

Environmental Data Resources (EDR) Area Study  
Barrio Logan  
San Diego, California


Prepared for: City of San Diego  
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## Executive Summary

This Environmental Data Resources (EDR) Area Study was performed in order to identify sites with potential environmental concerns within the Barrio Logan Study Area. Sites with potential environmental concerns within the Barrio Logan Study Area should be considered when planning for future redevelopment of Barrio Logan, especially when pursuing brownfield development.

The Barrio Logan Study Area (Study Area) is the portion of the Barrio Logan Community Plan Area that is located east of Harbor Drive (Figures 1 and 2). Sites within the Study Area were evaluated in order to determine potential hazardous materials impacts within the Study Area. The area surrounding the Barrio Logan Study Area up to a mile in all directions was evaluated in order to identify sites that may have impacted the environmental conditions of sites within the Study Area. This surrounding area includes the portion of the Barrio Logan Community Plan Area west of Harbor Drive.

Identification of sites with potential environmental concerns was accomplished by 1) evaluation of an Area Study by EDR, 2) supplemental research of sites identified by EDR, 3) a limited area reconnaissance, and 4) a review of previous reports, including the 2000 Preliminary Hazardous Site Assessment and Mapping Study.

The EDR report identified 384 sites located within the Study Area (Figure 3). Two hundred seventy-five other sites were identified within the American Society for Testing and Materials (ASTM) Standard search distance from the Study Area.

The sites were evaluated by determining if the site is located within or outside of the Study Area, if there was a known release, if the release case was closed by the regulatory agency, if the release impacted soil or groundwater, and what type of chemical was released. The information needed to answer these questions, which is summarized in Tables 1 through 4, was obtained from the EDR report, on-line sources, and through agency file reviews. The sites were ranked from 0 to 4 based on these factors (a value of 4 representing the greatest relative impact to the Study Area and a value of 0 representing the lowest relative impact to the Study Area), as shown Tables 5 and 6.

Twenty-six sites were ranked as a 4 and include NASSCO, Pacific Treatment, Master Plating, Praxair, and Rigel Street Drum Site. Figures 4 through 6 show the sites relative to land use. For example, Figure 6 shows Master Plating (EDR ID 63), which has a ranking of 4, located in a residential area.

Although this evaluation identifies sites with known chemical uses, this evaluation does not consider potential impacts of chemical use, especially air emissions, from existing industrial uses on near-by residential or commercial properties. Instead, this evaluation identifies sites which have known soil or groundwater impacts, it identifies the relative

## *Executive Summary*

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level of site contamination, and this evaluation identifies issues that should be considered when evaluating a site for redevelopment and brownfield development.

Because the scope of the investigation was limited, it is possible that currently unrecognized conditions or contamination might exist within the Study Area. Dudek recommends that a Phase I Environmental Site Assessment, conducted in accordance with ASTM Standard E 1527-05, be prepared prior to acquiring or redeveloping a property. Additionally, Dudek recommends coordination with the County Department of Environmental Health (DEH) prior to redevelopment of listed release sites.

# 1 Introduction

This EDR Area Study was performed in order to identify sites with potential environmental concerns within the Barrio Logan Study Area. Sites with potential environmental concerns within the Barrio Logan Study Area should be considered when planning for future redevelopment of Barrio Logan.

Identification of sites with potential environmental concerns was accomplished by 1) evaluation of an Area Study by EDR, 2) supplemental research of sites identified by EDR, 3) a limited area reconnaissance, and 4) a review of the 2000 Preliminary Hazardous Site Assessment and Mapping Study.

The Barrio Logan Study Area (Study Area) is the portion of the Barrio Logan Community Plan Area that is located east of Harbor Drive (Figures 1 and 2). Sites within the Study Area were evaluated in order to determine potential hazardous materials impacts within the Study Area. The area surrounding the Barrio Logan Study Area up to a mile in all directions was evaluated in order to identify sites that may have impacted the environmental conditions of sites within the Study Area. This surrounding area includes the Port of San Diego located within the Barrio Logan Community Plan Area west of Harbor Drive.

## **1.1. Purpose**

The purpose of this investigation is to identify areas of environmental concern within the Barrio Logan Study Area in order to assist in making informed decisions about the redevelopment of Barrio Logan.

