alerting radio station for safety information and instructions if the sirens are activated. There are sirens installed at three locations in West Oakland: the Goss Avenue/Pine Avenue intersection, Poplar Recreation Area, and Lafayette Square.

Citizens of Oakland Respond to Emergencies (CORE)

The OES has developed the Citizens of Oakland Respond to Emergencies (CORE) as a citizen emergency response program to help the Oakland community become more self-sufficient in disaster situations. CORE promotes community awareness and training in emergency response to chemical accidents, natural disasters, and severe weather incidents. The CORE program includes training for home and family preparedness, and forming and linking neighborhood response teams, as well as more advanced training in early response procedures, and fire suppression and prevention. The CORE program includes a hazardous materials and awareness educational program.

Wildland Fires

Wildland fires in Oakland are a concern in the Oakland Hills where wildlands abut residential development and steep terrain slows emergency vehicle access. The City has delineated a Wildfire Prevention Assessment District on Figure 4.1 of the City of Oakland General Plan Safety Element. West Oakland is not located within an area at risk of wildland fires and is not within the City's Wildfire Prevention Assessment District.¹²

¹² City of Oakland, City of Oakland General Plan Safety Element, November 2004, Figure 4.1.

The California Department of Forestry and Fire Protection (CalFIRE) maps areas of significant fire hazard based on fuels, terrain, weather and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, then determine the requirements for special building codes designed to reduce the ignition potential of buildings. The Planning Area is located within a non-Very High Fire Hazard Severity Zone.¹³

Regulatory Setting

The use, storage and disposal of hazardous materials, including management of contaminated soils and groundwater, is regulated by numerous local, State, and federal laws and regulations. The U.S. Environmental Protection Agency (U.S. EPA) is the federal agency that administers hazardous materials and hazardous waste regulations. State agencies include the California Environmental Protection Agency (Cal/EPA), which includes the California Department of Toxic Substances Control (DTSC), the State Water Resources Control Board (State Water Board), the California Air Resources Board (ARB) and other agencies. The San Francisco Bay Regional Water Quality Control Board (Water Board), the Bay Area Air Quality Management District (BAAQMD), Alameda County Department of Environmental Health (ACEH) and Oakland Fire Department (OFD) have jurisdiction on a regional or local level. A description of each agency jurisdiction and involvement in the management of hazardous materials and wastes is provided below. Regulatory and policy-based initiatives that promote reuse of “brownfields” by facilitating cleanup of abandoned, idled, and underutilized properties are identified. Regulations enacted to ensure safe handling of hazardous materials, response to releases of hazardous materials, closure of permitted facilities, and safe handling of hazardous materials near a sensitive receptor are also.

Federal

U.S. Environmental Protection Agency

The U.S. EPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials and hazardous waste. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations (40 CFR). The legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA), the Superfund Amendments and Reauthorization Acts of 1986 (SARA), and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The U.S. EPA provides oversight for site investigation and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes. The U.S. EPA has also developed numerous “brownfields” programs to promote and expedite the cleanup of brownfields while reducing the potential liability to lenders and developers of contaminated properties.

Occupational Safety and Health Administration

Worker health and safety is regulated at the federal level by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). The Federal Occupational Safety and Health Act of 1970 authorizes states (including California) to establish their own safety and health programs with OSHA approval; implementation of worker health and safety in California is regulated by the California

¹³ CalFIRE, Alameda County Very High Fire Hazard Severity Zone Map as Recommended by CalFIRE, September 2008. http://frap.cdf.ca.gov/webdata/maps/alameda/fhszl_map.1.pdf

Department of Industrial Relations (DIR). The DIR includes the Division of Occupational Safety and Health (DOSH), which acts to protect workers from safety hazards through its California OSHA (Cal/OSHA) program and provides consultative assistance to employers. California standards for workers dealing with hazardous materials are contained in CCR Title 8 and include practices for all industries (General Industrial Safety Orders), specific practices for construction, and other industries.

State

Department of Toxic Substances Control

The DTSC is authorized by U.S. EPA to enforce and implement federal hazardous materials laws and regulations in California. California regulations pertaining to hazardous materials are equal to or exceed the federal regulation requirements. The DTSC is authorized by the U.S. EPA to regulate the management of hazardous substances including the remediation of sites contaminated by hazardous substances. Most State hazardous materials regulations are contained in Title 22 of the California Code of Regulations. DTSC generally acts as the lead agency for soil and groundwater cleanup projects that affect public health, and establishes cleanup levels for subsurface contamination that are equal to, or more restrictive than, federal levels. DTSC has also developed land disposal restrictions and treatment standards for hazardous waste disposal in California. The DTSC has also developed “brownfield” programs to promote and expedite the cleanup of brownfields.

State Water Resources Control Board

The State Water Board enforces regulations on how to implement underground storage tank (UST) programs. It also allocates monies to eligible parties who request reimbursement of funds to clean up soil and groundwater pollution from UST leaks. The State Water Board also enforces the Porter-Cologne Water Quality Act through its nine regional boards, including the San Francisco Bay Regional Water Quality Control Board, described below.

California Air Resources Board

The ARB is responsible for coordination and oversight of State and local air pollution control programs in California, including implementation of the California Clean Air Act of 1988. ARB has developed State air quality standards, and is responsible for monitoring air quality in conjunction with the local air districts.

AB 440

Prior to the 2011 dissolution of all redevelopment agencies, the Polanco Redevelopment Act authorized a redevelopment agency to take action to require the investigation and cleanup of an identified release of hazardous materials in accordance with applicable state and federal laws, or to perform the cleanup itself with the oversight of applicable regulatory agencies, with cost recovery provisions, if the site owner or operator refuses to do so. The Polanco Act also provided immunity from liability for the contamination under this legislation. With the State’s decision to dissolve redevelopment agencies effective February 2012, there had not been an alternative by which the Polanco Act’s powers could be transferred to another, or successor agency.

On October 5, 2013 the Governor signed AB 440, giving cities, counties, and some housing authorities the authority to compel cleanup of contaminated properties. Similar to the prior Polanco Act, AB 440 gives municipalities the right to obtain environmental information from property owners, the authority to compel cleanup of properties, cost recovery for cleanup efforts, and immunity from liability during

the cleanup process. AB 440 also expands on the previous Polanco Act provisions by applying to properties “with the presence *or perceived presence* (emphasis added) of a release of hazardous material that contributes to the vacancies, abandonment of property, or reduction or lack of property utilization of property.”

California Land Environmental Restoration and Reuse Act

The California Land Environmental Restoration and Reuse Act (CLERRA) was enacted in 2001 to promote the restoration and reuse of brownfields sites in California. This act authorizes local regulatory agencies to require property owners to provide information related to potential past or present hazardous material releases at a property and to require a Phase I environmental site assessment if a release is indicated. In the event that a potential release is indicated by the Phase I environmental site assessment, the act requires the California EPA to assign the DTSC, Water Board, or a local agency as the lead oversight regulatory agency for further investigation and remediation of the site. These actions include a preliminary endangerment assessment, additional site investigations, and implementation of remedial action in accordance with an approved Remedial Action Plan (RAP).

Regional

San Francisco Bay Regional Water Quality Control Board

The Planning Area is located within the jurisdiction of the San Francisco Bay Water Board. The Water Board provides for protection of State waters in accordance with the Porter-Cologne Water Quality Act of 1969. The Water Board can act as lead agency to provide oversight for sites where the quality of groundwater or surface waters is threatened, and has authority to require investigations and remedial actions.

Bay Area Air Quality Management District

The BAAQMD has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which is the responsibility of U.S. EPA and ARB). BAAQMD is responsible for preparing attainment plans for non-attainment criteria pollutants, control of stationary sources, and the issuing of permits for activities demolition and construction activities involving building materials that contain asbestos (District Regulation 11, Rule 2).

Alameda County Department of Environmental Health and Oakland Fire Department

ACEH and the OFD are the primary agencies responsible for local enforcement of State and federal laws pertaining to hazardous materials management and oversight of hazardous materials investigations and remediation in Alameda County.

Alameda County Hazardous Waste Management Program

Assembly Bill (AB) 2948 requires counties and cities either to adopt a county Hazardous Waste Management Plan as part of their general plan, or enact an ordinance requiring that all applicable zoning subdivision, conditional use permit, and variance decisions be consistent with the county hazardous waste management plan. Once each County had its Hazardous Waste Management Program approved by the State, each city had 180 days to either 1) adopt a City Hazardous Waste Management Plan containing specified elements consistent with the approved County Hazardous Waste Management Program, 2) incorporate the applicable portions of the approved Program, by reference, into the City's

General Plan, or 3) enact an ordinance which requires that all applicable zoning, subdivision, conditional use permits, and variance decisions be consistent with the specified portions of the Program. Alameda County has adopted a Hazardous Waste Management Program that addresses procedures for hazardous materials incidents.

Under the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program, the ACEH is certified by the DTSC to implement the Hazardous Materials Management Plan and Inventory (HMMP); Hazardous Materials Business Plan (HMBP); Risk Management Program (RMP); UST; Spill Prevention, Control and Countermeasure (SPCC) Plan for aboveground storage tanks; hazardous waste generators; and on-site hazardous waste treatment (tiered permit) programs.