## **1.2. Scope of Work**

The scope of the environmental investigation consisted of: 1) a computerized database search of regulatory agency records; 2) a review of regulatory agency files for select sites; 3) a limited site reconnaissance for select sites; 4) a review of the 2000 Preliminary Hazardous Site Assessment and Mapping Study; and 5) the preparation of this EDR Area Study report detailing the findings of the investigation.

These activities were conducted in order to identify environmental conditions. For the purposes of this report, the term environmental conditions means the presence of known soil and/or groundwater contamination. As the scope of this investigation was limited and did not include detailed, on-site visual observation and would therefore preclude identification of a threat of release, the report does not use the ASTM term recognized environmental condition. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or

petroleum products into the ground, groundwater, or surface water on the subject property.

### **1.3. Limiting Conditions**

The findings and conclusions presented in this report are professional opinions based solely upon the indicated data described in this report, visual observations of select properties from public right of ways, and our interpretation of the documents reviewed. Dudek makes no warranty as to the accuracy of statements made by others or the accuracy of information included in documentation reviewed in connection with this study. It should be recognized that this study was not intended to be a definitive investigation of potential contamination in the Study Area and that the recommendations do not necessarily include all conditions that may be present. Because the scope of the investigation was limited, it is possible that currently unrecognized conditions or contamination might exist within the Study Area.

No warranties or guarantees or representations, expressed or implied, are made by Dudek, except that this report has been prepared in accordance with current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professionals performing the same or similar services. The conclusions are intended exclusively for the purpose outlined herein and may not be suitable to satisfy the needs of other users. Thus, any use or reuse of this document is at the sole risk of said user.

### **1.4 Environmental Professionals**

This EDR Area Study was prepared by Rachel Ganiere, Environmental Engineer, and Nicole Peacock, a Professional Engineer in the State of California. Qualifications for Ms. Ganiere and Ms. Peacock are presented in Appendix A.

## **2 General Site Characteristics**

### **2.1 Site Location**

The subject property (the Barrio Logan Study Area) is the portion of the Barrio Logan Community Plan Area located east of Harbor Drive. The Study Area is located southwest of Interstate 5, northeast of Harbor Drive (west of 28<sup>th</sup> Street) and Main Street (east of 28<sup>th</sup> Street), and south of 16<sup>th</sup> Street and Sigsbee in San Diego, California (Figure 2). The subject property includes approximately 250 acres of residential, industrial, commercial, and recreational properties.

### **2.2 Adjacent Properties**

The area surrounding the subject property consists of mostly industrial areas to the west and mostly residential areas to the east.

- North:** The area north or northwest of the Study Area consists of mostly industrial properties.
- East:** The area east or northeast of the Study Area consists of Interstate 5 and mostly residential and commercial properties.
- Southwest:** The area southwest of the Study Area includes that Port of San Diego, which is the portion of the Community Plan Area located west of Harbor Drive. This is an industrial area. Naval Station San Diego is also located adjacent to the Study Area, south of the Port of San Diego.

The potential impact of surrounding properties on the Study Area is evaluated in Section 3.

### **2.3 Environmental Setting**

#### **2.3.1 Regional Physiographic Conditions**

The topography in the vicinity of the subject property slopes to the west/southwest toward San Diego Bay. According to the United States Geological Survey (USGS) 7.5 minute topographic maps for Point Loma and National City, the elevation of the subject property ranges from 20 to 60 feet above mean sea level.

#### **2.3.2 Soil Conditions**

No subsurface geologic investigations were performed as part of the EDR Area Study. According to a prior subsurface investigation conducted in the northern portion of the Study Area, the site vicinity is underlain by Quaternary Bay Point Formation, which is a marine and non-marine poorly consolidated fine- and medium-grained sandstone (EBS 2005a). Bay Point Formation was identified to depths of

approximately 7 feet below ground surface (bgs) in the northern portion of the Study Area. The Bay Point Formation is underlain by the San Diego Formation, a fine- to medium-grained sandstone.

### **2.3.3 Geologic Conditions**

No oil or gas wells were mapped by the Division of Oil, Gas, and Geothermal Resources (DOGGR) within the Study Area (DOGGR 2008).

### **2.3.4 Surface Water and Groundwater Characteristics**

Chollas Creek runs through the southern portion of the Study Area. Chollas Creek is a lined urban creek (some sections remain unlined) that originates in Lemon Grove and La Mesa and empties into the San Diego Bay. Chollas Creek receives flow from urban runoff and frequently exceeds water quality objectives for metals and toxicity.

The Study Area is located in the Chollas Hydrologic Subarea (908.22), within the San Diego Mesa Hydrologic Area, which has been designated as not having potential or existing beneficial uses (RWQCB 1994).

According to a prior subsurface investigation conducted in the northern portion of the Study Area, groundwater is present between 10 and 40 feet bgs (EBS 2005a).

### 3 Results of Investigation

The regulatory database gives a listing of sites, within an approximately one-mile radius of the area search, which are known to be chemical handlers, hazardous waste generators, or polluters. Information in these listings includes the location of the site, sources of pollution, and the status of the site. The search performed for this assessment was conducted in June 2008 by EDR. The complete area search report is included in the attached CD as Appendix B.

Sites located within the area searched were identified in the EDR report. The databases searched are discussed in Section 3.1. The results of the database search are discussed in Section 3.2 and are presented in Tables 1 through 5.

#### 3.1 Databases Searched

The following computer databases were included in this search:

ACRONYM	DATABASE	SEARCH DISTANCE
NPL	National Priorities List (including proposed NPL sites)	1 mile
CORRACTS	Resource Conservation and Recovery Act (RCRA) Corrective Action	1 mile
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)	0.5 mile
NFRAP	No Further Remedial Action Planned (CERCLIS)	0.5 mile
TSD	RCRA permitted treatment, storage or disposal facilities	0.5 mile
TRIS	Toxic Release Inventory Database	Target Property
RCRIS	RCRA registered small or large generators of hazardous waste	0.25 mile
ERNS	Emergency Response Notification System of spills	Target Property
CONSENT	Superfund (CERCLA) Consent Decrees	1 mile
ROD	Record of Decision	1 mile
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report	Target Property
HMIRS	Hazardous Materials Information Reporting System	Target Property
MLTS	Material Licensing Tracking System	Target Property

*Section 3 – Results of Investigation*

MINES	Mines Master Index File	0.25 mile
NPL LIENS	Federal Superfund Liens	Target Property
PADS	Polychlorinated Biphenyl Activity Database System	Target Property
DOD	Department of Defense Sites	1 mile
US BROWNFIELDS	A Listing of Brownfields Sites	0.5 mile
RAATS	RCRA Administrative Action Tracking System	Target Property
TSCA	Toxic Substance Control Act	Target Property
Delisted NPL	National Priority List Deletions	1 mile
UMTRA	Uranium Mill Tailings Sites	0.5 mile
FUDS	Formerly Used Defense Sites	1 mile
INDIAN RESERV	Indian Reservations	1 mile
SSTS	Section 7 Tracking Systems	Target Property
ODI	Open Dump Inventory	0.5 mile
FTTS	Federal Insecticide, Fungicide, & Rodenticide Act/TSCA Tracking System	Target Property
US INST CONTROLS	Sites with Instrument Controls	0.5 mile
US ENG CONTROLS	Sites with Engineering Controls	0.5 mile
AWP	Annual Workplan Sites	1 mile
CAL-SITES	Cal-EPA, Department Of Toxic Substances Control (DTSC)	1 mile
CHMIRS	California Hazardous Material Incident Report System	Target Property
Notify 65	Proposition 65	1 mile
State Landfill	State Landfill	0.5 mile
WMUDS/SWAT	Waste Management Unit Database/Solid Waste Assessment Test	0.5 mile
LUST	Leaking Underground Storage Tank	0.5 mile
BEP	California Bond Expenditure Plan	1 mile
DEED RSTR	Department of Health Services – Land Use And Air Assessment	0.5 mile