City of Oakland

Urban Land Redevelopment Program

The Oakland Urban Land Redevelopment (ULR) Program is a collaborative effort by the City of Oakland and the principal agencies charged with enforcing environmental regulations (DTSC, Water Board and ACDEH) to facilitate the cleanup and redevelopment of contaminated properties in Oakland. The program is coordinated by the City and is specific to Oakland sites. The ULR Program clarifies environmental investigation requirements and established Oakland-specific, risk-based corrective action (RBCA) standards for qualifying sites. RBCA standards are criteria that, when met, adequately address risk posed by contamination to human health.

The ULR Program includes a three-tiered approach to the investigation of sites and identification of RBCA standards. Tier 1 Risk Based Screening Levels (RBSLs) and Tier 2 Site Specific Target Levels (SSTLs) are specified for the protection of human health at sites that meet specific eligibility requirements, where commonly found contaminants are present, and the contaminants are considered to present a relatively low risk. RBSLs and SSTLs are identified for residential and commercial/industrial land uses. These levels are typically lower (more stringent) for residential land uses than for commercial/industrial land uses. For more complicated sites that do not meet the eligibility requirements, a Tier 3 analysis using site-specific information would be required to identify SSTLs for the appropriate land use. RBSLs and SSTLs are based on an acceptable carcinogenic risk of 10^{-5} and non-carcinogenic hazard index of 1.0.

A risk management plan would be prepared to specify containment measures where contaminants would be left at concentrations greater than the most stringent RBSL. These measures would be used to prevent exposure to any hazardous materials left in place and/or institutional controls that would be employed to ensure the future protection of human health. The site would also be included in the City of Oakland Permit Tracking System, and future permit applications for work that might alter the conditions of site closure would undergo special review by the OFD. Implementation of this program is intended to provide assurance that human health and environmental resources will be protected without needlessly delaying future construction and development projects.

Oakland Hazardous Materials Regulation

In accordance with Chapter 6.11 of the California Health and Safety Code (Section 25404, et seq.), the City of Oakland assumed authority and responsibility for the administration and enforcement of the unified hazardous waste and hazardous materials management program within the city. The purpose of this legislation was to simplify environmental reporting by streamlining the number of regulatory agency contacts a facility must maintain and requiring the use of standardized forms and reports. OES is the administering agency for the Certified Uniform Program Agency (CUPA) program in Oakland. The CUPA

programs include coordination of the local hazardous waste generator programs, underground and aboveground storage tank management, and investigations of leaking underground storage tank sites. OFD also implements the City of Oakland Hazardous Materials Assessment and Reporting Program, pursuant to City Ordinance No. 12323, which requires notification of hazardous materials storage, use and handling, and an assessment as to whether this storage, use and handling would cause a public health hazard to nearby sensitive receptors including schools, hospitals or other sensitive receptors.

Community Right to Know Laws

In accordance with Community Right to Know laws, businesses that handle specified quantities of hazardous materials prepare a Hazardous Materials Business Plan (HMBP) that details hazardous substance inventories, site layouts, training and monitoring procedures, and emergency response plans. Businesses that handle specified amounts of acutely hazardous materials must implement a Risk Management and Prevention Plan (RMPP). The RMPP must include information on the submitting facility, reference to the facility's business plan, process designation, identification of acutely hazardous materials handled and their quantity, and a general description of processes and principal equipment.

Spill Reporting at a Permitted Facility

In accordance with CUPA regulations, the City also requires facilities to report any actual or potential release of hazardous substances by calling 911 and is required to complete all actions necessary to remedy the effects of an unauthorized release. If the City suspects a release of hazardous materials from a facility they may also inspect the facility and abate a property where contamination is not being managed in compliance with CUPA regulations.

Closure of Facilities under CUPA Program

Facilities that handle hazardous materials or wastes under the CUPA program are required to appropriately close, prepare, and implement a closure plan when hazardous materials handling activities are stopped. The closure plan must ensure that there is no residual threat to public health and safety or the environment from possible release of hazardous materials and/or waste from the unit or facility and require no future monitoring of the site.

Use of Hazardous Substances within ¼ Mile of a Sensitive Receptor

To protect sensitive receptors from public health effects from a release of hazardous substances, the City of Oakland Municipal Code requires a handler of hazardous materials within 1,000 feet of a residence, school, hospital, or other sensitive receptor to make written disclosure of whether it will handle, store, or produce any hazardous substances. The City, at its discretion, may require such a facility to prepare a hazardous materials assessment report and remediation plan (HMARRP) and include public participation in the planning process. The HMARRP must identify hazardous materials used and stored at the property and the suitability of the site; analyze off-site consequences that could occur as a result of a release of hazardous substances (including fire); include a health risk assessment; and identify remedial measures to reduce or eliminate on-site and off-site hazards.

City of Oakland Municipal Code

The City of Oakland Municipal code includes regulations for the handling of hazardous materials in the City. Title 8, Chapter 8.12 of the Oakland Municipal Code adopts the California Health and Safety Code laws (Health and Safety Code Section 25500 et seq.) related to hazardous materials. City Ordinance No. 12323 regarding hazardous materials storage, use and handling reporting requires notification of

hazardous materials storage, use and handling, and an assessment as to whether this storage, use and handling would cause a public health hazard to nearby sensitive receptors including schools, hospitals or other sensitive receptors.

City of Oakland Hazardous Materials Release Response Plan Program

The OFD Fire Prevention Bureau Hazardous Materials Release Response Plan Program requires any business that handles more than a threshold quantity of a hazardous material to develop and submit to the OFD a Hazardous Materials Business Plan. The threshold is 30 gallons, 500 pounds or 220 cubic feet of gas. For Extremely Hazardous Substances as listed in 40 CFR, Part 355, Appendix A the reporting quantity is the California threshold or the Federal Threshold Planning Quantity (TPQ) depending on whichever is lower. The Hazardous Materials Business Plan must include and address facility information, inventory of hazardous materials, facility map, emergency response plans and procedures, training, release reporting, underground storage tanks, and hazardous waste treatment/tiered permitting.

City of Oakland General Plan

The following City of Oakland General Plan Safety Element policies are relevant to the hazards and hazardous materials impacts of the Specific Plan.

Policy HM-1: Minimize the potential risks to human and environmental health and safety associated with past and present use, handling, storage and disposal of hazardous materials.

Policy HM-2: Reduce the public's exposure to toxic air contaminants through appropriate land use and transportation strategies.

Policy HM-3: Seek to prevent industrial and transportation accidents involving hazardous materials and enhance the city's capabilities to respond to such incidents.

Policy PS-1: Maintain and enhance the city's capacity to prepare for, mitigate, respond to, and recover from disasters and emergencies.

The following Open Space, Conservation and Recreation (OSCAR) Element policies are relevant to the hazards and hazardous materials impacts of the Specific Plan.

Policy CO-1.2: Soil contamination and hazards. Minimize hazards associated with soil contamination through the appropriate storage and disposal of toxic substances, monitoring of dredging activities, and cleanup of contaminated sites. In this regard, require soil testing for development of any site (or dedication of any parkland or community garden) where contamination is suspected due to prior activities on the site.

Policy REC-4.2: Encourage maintenance practices which conserve energy and water, promote recycling and minimize harmful side effects on the environment. Ensure that any application of chemical pesticides and herbicides is managed to avoid pollution of ground and surface waters.

Standard Conditions of Approval

The City's Standard Conditions of Approval relevant to hazards and hazardous materials impacts are listed below. These Standard Conditions of Approval would be adopted as mandatory requirements of each individual future project within the Planning Area when it is approved by the City and would avoid or reduce significant impacts. The Standard Conditions and Approval are incorporated and required as part of development in accordance with the Specific Plan, so they are not listed as mitigation measures.

Where development in accordance with the Specific Plan would result in significant impacts despite implementation of the Standard Conditions of Approval, additional mitigation measures are recommended.

SCA 33: Construction Traffic and Parking. *(Prior to the issuance of a demolition, grading or building permit.)* The project applicant and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:

- a. A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.
- b. Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- c. Location of construction staging areas for materials, equipment, and vehicles at an approved location.
- d. A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.
- e. Provision for accommodation of pedestrian flow.

Major Project Cases:

- f. Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on-street spaces.
- g. Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's expense, within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy.
- h. Any heavy equipment brought to the construction site shall be transported by truck, where feasible.
- i. No materials or equipment shall be stored on the traveled roadway at any time.
- j. Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.
- k. All equipment shall be equipped with mufflers.
- l. Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.

SCA 35: Hazards Best Management Practices. *(Prior to commencement of demolition, grading, or construction.)* The project applicant and construction contractor shall ensure that Best Management

Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- a. Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;
- b. Avoid overtopping construction equipment fuel gas tanks;
- c. During routine maintenance of construction equipment, properly contain and remove grease and oils;
- d. Properly dispose of discarded containers of fuels and other chemicals.
- e. Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.
- f. If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

SCA 41: Asbestos Removal in Structures. *(Prior to issuance of a demolition permit.)* If asbestos-containing materials (ACM) are found to be present in building materials to be removed, demolition and disposal, the project applicant shall submit specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified ACM in accordance with all applicable laws and regulations, including but not necessarily limited to: California Code of Regulations, Title 8; Business and Professions Code; Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended.

SCA 61: Site Review by the Fire Services Division. *(Prior to the issuance of demolition, grading or building permit.)* The project applicant shall submit plans for site review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property owner may be required to obtain or perform a Phase II hazard assessment.

SCA 62: Phase I and/or Phase II Reports. *(Prior to issuance of a demolition, grading, or building permit.)* Prior to issuance of demolition, grading, or building permits the project applicant shall submit to the Fire Prevention Bureau, Hazardous Materials Unit, a Phase I environmental site assessment report, and a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer.

SCA 63: Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment. *(Prior to issuance of any demolition, grading or building permit.)* The project applicant shall submit a comprehensive assessment report to the Fire Prevention Bureau, Hazardous Materials Unit, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACM), lead-based paint, and any other building materials or stored materials classified as hazardous waste by State or federal law.

SCA 64: Environmental Site Assessment Reports Remediation. *(Prior to issuance of a demolition, grading, or building permit.)* If the environmental site assessment reports recommend remedial action, the project applicant shall:

- a. Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.
- b. Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency.
- c. Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater management plans.

SCA 65: Lead-Based Paint Remediation. *(Prior to issuance of any demolition, grading or building permit.)* If lead-based paint is present, the project applicant shall submit specifications to the Fire Prevention Bureau, Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended.

SCA 66: Other Materials Classified as Hazardous Waste. *(Prior to issuance of any demolition, grading or building permit.)* If other materials classified as hazardous waste by State or federal law are present, the project applicant shall submit written confirmation to Fire Prevention Bureau, Hazardous Materials Unit that all State and federal laws and regulations shall be followed when profiling, handling, treating, transporting and/or disposing of such materials.

SCA 67: Health and Safety Plan per Assessment. *(Prior to issuance of any demolition, grading or building permit.)* If the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.

SCA 68: Best Management Practices for Soil and Groundwater Hazards. *(Ongoing throughout demolition, grading, and construction activities.)* The project applicant shall implement all of the following Best Management Practices (BMPs) regarding potential soil and groundwater hazards.

- a. Soil generated by construction activities shall be stockpiled onsite in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state and federal agencies laws, in particular, the Regional Water Quality Control Board (Water Board) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.
- b. Groundwater pumped from the subsurface shall be contained onsite in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies of the City of Oakland, the Water Board and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources).

- c. Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to the Water Board and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.

SCA 69: Radon or Vapor Intrusion from Soil or Groundwater Sources.*(Ongoing.)*The project applicant shall submit documentation to determine whether radon or vapor intrusion from the groundwater and soil is located on-site as part of the Phase I documents. The Phase I analysis shall be submitted to the Fire Prevention Bureau, Hazardous Materials Unit, for review and approval, along with a Phase II report if warranted by the Phase I report for the project site. The reports shall make recommendations for remedial action, if appropriate, and should be signed by a Registered Environmental Assessor, Professional Geologist, or Professional Engineer. Applicant shall implement the approved recommendations.

SCA 74: Hazardous Materials Business Plan.*(Prior to issuance of a business license.)*The project applicant shall submit a Hazardous Materials Business Plan for review and approval by Fire Prevention Bureau, Hazardous Materials Unit. Once approved this plan shall be kept on file with the City and will be updated as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle the materials and provides information to the Fire Services Division should emergency response be required. The Hazardous Materials Business Plan shall include the following:

- a. The types of hazardous materials or chemicals stored and/or used on site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.
- b. The location of such hazardous materials.
- c. An emergency response plan including employee training information
- d. A plan that describes the manner in which these materials are handled, transported and disposed.

SCA A: Construction-Related Air Pollution Controls (Dust and Equipment Emissions). *(Ongoing throughout demolition, grading, and/or construction.)*During construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD):

- a. Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- e. Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).

- f. Limit vehicle speeds on unpaved roads to 15 miles per hour.
- g. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.
- h. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- i. Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and BAAQMD shall also be visible. This information may be posted on other required on-site signage.
- j. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- k. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
- l. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- m. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- n. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
- o. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.
- p. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- q. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- r. All trucks and equipment, including tires, shall be washed off prior to leaving the site.
- s. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.
- t. Minimize the idling time of diesel-powered construction equipment to two minutes.
- u. The project applicant shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate matter (PM) reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as they become available.
- v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).

- w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NO_x and PM.
- x. Off-road heavy diesel engines shall meet the CARB's most recent certification standard.

Impacts, Standard Conditions of Approval and Mitigation Measures

Significance Criteria

According to the City's Thresholds of Significance, the Specific Plan would have a significant impact related to hazards and hazardous materials if it would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. 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;
3. Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors [NOTE: Per the BAAQMD CEQA Guidelines, evaluate whether the project would result in persons being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for acutely hazardous air emissions either by siting a new source or a new sensitive receptor. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers];
4. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
5. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 (i.e., the "Cortese List") and, as a result, would create a significant hazard to the public or the environment;
6. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions;
7. Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in a significant safety hazard for people residing or working in the project area;
8. Be located within the vicinity of a private airstrip, and would result in a significant safety hazard for people residing or working in the project area;
9. Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
10. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Hazardous Materials Release Sites

Impact Haz-1: The Planning Area contains numerous sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Continued occupancy and use or future development of these hazardous materials sites in accordance with the Specific Plan could create a significant hazard to the public or the environment. However, with required implementation of City of Oakland Standard Conditions of Approval and required compliance with local, state and federal regulations for treatment, remediation or disposal of contaminated soil or groundwater, hazards to the public or the environment from hazardous materials sites would be less than significant. **(LTS with SCA)**

The Planning Area, including the Opportunity Sites previously described and shown in Table 4.5-2, contain numerous sites which are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the Cortese list). The Cortese list 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.

Additional properties within the Planning Area may be placed in environmental agency databases in the future due to the discovery of as yet unknown previous releases or new releases of hazardous substances. Continued use or future development of these hazardous materials release sites in accordance with the Specific Plan could create a significant hazard to the public or the environment.

Environmental Cases at Opportunity Sites Proposed for Residential Use

There are several sites within the West Oakland Planning Area that have historically been used for industrial purposes or are currently in industrial use, but which are now proposed for a change in land use to residential. The City of Oakland's Urban Land Redevelopment Program includes risk-based corrective action standards that are established to adequately address the risk posed by contamination to human health. Residential Risk Based Screening Levels incorporated into the Urban Land Redevelopment Program are more conservative (i.e., more stringent) than screening levels for commercial/industrial use. Previously applied assumptions regarding steps necessary to protect human health may need to be revisited and reassessed based on the proposed new residential use.

Roadway Site

The Roadway sites, located between 17th and 18th Street as well as the fronting parcels on the south side of 17th Street, and between Campbell and Wood Streets, are currently in industrial use but the Specific Plan proposes to designate these sites for future residential use. These properties are identified in the Specific Plan as containing Opportunity Sites #8 and #12. The following reported environmental cases are known to exist within these proposed residential sites, and which must be addressed by future development plans prior to any future residential development.

- 1708 Wood Street (Roadway Express, Case #T0600102107) – Open, Verification Monitoring: A Phase II Environmental Site Assessment prepared for this site in February 2011 identified two UST sand and oil/water separator as recognized environmental conditions on the site. In July 2011, the USTs, the separator and associated piping and materials were removed and impacted soils were excavated and disposed, and verification monitoring of groundwater wells is currently underway. In a letter to Alameda County Department of Health dated March 2012, the

environmental engineers in charge of remediation efforts recommended the site be considered for No Further Action status. The current official status of this case remains open pending ACDEH case closure.¹⁴

- 1655 17th Street (ACME Galvanizing, Case #T10000001503) – Open, Assessment and Interim Remedial Action: This is the southern portion of the Roadway site which is proposed for residential use under the Specific Plan. The state database indicates that lead, acid or another corrosive is a pollutant of concern at this site and indicates that the case has been listed as “Open – Assessment and Remedial Action” since August 2001. This listing suggests that an interim remedial action is occurring at the site, and that additional activities such as site characterization, investigation, risk evaluation, and/or site conceptual model development are occurring.¹⁵

Coca Cola Bottling/Mayway Site

There are no records of known environmental cases at this site listed on federal, state or regional databases.

Phoenix Iron Works Site

The Phoenix Iron Works site was used for a variety of purposes between 1920 and the present, including auto parts manufacturing, steel and ironworks fabrication, and fireworks manufacturing. The Specific Plan now proposes to allow this site to be used for mixed housing and business uses.