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CORTESE	State Index Of Properties With Hazardous Waste	0.5 mile
REF	Sites Referred To Another State Or Local Agency	0.25 mile
SCH	Proposed And Existing School Sites Being Evaluated By DTSC	0.25 mile
TOXIC PITS	Toxic Pits Cleanup Facilities	1 mile
UST	Registered Underground Storage Tanks, Including Tanks On Indian Land And Historic Underground Storage Tanks	0.25 mile
HIST UST	Historic Underground Storage Tanks (USTs)	0.25 mile
SWEEPS UST	UST listing maintained by the Regional Water Quality Control Board (RWQCB) in the 1980s	0.25 mile
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land	0.5 mile
INDIAN UST	Underground Storage Tanks on Indian Land	0.25 mile
CA FID UST	Facility Inventory Database	0.25 mile
AST	Registered Aboveground Storage Tanks	0.25 mile
VCP	Brownfields Voluntary Cleanup Program	0.5 mile
CLEANERS	Dry Cleaner Facilities	0.25 mile
NFA	Properties With No Further Action Required By DTSC	0.25 mile
NFE	Properties Needing Further Evaluation By DTSC	0.25 mile
EMI	Emissions Inventory Data	Target Property
SWRCY	Recycler Database	0.5 mile
SLIC	Statewide SLIC Cases	0.5 mile
CA WDS	Sites Issued Waste Discharge Requirements	Target Property
San Diego Co. HMMD	Hazardous Material Management Database	Target Property
WIP	Well Investigation Program Case List	0.25 mile
HAZNET	Hazardous Waste Information System	Target Property
Gas Stations/Dry Cleaners	Business listing for Dry Cleaner or Gas Station	0.25 mile
Manufactured Gas Plants	Business Listing for Gas Plants	1 mile

### 3.2 Search Findings

The EDR report identified 384 sites located within the Study Area (Figure 3). Two hundred seventy-five other sites were identified within the ASTM Standard search distance from the Study Area.

The sites were evaluated by determining if the site is located within or outside of the Study Area, if there was a known release, if the release case was closed by the regulatory agency, if the release impacted soil or groundwater, and what type of chemical was released. The information needed to answer these questions was obtained from the EDR report. If the EDR report did not contain sufficient detail to answer the questions, Dudek researched on-line databases such as the Regional Water Quality Control Board's Geotracker, the Department of Toxic Substances Control's Envirostor, and the San Diego County Department of Environmental Health's establishment search. If additional information was needed, Dudek conducted a file review through the County DEH or the Environmental Protection Agency. The results of the file reviews are presented in Section 3.3.

Based on the research conducted, sites within the Study Area that have had a known release were listed in Table 1. The table identifies if the known release cases are open or closed, if soil or groundwater was impacted, and the type of chemical that was released. Dudek evaluated this information in order to rank the sites in terms of the extent of the known impact to the Study Area, with a value of 4 representing the greatest relative impact to the Study Area and a value of 0 representing the lowest relative impact to the Study Area.

Table 6 presents the rationale for ranking the sites. For sites within the Study Area that have had known releases, a ranking of 4 was given to open release cases that impacted either soil or groundwater. Closed release cases were given a ranking of 3, as the lead regulatory agency has stated that level of investigation and/or remediation completed is sufficient to protect human health and the environment. However, this closure is often under the mandate that the site be reevaluated upon a change in land use from commercial/industrial to residential. In general, more weight was given to sites with longer term releases, such as those from underground storage tanks (USTs) versus one-time accident releases, such as ERNS, CHMIRS, and HMIRS sites. Additionally, more weight was given to more toxic and mobile chemicals, such as chlorinated solvents, versus more innocuous substances, such as waste oil.

It should be noted that the same site is often listed more than once in Tables 1 through 5. In one table, the site may be listed as an open release case, with a ranking of 4. Another table may only identify the site as a chemical use site, with a ranking of 1. Dudek consolidated the information in Table 5, so that each unique site has only one listing and the final ranking for the site is the highest ranking identified for the site in Tables 1 through 4.

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Figures 4 through 6 show the approximate locations of the sites identified in the EDR report. Figure 4 shows release sites identified by EDR, Figure 5 shows chemical use sites, and Figure 6 shows all sites by assigned rank.

### 3.3 Detailed Regulatory Database Search Review

As discussed in the previous section, Dudek conducted a file review of the following sites in order to obtain additional information. Copies of these files are presented in Appendix C.

- Information pertaining to Allen, Willis located at 1902 National Avenue was not available. However, inspections were conducted at the site (listed under the names George Gonzales/Southwest Coaches, Inc./Elmer’s Auto) in 1995 through 2003. A release to soil was reported at the site on November 16, 1990. The soil only release was closed on May 2, 1996.
- C & B Auto Repair and Bay Cities Services located at 3683 Dalbergia Street were identified on the LUST database. Six USTs were closed on May 19, 1997 in which five tanks were removed and one tank was closed in place. Environmental Business Solutions (EBS) prepared a Corrective Action Plan (CAP) and an Additional Groundwater Monitoring Assessment for the property in 2004. The most recent sampling event was on December 23, 2003 and the results are presented below.