- 800-888 Cedar Street (Phoenix Iron Works, Case # T0600102229) – Open, Site Assessment: Multiple site investigations and remedial activities have been performed at the site since 1990. Analytical data from the prior investigations indicate that isolated areas of the site are impacted by acetone, diesel, gasoline, and other solvent or non-petroleum hydrocarbons; that elevated concentrations of lead are present in shallow soil across the site; and that metals within the groundwater is of potential concern. This site is currently regulated by the DTSC under a Voluntary Cleanup Agreement with Caltrans as amended in 1999. A 2011 Sampling and Analysis Plan prepared for this site describes soil assessment activities that are intended to be conducted during a Phase II Soil Investigation performed for the City of Oakland under a Brownfield Assessment Grant for both hazardous substances and petroleum hydrocarbons. The purpose of the Phase II Soil Investigation is to define the extent of semi-volatile organic compound and petroleum hydrocarbon soil contamination in several areas of the site that were identified in previous investigations; to provide further evaluation of elevated lead concentrations detected in soil; and to evaluate the potential need for remediation or additional evaluation of risk.¹⁶

¹⁴ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102107

¹⁵ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000001503

¹⁶ Northgate Environmental Management, Inc., *Sampling and Analysis Plan, Phase II Soil Investigation*, prepared for the City of Oakland under EPA Brownfields Assistance Grant Number 2B-00T18101-0, July 14, 2011. Accessed at: http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/9784458756/Phase%20II%20Sampling%20and%20Analysis%20Plan_7-14-11.pdf

West Oakland BART TOD Site

In 1994 the DTSC entered into a Voluntary Cleanup Agreement with Caltrans to conduct Preliminary Endangerment Assessments, removal actions, risk assessment, design review and/or implementation of a Remedial Action Plan (RAP) as required on a site-by-site evaluation for 34 separate properties located along the Cypress Freeway replacement realignment.¹⁷ Each of these properties were identified as being potentially contaminated with hazardous substances and wastes which may require remedial activities prior to and during construction of the freeway and installation of a new EBMUD sewer line. Many of these properties are located in and immediately adjacent to the site now proposed for the West Oakland BART Station TOD. The status of each of key property at the West Oakland BART Station TOD is listed below, along with other environmental cases within the West Oakland BART Station TOD site and vicinity.

- 1225 7th Street (All Mercedes Dismantlers, Case #T0600101163) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of the underground tank has been complete and that the case has been considered closed, based on a Cleanup Action Report, as of June 1997.¹⁸
- 1390 7th Street (Kelly's Truck Repair, Case # T0600101944) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of the underground tank has been complete and that the case has been considered closed, based on a Cleanup Action Report, as of March 1997.¹⁹
- 1451 7th Street (West Oakland BART Station, Case #70000133) – Refer to Local Agency: The site includes two parcels currently owned by BART, with the West Oakland BART Station running roughly north-south through the site. The site consists of the parking lots surrounding the station roughly from 5th Street to 7th Street and between Mandela Parkway and Chester Street. The site has been used as a parking lot since 1954. It was the former site of a door and window production facility. Pursuant to a USEPA grant, a Site Investigation Report was prepared for this site to assess whether chemicals of concern have impacted site soils, groundwater and soil vapor.²⁰ In response to the Site Investigation Report, DTSC has recommended that a supplemental investigation be conducted to further characterize semi-volatile organic compound, polychlorinated biphenyl, arsenic and lead hotspots, with use of the supplemental data and results to develop an appropriate remedial strategy (if warranted) to ensure that the site is suitable for the intended future use.²¹
- 1285 5th Street (Container Freight, Case #01420128) – Inactive, Needs Evaluation: The site is part of the Cypress Freeway Construction Project. Former site uses include a warehouse and distribution facility since 1967. Site activities consisted of unloading cargo from freight trains and transferring to

¹⁷ DTSC and Caltrans, *Voluntary Cleanup Agreement, Cypress Freeway Reconstruction Project and East Bay Municipal Utility District Sewer Line Realignment*, Oakland and Emeryville, CA, May 10, 1994

¹⁸ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101163

¹⁹ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101944

²⁰ Weiss Associates, *Targeted Site Investigation and Analysis Report for West Oakland Bay Area Rapid Transit Station*, Oakland, California, June 29, 2007

²¹ DTSC, letter to Alliance for West Oakland Development and SF BART, October 3, 2007. Accessed at : http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/7848157584/WOBS_CL_100307.pdf

trucks. Prior to this use, the site was owned by the Commissary Department of the Southern Pacific Railroad. It is not known what site activities took place when it was owned by the railroad. Potential contaminants of concern at this site include arsenic, chromium, diesel, gasoline, lead, nickel, other insecticides /pesticide fumigants /herbicides, other solvent or non-petroleum hydrocarbon, polychlorinated biphenyls (PCBs), and waste motor/hydraulic/lubricating oil. According to a DTSC final Report of Completion of Remedial Action²², remedial action completed at this site consisted of management of contaminated soil during Caltrans' Cypress Freeway (1-880) Reconstruction Project. Construction and remedial actions at these sites were governed by the Cypress Replacement Project Feasibility Study/Remedial Action Plan (1995). Contaminated soil was excavated from these sites, most of which was hauled to an appropriate landfill and some of which was reused as fill material. This soil was graded, compacted and covered with clean imported aggregate base, then covered with approximately 4 inches of asphalt. Semi-annual groundwater monitoring and cap inspection and maintenance was required to continue at site. Certification of the remedial actions is listed as pending an Operation and Maintenance agreement and a land use covenant for the site.

- 500 Kirkham Street (Smilo Chemical Company, Case # 01510022) – Inactive, Needs Evaluation: This site is part of the Cypress Freeway Reconstruction Project. The site was formerly known as Smilo Chemical Company, which operated as a chemical repackaging company. It was later used as a truck repair facility in which the facility occupied approximately one third of the site. Previous investigations have identified potential contaminants of concern at this site to include acetone, arsenic, chromium, copper, diesel, gasoline, lead, nickel, other solvent or non-petroleum hydrocarbon, polychlorinated biphenyls (PCBs). This site's case is overseen by DTSC. Pursuant to a Brownfield Assessment Grant issued by the U.S. EPA for the West Oakland Development Area, the City of Oakland is conducting detailed investigations at this site. A Sampling and Analysis Plan, Phase II Soil and Groundwater Investigation Report for 500 Kirkham Street, describes the soil and groundwater assessment activities that are intended to be conducted during a Phase II Soil and Groundwater Investigation by the City of Oakland. The grant covers both petroleum products and hazardous substances. The work will be performed in accordance with procedures outlined in a Quality Assurance Project Plan for the West Oakland Development Area (Northgate Environmental, September 2009). The Quality Assurance Project Plan was prepared to serve as a master document to support site-specific sampling and analysis plans. The purpose of the Phase II Soil and Groundwater Investigation will be to confirm the presence or absence of soil or groundwater contamination at the site; to define potential sources of contamination at the site (whether originating from on-site or off-site sources; to evaluate data collected at the site; to provide professional opinions regarding environmental conditions at the site, potential liabilities associated with the site, and potential impacts to future use of the site; and to evaluate the potential need for remediation or additional evaluation of risk.²³
- 5th and Kirkham (Southern Pacific Transportation Company, Case #T060010130) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking

²² DTSC Report of Completion of Remedial Action, February 2007. Accessed at: http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/8268796622/DTSC%20Report%20of%20Completion%20of%20RA.pdf

²³ Sampling and Analysis Plan, Phase II Soil and Groundwater Investigation at 500 Kirkham Street

diesel and waste oil has been complete and that the case has been considered closed, based on a Cleanup Action Report, as of October 2012.²⁴

- 1396 5th Street – Red Star Yeast, Case #T06019794669 – Open, Remediation: This site was formerly occupied by the Red Star Yeast Company, but all buildings and appurtenant structures have been removed. Soil borings conducted in 2004, 2006 and 2011 encountered a layer of fill material with detected concentrations of cadmium, lead, mercury, and copper at several locations across the site. The metals appear to have been brought to the site with the fill material and do not appear to be related to site activities. The fill material is believed to have been placed at the site sometime between 1862 and 1890. Petroleum hydrocarbons were also detected in site soils and shallow groundwater. Soil excavations were conducted to remove soil with elevated concentrations of metals. Three USTs were discovered during the investigation and soil removal process. The three USTs were removed or closed in place.²⁵ Alameda County Environmental Health staff has reviewed the Soil Closure Report (August 21, 2012), the Excavation Report (October 15, 2012) and the Underground Storage Tank Removal and Closure Report (November 13, 2012), and have identified several items that require additional information, clarification, or correction before the County is able to adequately evaluate the effectiveness of the soil excavation and UST removals before considering the case for closure.²⁶
- 1445 5th Street (Eastlake Associates, Case # T0600100492) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking gasoline has been complete and that the case has been considered closed, based on a Cleanup Action Report as of July 1993.²⁷
- 349 Mandela Parkway (SF BART, Case #01750021) – Certified: According to a Site Certification Synopsis prepared by DTSC, this 0.3-acre site was formerly used by a beer bottle maker, a soda works, beer depot, wholesale beer and wine warehousing and cold storage, plumbing supplier, clothing and salvage warehouse operation, and more recently by an auto wrecker. Surface and subsurface sampling at the site found elevated concentrations of lead, as well as other metals and organic compounds. Lead was the only chemical identified as a chemical of potential concern. Soil excavation and subsequent offsite disposal has occurred and DTSC determined that all appropriate response actions had been completed, that all acceptable engineering practices were implemented