Contaminant of Concern	Groundwater Concentration (micrograms per liter [µg/L])			
	MW-1	MW-2	MW-3	MW-6
Total Petroleum Hydrocarbons (TPH) Gasoline	17,000	61,000	31,000	<500
Benzene	1,500	3,300	420	0.9
Toluene	620	9,400	3,700	<0.5
Ethylbenzene	480	2,300	2,500	<0.5
Total Xylenes	1,810	10,000	8,500	<1.5
Methyl tert-butyl ether	600	3,600	<100	430
Diisopropyl ether	<100	<100	<100	4.3
Ethyl tert-butyl ether	<100	<100	<100	<1
Tert-amyl methyl ether	<100	<100	<100	1.5
Tert-butyl alcohol	<500	<500	<500	50
Total Lead	<10	15.1	<10	<10
Organic Lead	<300	<300	<300	<300

EBS proposed two methods to remediate the property which include monitored natural attenuation and high vacuum dual phase extraction. DEH responded to EBS’s Corrective Action Plan and Additional Groundwater Monitoring

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Assessment on March 27, 2006. DEH recommended additional soil vapor sampling to evaluate human health risk to occupants of adjacent buildings from benzene vapors. In addition, DEH requested additional soil samples and vertical delineation of soil contamination.

- Pacific Treatment and Center City Towing located at 1668 National Avenue formerly treated oil/water mixtures. McLaren Hart prepared the Closure Plan for the Pacific Treatment Facility in 1991. McLaren Hart indicated that the two USTs located on the property were filled with cement slurry and closed in place prior to 1983. McLaren Hart presented the following Hazardous Waste Management Units:
  - 1 – Truck Offloading Containment Area
  - 2 and 3 – Oil/Water Treatment Tanks 1,2,3 and Tanks 4,5,6
  - 4 – Freon Batch Still
  - 5 – Truck Washout Sump
  - 6 – Truck Washout Area
  - 7 – Sewer Discharge Basin

JRJ Associates completed a Subsurface Sampling and Field Investigation Report on November 4, 1988. JRJ Associates indicated that three trenches were excavated at the site where a total 14 soil samples were collected within the trenches.

Trench	Soil Sample	Total Chromium milligrams per kilogram (mg/kg)	Lead (mg/kg)	Hydrocarbons (mg/kg)
1	#1	10	44	20
1	#2	5	188	30
1	#3	13	70	34
1	#4	10	57	24
2	#5	9	45	<6
2	#6	10	49	<6
2	#7	11	195	29
2	#8	8	<26	5
3	#9	4	<12	<5
3	#10	11	48	<5
3	#11	9	50	60
3	#12	28	85	<6
3	#13	9	41	<4
3	#14	9	49	<6

A letter dated July 13, 1992 indicated that clean-up of the site was in its final phase. On April 13, 1992, surface soil between 6 inches and 1 foot along with concrete pads were excavated from the property and transported offsite to

### *Section 3 – Results of Investigation*

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appropriate disposal sites. Following a soil sampling event in May 1992, an additional 12-18 inches of surface soil were excavated and stockpiled onsite. Five samples were collected from the stock pile where total recoverable petroleum hydrocarbons (TRPH) ranged from 25 to 240 parts per million (ppm) and soluble threshold limit concentration (STLC) lead ranged from 3.5 to 11 ppm. Pacific Treatment Corp requested assistance from DEH in securing a landfill to receive the stockpiled soil. No additional documentation was available pertaining to the Closure Plans for Pacific Treatment Corp.

In addition to the Pacific Treatment Closure Plan, the DEH completed an inspection of the site in 1996 and indicated that Centre City Towing was not required to maintain a San Diego County HMMD permit at that time. One UST was removed from the property in 1987 and two USTs were removed from the property in 2005. Four soil samples were collected following the two UST excavation. Total petroleum hydrocarbons (TPH) was not detected in any of the soil samples collected. TPRH was detected in the Tank 2 excavation at 16 and 12 mg/kg.

- A 500 gallon UST was located at the Johnson Truck Repair and Paint, 1931 Newton Avenue. Leighton and Associates conducted a Geotechnical and Hazardous Materials Investigation at the site in December 1987. Leighton and Associates indicated that the 500 gallon tank was planned to be removed following the report. Two soil borings were advanced on the subject property. Groundwater was encountered at 30 feet bgs. Leighton and Associates stated that 1.1 ppm of methylene chloride and 0.05 ppm of trichloroethene were detected in the soil sample collected at Boring B-2.

On May 11, 1988, the County DEH issued a letter regarding the illegal removal of a UST at the site. DEH indicated that collection and analysis of two samples was required to be submitted to the department. No additional information was available in the file. The case remains open.

- Three releases were reported at Santa Fe Intermodal located at 1342 Crosby Street. One of the releases (003) was administratively closed since it was determined that a previously reported release (002) would encompass the potential groundwater contamination from release 003.

On July 2, 2008, DEH closed one of the releases (001) considering that the cleanup goals for onsite soil were met. Approximately, 1,500 cubic yards of soil were excavated and transported offsite to a Class 2 landfill. In addition, 1,230 cubic yards of soil were treated onsite by soil bioventing. As presented in the Confirmation Sampling Results dated January 9, 2008, two soil locations were sampled at depths ranging from 5 to 20 feet bgs. No volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), benzene, toluene, ethylbenzene, total xylenes, methyl tert-butyl ether

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(MTBE), antimony, beryllium, cadmium, mercury, molybdenum, silver, titanium, or selenium were detected in the soil samples collected. Concentrations of other metals, with the exception of arsenic, were less than the EPA residential preliminary remediation goals.

Boring ID	Depth	Analytical Results in mg/kg	
		TPH diesel range	Arsenic
IB-1	5	72.3	NA
	9	1140	1.80
	12	748	1.46
	15	<11.8	NA
	18.5	<12.3	NA
IB-2	5	<21.9	NA
	9	436	3.58
	11	<11.8	NA
	15	<12.2	NA
	20	12.1	3.06

NA – Not Analyzed

In the May 12, 2008 Semi-Annual Groundwater Monitoring and Sampling Report, TPH (gasoline range) was detected in upgradient wells MW-4 (15 milligrams per liter [mg/L]) and MW-5 (22 mg/L). In addition, the Liquid Phase Hydrocarbons (LPH) thickness has decreased across the site. A pneumatic skimmer pump was installed in MW-1 in which approximately 712.5 gallons of LPH was recovered by the system. Additional work proposed as of July 11, 2008 included installation of three additional monitoring wells, soil vapor sampling, and indoor air risk assessment.

- Master Plating, 2109 Newton Avenue, was used as a metal plating business including chrome plating from 1972 until 2002. In May 2002, State of California Air Resources Board (ARB) collected samples of concrete, polishing fluff, bulk liquid plating solution, floor sweepings, dust from building surfaces, and soil from nearby residential lots and public easements. Elevated concentrations of chromium, including hexavalent chromium, copper, lead, and nickel were detected in the samples collected. Hexavalent chromium was detected at a concentration of 8,360 mg/kg in a dust sample collected from the on-site building.

Master Plating ceased operations at the site and bulk hazardous waste, hazardous materials, and contaminated equipment and fixtures were removed. In addition, the remaining fixtures, interior floor, and other building surfaces were cleaned and decontaminated. In January 2003, composite soil/concrete samples were collected from residences and onsite for hazard characterization and assessment of potential threat to human health. Chromium, copper, nickel, and lead were detected in the two composite samples collected from the onsite building floor at concentrations exceeding total threshold limit concentration (TTLC) hazardous

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waste criteria and the US EPA residential and industrial preliminary remediation goals (PRGs).

Metals	MP-1 mg/kg	MP-2 mg/kg	PRG (residential), mg/kg
Chromium	2,010	6,270	210
Copper	26,700	9,110	3,100
Lead	3,560	11,100	150
Nickel	16,200	25,700	1,600

The EPA On-Scene Coordinator (OSC) indicated that the remaining on-site contamination poses substantial endangerment to human health and environment due to high concentrations of heavy metals detected in floor samples and significant staining of indoor and outdoor building surfaces.

In March 2003, Whillock Contracting, Inc. was contracted to remove concrete from the remaining portion of a 25 by 25 foot grid cell which was demarcated to be excavated. In addition, stained soil (1 by 3 feet) was observed beneath the excavated concrete floor. The stained soil was excavated to 1 foot bgs. Two soil samples were collected from the stained soil as well as following the stained soil excavation (approximately 1 to 1.5 feet bgs). Two 20 cubic yard roll-off boxes containing the excavated concrete and stained soil were removed from the site on March 19, 2003.