²⁴ State Water Resources Control Board, Geotracker Report. Accessed at:
https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101304

²⁵ Alameda County Health Care Services Agency, *Draft Fact Sheet - Proposed Soil Cleanup, Red Star Yeast*, April 28, 2011. Accessed at :
https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/3402677774/RO2896%2C%20Red%20Star%20Yeast%2C%201396%205th%20Street%2C%20Oakland%20Fact%20Sheet%202011-04-20.pdf

²⁶ Alameda County Health Care Services Agency Case File Review for SLIC Case RO0002896 and GeoTracker Global ID T06019794669, Red Star Yeast/1396 Fifth Street LLC, Accessed at
https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/9375492691/RO2896_DIR_L_2012-12-18.pdf

²⁷ State Water Resources Control Board, Geotracker Report. Accessed at:
https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100492

and that no further removal/remedial action was necessary. The lead contaminated soil was remediated to achieve an unrestricted land use standard.²⁸

- 1414 3rd Street (AMCO Chemical Site, Case #01390001) – National Priorities List, Active: The site was occupied by AMCO Chemical Corp. until December 1989. DTSC inspected the site in 1988 and in February 1989 issued a Report of Violation to correct violations related to leakage of hazardous waste from piping and containers; storage of hazardous waste in deteriorated or otherwise corroded conditions; and unlabeled waste containers. The USEPA implemented a removal action in 1997 to address high concentrations of vinyl chloride at or near the AMCO site. A groundwater extraction and treatment system and a soil vapor extraction system were installed to address the vinyl chloride and other contaminants found in shallow groundwater and soils. Operation of this system ceased in July 1998 due to community concerns. USEPA listed the site on the National Priorities List in July 2004. Since then, the U.S. EPA has continued to conduct soil gas, soil and groundwater investigations, and to work towards development of a remediation and reuse plan.²⁹

The Site is located in an industrial neighborhood in transition. Potential future uses in the area include a mix of commercial and residential uses; future use of the facility itself is uncertain. Further, vapor intrusion concerns have led EPA to consider temporary and permanent relocation for residents in homes surrounding the facility as cleanup continues. This creates additional uncertainty related to the uses on the block surrounding the AMCO property as current land uses may change in response to both relocation possibilities and the land use goals of the City of Oakland and neighborhood residents. Based on the Specific Plan's land use assumptions, future land use on the block around the AMCO property is intended to include residential uses and Transit Oriented Development, which may include residential, commercial, office, community institution and open space uses. However, the presence of the AMCO site and its conditions may influence future land use patterns on the block. Permanent or temporary relocation of existing residential units may influence the size and form of TOD development, and long-term cleanup at the site may require phased development of the block.

Certain site remediation considerations may alter or affect land use choices for this site and its surroundings. Targeted use restrictions may be required on the site to ensure protection of human health and the environment, long-term remedial features may create some constraints on future use although remedial features could be clustered in order to maximize buildable space, and there may be an option to restrict residential use on the ground floor only and allow upper story residential use. EPA's analysis of the site is ongoing, and additional information about the effectiveness of various remediation alternatives may affect the types of land uses allowed at the site. In the interim, during the on-going analysis and planning for remediation of this site, interim use of the site in a manner that is beneficial to the community has been considered. A bamboo forest has been identified as the preferred interim use. Bamboo plantings could visually screen the site and restrict access during cleanup, and could possibly have some value for groundwater

²⁸ DTSC *Site Certification Synopsis*, BART-Mandela Parkway Site at 349 Mandela Parkway, April 2000. Accessed at: http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/9535382926/madela%20site%20certification%20synopsis.pdf

²⁹ DTSC Envirostor database, accessed at: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01390001

cleanup, capping lead contamination in soil, and reducing exposure to freeway related air pollutants.

Standard Conditions of Approval

Future development of residential use throughout the West Oakland Specific Plan area, particularly new residential development that may ultimately be proposed on those sites identified above, will be required to implement all applicable City of Oakland Standard Conditions of Approval.

SCAs 61 through 66, and 69 will require preparation of a Phase I Environmental Site Assessment (ESA) and/or a Phase II ESA. A Phase I ESA typically lists current and past operations, reviews environmental agency databases (including the State Cortese list as indicated above), records site reconnaissance observations, and summarizes potential contamination issues. A Phase I ESA is typically triggered by a title transfer prior to submission of a development application to the City. In the event that a development application for a proposed residential development project allowed by the Specific Plan does not already have a Phase I ESA, one would be required through the City's permit application process.

If the Phase I ESA identifies known or potential contamination issues, including presence on the Cortese list (as indicated for those sites listed above), a Phase II ESA is conducted. A Phase II ESA typically includes collecting soil and/or groundwater samples at the project site and sending the samples to a laboratory for analysis. A Phase II ESA can also entail inspecting existing structures to identify hazardous building materials. A Phase II ESA typically includes recommendations for remediation and/or safe handling of identified contaminants.

SCA 67: Health and Safety Plan per Assessment, requires a Health and Safety Plan that conforms to the Phase I ESA or Phase II ESA recommendations to protect construction workers. *SCA 68, Best Management Practices for Soil and Groundwater Hazards*, requires Best Management Practices (BMPs) for handling contaminated soil and groundwater.

In addition to compliance with the City's SCAs 61 through 69, any required treatment, remediation or disposal of contaminated soil or groundwater would be required to comply with any additional local, State and federal regulations. A Remedial Action Plan, Soil Management Plan and Groundwater Management Plan would be required to address issues such as dust suppression, protection of surface waters and storm drainage outfalls, noise attenuation, etc. The BAAQMD may also impose specific requirements to protect ambient air quality from dust, lead, hydrocarbon vapors or other airborne contaminants that may be released during site remediation activities. A Risk Management Plan and a Site Health and Safety Plan in conformance with federal and Cal/OSHA regulations would also be required. These plans would include identification of chemicals of concern, potential hazards, personal protection clothing and devices, and emergency response procedures as well as required fencing, dust control or other site control measures needed during excavation to protect the health and safety of workers and the public. OSHA requirements mandate an initial training course and subsequent annual training. Site-specific training may also be required for some workers. For transportation of hazardous materials for disposal, the remediation contractor would be required to follow state and federal regulations for manifesting the wastes, using licensed waste haulers, and disposing of the materials at a permitted disposal or recycling facility.

With required implementation of SCAs 61 through 69, and required compliance with local, State and federal regulations for treatment, remediation or disposal of contaminated soil or groundwater, the hazard to the public or the environment from hazardous materials sites would be less than significant.

Mitigation Measures

None needed

Environmental Cases at Other Key Opportunity Sites

The Specific Plan identifies two separate sites for future redevelopment of high intensity anchor campuses within the northeast quadrant of the Mandela/West Grand intersection. This first location, Mountain Storage, is a 2-block site at the corner of West Grand Avenue and Mandela Parkway, also bounded by 24th Street and Poplar. The second campus location calls for redevelopment of the Oakland Scavenger and Custom Alloy Scrap Sales sites, which are irregular shaped series of parcels generally bound by 26th Street to 28th Street, and from Peralta Street to Magnolia Street. These locations are identified in the Specific Plan as containing Opportunity Sites #10 and #20 (Mountain Storage), and #2, #11 and #19 (Oakland Scavenger and CASS site). The following reported environmental cases are known to exist within these campus sites, and which must be addressed by future development plans prior to campus development.

Mountain Storage Site

The Mountain Storage site (Opportunity Sites #10 and #20) contain no reported environmental cases.

Oakland Scavenger and CASS Sites

- 2601 Peralta Street (CASS, Case #60000373 and #T0600100997) – Case Closed, No Action Required: The CASS operations consist of recycling ferrous and non-ferrous metals. The property at 2601 Peralta is used for scrap metal storage prior to processing. A release to soil and groundwater from four underground storage tanks was documented at the site. The USTs were used for gasoline, diesel and waste oil. The USTs were removed in October of 1988. Soil samples and groundwater samples were collected after removal of the USTs, and remaining contaminants were detected at levels below their respective environmental screening level or preliminary remediation goals, with the exception of gasoline. Site characterization and remediation was completed under the oversight of the County of Alameda Environmental Health Division from 1988 through 1991. In May 1996, the County issued a Remedial Action Completion Certification, and in April 1995, the RWQCB approved a Case Closure report.³⁰
- 2730 Peralta (CASS, Case #T0600100427)- Open, Site Assessment: Two USTs were removed from the site in April 1990, and several borings and monitoring wells were installed. On site wells have been reported to contain over 3 feet of free product. In 1991, a work plan was submitted and subsequently approved by ACDEH, but there is no documentation of remedial/characterization/monitoring action at the site since 1995. Notices of violation were sent to the responsible party with no response. In June 2012, ACDEH referred the site to the RWQCB for enforcement actions.³¹

³⁰ DTSC, *Site Screening Assessment for 2601 Peralta*, June 23, 2006. Accessed at: http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/4671186149/Site%20Screening%20Assessment.pdf

³¹ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100427

- 2711 Union Street (CASS, Case #T06019746121) – Open, Site Assessment: This site is also part of the CASS scrap metal recycling facility. A 1990 limited site investigation found oil and grease and diesel impacts in the soil and groundwater. Monitoring wells were installed in 1996 and 1998 and results from those wells indicated risks for volatilization from groundwater to both onsite and down gradient receptors. A letter dated July 2009 from ACDEH indicates that the groundwater monitoring wells on the site has not been monitored since 1998. The status of this case remains open.³²

Pacific Pipe/American Steel Site

The Specific Plan identifies an approximately 4-block, “L” shaped area within the Mandela/Grand Opportunity Area as a site for future redevelopment as a series of high intensity anchor campus sites. This location is generally bounded by West Grand Avenue, Mandela Parkway to 18th Street, 18th Street to Poplar, Poplar to 21st Street, 21st to Adeline and Adeline back to West Grand Avenue. It is identified in the Specific Plan as containing Opportunity Sites #5(Pacific Pipe/American Steel) and #17 (EBMUD). The following reported environmental cases are known to exist within these campus sites, and which must be addressed by future development plans for campus development.

- Mandela at West Grand (Case #60000433) – Inactive, Needs Evaluation: This site consists of two blocks used for industrial purposes: the Pacific Pipe block and the American Steel Building block. The Pacific Pipe block is occupied by a steel pipe product manufacturing company with railroad and crane tracks, a three bay warehouse, pipe storage yards, underground storage tanks, and a gasoline service station. The American Steel Building is occupied by several separate companies. This site is currently regulated by the DTSC under a Voluntary Cleanup Agreement to address potential contaminants of concern, including lead, diesel, gasoline, motor oil and cadmium. The case is currently identified as inactive and in need of further evaluation.
- 1901 Poplar (Pacific Pipe Company, Case # T0600101893)- Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking diesel has been complete and that the case has been considered closed, based on a Cleanup Action Report as of October 1995.³³

East Bay MUD Site

- 1200 21st Street (EBMUD, Case #T0600102115) – Open, Site Assessment: This site is part of a large EBMUD facility with several previous parcels containing environmental issues. In 1994, six USTs were removed from the site. Elevated concentrations of gasoline, oil and grease, and benzene were detected in soil samples. In 1995 and 1996, two additional subsurface investigations were conducted. Based on the analytical data, remedial soil excavation activities were conducted in 1997 during construction of the Adeline Maintenance Center. An additional subsurface investigation was conducted in 2009 to further characterize the extent of petroleum hydrocarbons in soil and groundwater at three areas of concern (a former gas station, a former auto shop, and an existing waste oil tank. Information from this investigation is to be used to interpret the geologic and hydro-geologic characteristics of the water-bearing formation and the nature and distribution of subsurface contamination, for preparation of concentration maps of constituents of concern, and to

³² State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019746121

³³ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101893

develop recommendation for monitoring and/or remediation wells or other remediation measures, if warranted.

Upper Wood Street Development Sites

The Specific Plan identifies an approximately 4-block area within the Mandela/Grand Opportunity Area as a site for future redevelopment as a high intensity anchor campus site. This location is generally bounded by West Grand Avenue to 26th Street, between Mandela Parkway and I-880. It is identified in the Specific Plan as containing Opportunity Sites #3, #4 and #18. The following reported environmental cases are known to exist within this campus site, and which must be addressed by future development plans for this campus site.

- Wood Street at West Grand Avenue (BNSF Wood Street Yard, Case #01400017) - Certified O&M - Land Use Restrictions: This site consists of one small (0.03-acre) parcel that was part of an active rail yard from approximately the 1930's through the early 1990's. Portions of the site have been incorporated within the Cypress Freeway Reconstruction Project. Site investigations were conducted in 1994 and 2005, indicating that soils throughout the site have been contaminated by arsenic at concentrations above regional background levels. A Preliminary Environmental Assessment prepared for the site concluded that the site does not pose an immediate potential hazard to public health or the environment because of limited exposure. Exposure to site soils would require excavation of soils and redevelopment in the area is highly unlikely because of current site use as part of the Cypress Freeway Realignment Project. A deed restriction has been recorded to restrict future use of the property.
- 2233 Wood Street (Army-Navy Distributing Center, Case #J09CA0753, 80000374) – No Further Action: This site is a former Army-Navy Distributing Center situated on approximately 3 acres on the west side of Wood Street. Evidence indicates that there were two underground fuel tanks and a warehouse on this site. The site is now partially owned by Caltrans and partially owned by the Burlington Northern Santa Fe Railroad. In May of 1994 Caltrans entered into a Voluntary Cleanup Agreement with DTSC, removed underground tanks, excavated and disposed of contaminated soil, and conducted groundwater monitoring. In November 2007, DTCS agreed to a No Further Action status for this site.³⁴ This address is also referenced in the DTSC database as LDS Trucking (Case #01420127). Pursuant to a Voluntary Cleanup Program, Caltrans conducted site investigations to document that a solvent source is no longer present in the subsurface soils and substantiating that there is no need for further remediation or monitoring. In July 2008, DTSC finalized and signed a Remedial Action Certification indicating that no further removal or remediation measures were necessary.³⁵
- 2200-2222 Wood Street (Lucchesi Property, Case #SLT19795063) – Open, Site Assessment: According to a June 2006 Phase II Subsurface Investigation, a petroleum release occurred on this property at some uncertain time, adversely affecting the groundwater. The Phase II ESA recommended reporting the results of the investigation to the Alameda County Department of Environmental Health and OFD. At this time, no remedial actions have been identified and the case remains open.

³⁴ DTSC Envirostor Data Base, Accessed at:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80000374

³⁵ DTSC Envirostor Data Base, Accessed at:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01420127

- 2230 Willow Street (Crown Zellerbach, Case #T0600101564) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking gasoline has been complete and that the case has been considered closed, based on a Cleanup Action Report as of November 1993.³⁶

Pacific Pipe Site at 24th Street

- 1685 24th Street (Pacific Pipe Company, Case # T06019758726) – Open, Site Assessment: Seven USTs, including storage for gasoline and waste oil, were removed from this site in 1987. Soil and groundwater investigations revealed concentrations of gasoline, diesel, motor oil and benzene in soil, and benzene in groundwater. The lateral and vertical extent of contamination was un-defined and appears to extend off site. Soil and groundwater investigation were to be submitted in 2008, but the report was not submitted and no further reports documenting work have been received. In April 2012, ACEH requested the site be referred to the San Francisco Bay Regional Water Quality Control Board for enforcement actions.
- 1688 24th Street (Cereske Electric, Case #t0600102219)- Open , Site Assessment: Two underground storage tanks were removed from this site in 1995, and visibly stained soil was observed in the underground pit. Soil samples indicate presence of gasoline and benzene, and groundwater samples indicate presence of benzene. The lateral and vertical extent of contamination was un-defined. Soil and groundwater investigation were to be conducted but the responsible parties are non-responsive. In June 2012, ACEH requested the site be referred to the San Francisco Bay Regional Water Quality Control Board for enforcement actions.
- 1735 24th Street (Pacific Supply, Case #T0600101039) – Open, Site Assessment: An underground storage tank was removed from this site in 1987, and soil and vapor samples conducted at the time indicated the soils were contaminated with gasoline, and that the gasoline may have reached the groundwater. Soil and groundwater investigations were conducted, and quarterly groundwater monitoring was initiated in 1992, including a vapor extraction pilot study. Groundwater sampling has continued up to the present. In January of 2012, the Regional Water Quality Control Board recommended the site be considered for closure, providing a health risk assessment is conducted and determined safe for prescribed activities but case closure by the lead agency (ACDEH) has not occurred.
- 1700 24th Street (C&L Trucking, Case #T0600102253) – Open, Site Assessment: An underground storage tank was removed from this site in 1990. Soil and groundwater samples conducted at the time detected diesel in the soils and groundwater. A monitoring well was installed in 1996. In a February 2001 letter, the ACDEH found the site to be out of compliance with agency directives regarding monitoring and reporting.

3rd Street Development Sites

The Specific Plan identifies an approximately 3-block area within the 3rd Street Opportunity Area as a site for future redevelopment as a high intensity anchor campus site. This location is bounded by 3rd Street to 5th Street, between Market Street and Chestnut Street. It is identified in the Specific Plan as

³⁶ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101564

Opportunity Site #35. The following reported environmental cases are known to exist within this campus site, and which must be addressed by future development plans for this campus development.

- 333 Market Street (Marine Terminals Corporation, Case #T0600100865) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking gasoline has been complete and that the case has been considered closed, based on a Cleanup Action Report as of January 1997.³⁷
- 333 Filbert (East Bay Ford Truck Sales, Case #T0600100485) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking waste oil / motor / hydraulic / lubricating oils have been complete and that the case has been considered closed, based on a Cleanup Action Report as of July 1994.³⁸
- 333 Chestnut Street (Aramark Uniform Services, Case #T0600100079) – Closed: This site is listed as a closed Alameda County LUST cleanup site, indicating that removal of identified leaking diesel has been complete and that the case has been considered closed, based on a Cleanup Action Report as of January 2004.³⁹

Standard Conditions of Approval

Future development of campus-type business and industrial uses at those Campus sites identified above will be required to implement all applicable City of Oakland Standard Conditions of Approval.

SCAs 61 through 66, and 69 require preparation of a Phase I Environmental Site Assessment (ESA) and/or a Phase II ESA. A Phase I study typically lists current and past operations, reviews environmental agency databases (including the State Cortese list), records site reconnaissance observations, and summarizes potential contamination issues. A Phase I ESA is typically triggered by a title transfer prior to submission of a development application to the City. In the event that a development application for a proposed campus-style development project pursuant to the Specific Plan does not already have a Phase I ESA, one would be required through the City's permit application process.

If the Phase I ESA identifies known or potential contamination issues, including presence on the Cortese list such as those sites indicated above, a Phase II ESA is conducted. A Phase II ESA typically includes collecting soil and/or groundwater samples at the site and sending the samples to a laboratory for analysis. A Phase II can also entail inspecting existing structures to identify hazardous building materials. A Phase II typically includes recommendations for remediation and/or safe handling of identified contaminants.

In those cases where either existing or future Phase II reports do include recommendations for remediation, all necessary environmental investigation requirements and established Oakland-specific, risk-based corrective action standards for proposed industrial/commercial development sites would be established to adequately address the risk posed by contamination to human health, pursuant to the City of Oakland's Urban Land Redevelopment Program. All currently required site characterization

³⁷ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100865

³⁸ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100485

³⁹ State Water Resources Control Board, Geotracker Report. Accessed at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100079

efforts, on-going monitoring and all already required remediation efforts established by the applicable lead agencies, whether current or inactive, would need to be fully implemented. A Risk Management Plan would be required, specifying containment measures where contaminants may be left at concentrations greater than the most stringent screening levels. These measures would be used to prevent exposure to any hazardous materials left in place. Institutional controls may also be employed to ensure the future protection of human health. The site would also be included in the City of Oakland Permit Tracking System, and future permit applications for work that might alter the conditions of site closure would undergo special review by the OFD. Implementation of this program is intended to provide assurance that human health and environmental resources will be protected.

SCA 67, *Health and Safety Plan per Assessment*, requires a Health and Safety Plan that conforms to the Phase I ESA or Phase II ESA recommendations be implemented during site characterization and remediation efforts to protect construction workers. SCA 68, *Best Management Practices for Soil and Groundwater Hazards*, requires Best Management Practices (BMPs) for handling contaminated soil and groundwater.

In addition to compliance with the City's SCAs 61 through 69, any required treatment, remediation or disposal of contaminated soil or groundwater would be required to comply with all local, State and federal regulations. A Remedial Action Plan, Soil Management Plan and Groundwater Management Plan would be required to address issues such as dust suppression, protection of surface waters and storm drainage outfalls, noise attenuation, etc. The BAAQMD may also impose specific requirements to protect ambient air quality from dust, lead, hydrocarbon vapors or other airborne contaminants that may be released during site remediation activities. A Risk Management Plan and a Site Health and Safety Plan in conformance with federal and Cal/OSHA regulations would also be required. These plans would include identification of chemicals of concern, potential hazards, personal protection clothing and devices, and emergency response procedures as well as required fencing, dust control or other site control measures needed during excavation to protect the health and safety of workers and the public. OSHA requirements mandate an initial training course and subsequent annual training. Site-specific training may also be required for some workers. For transportation of hazardous materials for disposal, the remediation contractor would be required to follow state and federal regulations for manifesting the wastes, using licensed waste haulers, and disposing of the materials at a permitted disposal or recycling facility.

With required implementation of SCAs 61 through 69, and required compliance with local, State and federal regulations for treatment, remediation or disposal of contaminated soil or groundwater, the hazard to the public or the environment from hazardous materials at proposed campus development sites would be less than significant.

Mitigation Measures

None needed

Hazardous Building Materials

Impact Haz-2: Asbestos or lead based paint present within older structures in the Planning Area could be released into the environment during demolition or construction activities, which could result in soil contamination or pose a health risk to construction workers or future occupants. However, with required implementation of the City's Standard Conditions of Approval SCAs 41, 63 and 65, and other applicable laws, regulations, standards and oversight currently in place, the

potential impact of the Specific Plan related to exposure to hazardous building materials would be less than significant. **(LTS with SCA)**

Existing structures within the Planning Area may contain asbestos-containing insulation, siding, finishes and other asbestos-containing building materials, and, depending on the period when they were constructed, may contain lead based paint. Asbestos or lead-based paint present within older structures could be released into the environment during demolition or construction activities, which could result in soil contamination or pose a health risk to construction workers or future occupants if not managed in accordance with existing laws and regulations.

Standard Conditions of Approval

City of Oakland Standard Conditions of Approval SCAs 41, 63 and 65 would provide for the safe removal and disposal of asbestos and lead-based paint. SCA 41, *Asbestos Removal in Structures*, requires specifications signed by a certified asbestos consultant for the removal, encapsulation, or enclosure of the identified asbestos containing material in accordance with all applicable laws and regulations. SCA 63, *Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment*, requires submittal of a comprehensive assessment report to the Fire Prevention Bureau, Hazardous Materials Unit, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials, lead-based paint, and any other building materials classified as hazardous waste. SCA 65, *Lead-Based Paint Remediation*, requires submittal of specifications to the Fire Prevention Bureau, Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations.

In addition to the City's Standard Conditions of Approval, building demolition or rehabilitation activities within the Planning Area would be required to comply with regulations pertaining to the removal and proper disposal of asbestos and lead-based paint. Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. Individual building demolition and rehabilitation contractors would be required to implement standard federal, State and BAAQMD procedures for asbestos containment and worker safety. The BAAQMD is vested with authority to regulate airborne pollutants through both inspection and law enforcement, and must be notified 10 days in advance of any proposed demolition or abatement work. The demolition or removal of asbestos-containing building materials is subject to the limitations of BAAQMD Regulation 11, Rule 2: Hazardous Materials; Asbestos Demolition, Renovation and Manufacturing, which requires special handling of asbestos containing material (e.g., by keeping materials continuously wetted). The Rule prohibits any visible emissions of asbestos-containing material to outside air. Project applicants would be required to consult with the BAAQMD's Enforcement Division prior to commencing demolition of a building containing asbestos materials. The local office of the State Occupational Safety and Health Administration (OSHA) must also be notified of asbestos abatement to be carried out. OSHA regulates worker exposure to lead based paint during construction through respiratory protection, protective clothing, and hygiene facilities. Lead based paint is considered hazardous if the lead content exceeds 1,000 parts per million. A Cal OSHA certified asbestos and lead based paint contractor would prepare a site-specific asbestos and lead hazard control plan with recommendations for the containment of asbestos or lead-based paint materials during demolition activities, for appropriate disposal methods and locations, and for protective clothing and gear for abatement personnel.

Given the common occurrence of asbestos and lead-based paint contamination in older buildings, the proven and routine methods of abatement required to be implemented through the City's Standard Conditions of Approval, and other applicable laws, regulations, standards and oversight currently in place, the potential impact of the Specific Plan related to exposure to hazardous building materials would be less than significant.

Mitigation Measures

None needed

Hazardous Materials Use, Transport or Disposal

Impact Haz-3: Development allowed by the Specific Plan could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. However, with required implementation of the City's Standard Conditions of Approval, as well as required compliance with hazardous materials laws, regulations, standards and oversight currently in place, the potential impact of the Specific Plan related to the routine transport, use, or disposal of hazardous materials would be less than significant. **(LTS with SCA)**

New development allowed by the Specific Plan could involve the use, transport or disposal of hazardous materials which could create a hazard to the public or the environment. New development under the Specific Plan could also expose new residents or workers to hazards from existing use, transport or disposal of hazardous materials within the Planning Area. Construction activities could involve the standard use of gasoline, solvents, diesel fuel, oil and grease, hydraulic fluid, ethylene glycol, welding gases, and paint that are considered hazardous materials. If not properly managed, such routine transport, use, or disposal of hazardous materials, or reasonably foreseeable upset and accident conditions involving hazardous materials, could create a significant hazard to the public or the environment.

The potential for an accidental release of hazardous materials to occur within a residential area is reduced by current truck route designations and prohibitions that limit truck travel to designated truck routes, including the on- and off-ramps at 7th Street, Adeline and Union Streets, and West Grand Avenue.

Standard Conditions of Approval

The risk to human health and the environment from the routine use of hazardous materials would be reduced by required implementation of the City's Standard Conditions of Approval, as well as required compliance with hazardous materials regulations, which are codified in Title 8 of the California Code of Regulations (CCR), and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code. Projects requiring the use or disposal of hazardous materials would be required to comply with SCA 35, *Best Management Practices*, during construction and would be required to prepare a Hazardous Materials Management Plan (HMMP) and Hazardous Materials Business Plan (HMBP) as required by Alameda County and the City's SCA 74, *Hazardous Materials Business Plan* for operations.

The City of Oakland Office of Emergency Services (OES) is designated as the Certified Unified Program Agency (CUPA) responsible for permitting and overseeing activities that involve underground storage tanks and the handling of hazardous materials in Oakland. The OES requires facilities that handle

hazardous materials greater than threshold quantities to prepare a Hazardous Materials Business Plan (HMBP), and facilities that handle acutely hazardous materials are required to prepare a Risk Management and Prevention Plan (RMPP).

Hazardous materials would be stored according to manufacturer's recommendations and according to the specifications within the project-specific HMMP and HMBP. Hazardous materials would be stored in locations according to compatibility and in storage enclosures (i.e., flammable material storage cabinets) or in areas or rooms specially designed, protected, and contained for such storage, in accordance with applicable regulations. Hazardous materials would be handled and used in accordance with applicable regulations by personnel that have been trained in the handling and use of the material and that have received proper hazard communication training. Hazardous materials reporting (i.e., California Hazardous Materials Business Planning, California Proposition 65 notification, and Emergency Planning and Community-Right-to-Know Act reporting) would be completed as required.

Hazardous materials would be transported in accordance with applicable hazardous materials shipping regulations. The California Highway Patrol and the California Department of Transportation (Caltrans) are the primary state agencies with responsibility for enforcing federal and state regulations pertaining to transport of hazardous materials within California. The U.S. Department of Transportation regulates the transport of chemicals and hazardous materials by truck between states. These agencies regulate container types and packaging requirements as well as licensing and training for truck operations, chemical handling and hazardous waste haulers.

The risks of exposure to construction workers and occupants of surrounding properties from the routine use of hazardous materials during construction would be reduced through implementation of the City's Standard Conditions of Approval. SCA 68, *Best Management Practices for Soil and Groundwater Contamination*, requires that Best Management Practices (BMPs) be implemented during construction to avoid potential adverse effects to soils and groundwater. Furthermore, SCA 67, *Health and Safety Plan per Assessment*, requires preparation of a Health and Safety Plan to protect workers from the risks of exposure during demolition and construction activities. In addition to the City's Standard Conditions of Approval, other State and local regulations must also be implemented for any construction project, and are monitored by the State (Cal/OSHA in the workplace or DTSC for hazardous waste) and/or local jurisdictions (OFD and ACEHD).

With required implementation of the City's Standard Conditions of Approval, as well as required compliance with hazardous materials laws, regulations, standards and oversight currently in place, the potential impact of the Specific Plan related to the routine transport, use, or disposal of hazardous materials would be less than significant.

Mitigation Measures

None needed

Hazardous Materials Near Schools

Impact Haz-4: All schools within the Planning Area are located within ¼ mile of an existing permitted hazardous materials use or an identified environmental case. The Specific Plan could facilitate the addition of new businesses that emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school. However, with required implementation of the City's Standard Conditions of Approval, as well as required compliance with hazardous materials laws, regulations, standards and oversight currently in

place, the potential impact of the Specific Plan related to emission and handling of hazardous materials near schools would be less than significant. **(LTS with SCA)**

All public and charter schools within the Planning Area are located within ¼ mile of an existing permitted hazardous materials use or an identified environmental case. The Specific Plan could facilitate the addition of new businesses that emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The City has carried out consultation with the school districts regarding the potential impact of the Specific Plan on these schools as required for hazardous materials near schools by CEQA Guidelines Section 15186(b)(1) and (2).

Standard Conditions of Approval

The City's Standard Condition of Approval SCA 74, *Hazardous Materials Business Plan* and the City of Oakland Municipal Code require any facility that handles hazardous or acutely hazardous materials in excess of specified quantities to file a disclosure form, commonly referred to as a Hazardous Materials Business Plan (HMBP). This form must contain information needed for City emergency services to adequately prepare for response to an emergency at that facility. Facilities that handle acutely hazardous materials must also complete a Risk Management and Prevention Plan (RMPP) to assess potential off-site consequences of a release of hazardous materials.

In addition, facilities that handle hazardous materials within ¼ mile of a school, hospital, or residence can be required to complete a Hazardous Materials Assessment Report and Remediation Plan (HMARRP). The HMARRP must identify hazardous materials used at the facility and the suitability of the site, the potential on-site and off-site risks, and remedial measures to be implemented to reduce or eliminate on-site and off-site risks. The HMARRP is subject to review and approval by the City and public review and comment to ensure that potential threats to public health are adequately addressed.

With required implementation of the City's Standard Conditions of Approval, as well as required compliance with hazardous materials laws, regulations, standards and oversight currently in place, the potential impact of the Specific Plan related to emission and handling of hazardous materials near schools would be less than significant.

Mitigation Measures

None needed

Airport Hazards

Impact Haz-5: The Planning Area is not located within an airport land use plan area or within two miles of a public airport or public use airport, or near a private airstrip. The Specific Plan would have no impact related to airport hazards. **(No Impact)**.

Mitigation Measures

None needed

Interfere with Emergency Response Plan or Emergency Evacuation Plan

Impact Haz-6: With implementation of the City's Standard Condition of Approval SCA 33, *Construction Traffic and Parking*, the requirement to obtain an encroachment permit for work within street rights-of-way, and standard construction period notification requirements to first responders, the impacts related to interference with an emergency response plan or emergency evacuation plan would be less than significant. **(LTS with SCA)**

The Oakland OES has identified a network of evacuation routes and potential emergency shelters.⁴⁰ The Emergency Evacuation Routes within West Oakland are 7th Street, 14th Street, 12th Street, 27th Street, 35th Street, Adeline Street, Market Street, Martin Luther King Jr. Boulevard, San Pablo Avenue, and West Grand Avenue. Many of the development Opportunity Sites under the proposed Specific Plan are located along these streets identified as Emergency Evacuation Routes.

Emergency access would be maintained to properties in the surrounding vicinity during construction of development facilitated by the Specific Plan. Any need for traffic lane reductions or street closure due to construction would be short-term, temporary and localized. OFD is the first responder in an emergency. Individual future development projects would be required to obtain an encroachment permit from the City for any proposed changes to or construction period use of street rights-of-way, which would include review by OFD. Standard notification procedures required by the City are designed to ensure that OFD is notified if construction traffic would block any City streets. Specifically, the job site supervisor is required to call the OFD dispatch center any day construction vehicles would partially or completely block a City street during construction. In addition, the City's Standard Condition of Approval SCA 33, *Construction Traffic and Parking*, would require development of a construction management plan, which addresses construction period traffic and parking. As described in Section 4.11, Transportation, Circulation and Parking, traffic from ongoing occupancy and operation of future development in accordance with the Specific Plan would not create unacceptable traffic congestion on evacuation routes.

Mitigation Measures

None needed

Wildland Fires

Impact Haz-7: The Planning Area is located in an urbanized part of Oakland, within a non-Very High Fire Hazard Severity Zone as mapped by the California Department of Forestry and Fire Protection, and well outside of the City's Fire Prevention and Assessment District boundary. The Specific Plan would have no impact related to Wildland fires. **(No Impact)**

The California Department of Forestry and Fire Protection (CalFIRE) maps areas of significant fire hazard based on fuels, terrain, weather and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, then determine the requirements for special building codes designed to reduce the ignition potential of buildings. The Planning Area is located within a non-Very High Fire Hazard Severity Zone. Additionally, the Planning Area is located in an urbanized area of Oakland and, according to Figure 4.1 of the City of Oakland General Plan Safety Element, the area is well outside of the City's Fire

⁴⁰ City of Oakland, City of Oakland General Plan Safety Element, 2004, Figure 2.1.

Prevention and Assessment District boundary, which indicates that it is not subject to significant wildfire hazard. The Specific Plan would have no impact related to Wildland fires.

Mitigation Measures

None needed

Cumulative Impacts

Cumulative Impact Haz-8: Cumulative development could create a significant hazard to the public or the environment through the development of existing hazardous materials release sites, through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. However, with required implementation of the City’s Standard Conditions of Approval, as well as required compliance with other local and State hazardous materials laws, regulations, standards and oversight currently in place, potential cumulative hazards and hazardous materials impacts would be less than significant. **(LTS with SCA)**

Hazards and hazardous materials impacts are generally site-specific and/or have limited mobility. The geographic area considered for potential cumulative hazards and hazardous materials impacts consists of an area within ¼-mile of the Planning Area, and the area along transportation routes used during demolition and construction activities associated with development under the Specific Plan.

Cumulative development could create a significant hazard to the public or the environment through the development of existing hazardous materials release sites, through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Cumulative development would result in additional residential and non-residential development by the year 2035 and may involve the storage, use and disposal of potentially hazardous materials, such as common household cleaners, paints and solvents, pesticides and herbicides for landscaping and pest control, automobile maintenance products, and the like. These materials would typically not be of a type or in sufficient quantities to pose a significant hazard to public health and safety or the environment. Construction activities could potentially reveal as-yet undiscovered contamination or could potentially occur on properties with known contamination that could pose a potential threat to public health and safety or the environment. With required implementation of the City’s Standard Conditions of Approval, as well as required compliance with other local and State hazardous materials laws, regulations, standards and oversight currently in place, potential cumulative hazards and hazardous materials impacts would be less than significant.

Mitigation Measures

None needed