According to the US EPA Pollution Report dated May 7, 2003, EPA agreed that concentrations of total metals, cyanide, and hexavalent chromium are statistically below EPA residential PRGs. The EPA indicated that the concentration was not considered an imminent and substantial endangerment and is consistent with the planned future use of the building. The excavated area of the building floor was re-paved with concrete. No further removal activities are planned for the site. OSC recommended additional soil investigation beneath the building should the building be demolished and the site be used for a non-industrial purpose. The case was assigned a closed status as of May 20, 2003.

- San Diego Housing Commission contracted Applied Consultants to conduct an assessment of 2883 Boston Avenue. Two small oil spills were observed on the site. One soil sample was collected and analyzed for TRPH, benzene, toluene, xylene, ethylbenzene, lead, and VOCs. TRPH and lead were detected in the soil sample at 33,900 mg/kg and 11.8 mg/kg, respectively. The Housing Commission surmised that the oil stain was due to an onsite oil change. The Housing Commission requested additional information pertaining to removal of the oil stained soil. The case was transferred to inactive status due to lack of activity on November 9, 1998.

### **3.4 Initial CEQA Evaluation**

The County of San Diego has guidelines for determining significance of hazardous waste sites under the California Environmental Quality Act (CEQA). Included in the 2007 guidance document (DPLU 2007) are the following significance factors for impacts of solid waste disposal sites:

- If a burn ash site is encountered, it must be managed in accordance with state and local regulations.
  - No burn ash sites were identified in the EDR report; however, a prior Phase I Environmental Site Assessment for a property within the Study Area (See Section 5.2) noted the potential for former backyard incinerators in the site vicinity.
- Projects that are located within 1,000 feet of buried waste (landfills) are subject to specific requirements of the California Code of Regulations Title 27 Section 21190.
  - Landfills in the vicinity of the Study Area are identified on Tables 1 through 4 and in Appendix B as a solid waste facility/landfill (SWF/LF).
- A significant impact is present if projects are located within 1,000 feet of a formerly used defense site (FUDs), if it has been determined that it is probable that munitions located on the site could present a hazard to the public.
  - No FUDs sites were identified in the EDR report.
- Sites with historical agricultural use could present a significant impact.
  - The scope of this study did not include historical use evaluation. A Phase I Environmental Site Assessment should be conducted for specific proposed projects.
- Sites with USTs could present a significant impact.
  - Sites with current or former registered USTs are listed in Tables 1 through 4. Existing USTs should be properly removed with County oversight prior to redevelopment of a property.
- Sites with hazardous building materials, such as asbestos and lead paint, could present a significant impact.
  - Buildings proposed for demolition should be evaluated for the presence of hazardous building materials.
- Sites located on or within ¼ mile of a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5 could present a significant impact.
  - Government Code Section 65962.5 includes the following databases: LUST, Cortese, Cal-Sites, SWF/LF, and Envirostor. Sites listed in these databases are shown in Tables 1 through 4.

## 4 Area Reconnaissance

A site reconnaissance was conducted on August 20, 2008 by Rachel Ganiere of Dudek. Ms. Ganiere observed the subject property areas via public right of ways. Residential, commercial, and industrial areas were observed on the subject property area. Of the industrial and commercial areas within the subject property, Dudek observed an EDCO transfer station, welding shop, auto repair shops, trucking facilities, and industrial supply companies. In addition, Dudek observed a large undeveloped soil excavation area located on the northwestern portion of the subject area. The sites observed included A to Z Auto Dismantling, Pacific Treatment, Praxair, and Southwest Marine.

Evidence of chemical storage was observed at several of the sites viewed; however, based on the limitations of the site reconnaissance, Dudek did not observe evidence of releases of hazardous materials.

## **5 Previous Studies**

### **5.1 Preliminary Hazardous Site Assessment and Mapping Study**

The 2000 Preliminary Hazardous Site Assessment and Mapping Study was prepared in order to identify properties in the Barrio Logan Redevelopment and Expansion Areas that utilize hazardous materials that if released or discharged may significantly and adversely impact occupants of properties within the Redevelopment Area (Law Crandall 2000). The study involved review of an EDR Area Study, a limited site reconnaissance, community involvement, and mapping.

The sites identified in the EDR report as hazardous materials/waste sites and sites identified by the Environmental Health Coalition were noted. A limited site reconnaissance was conducted for approximately 180 of the sites (the sites were viewed from a public right of way) as a way to rate the environmental concern at the sites. A rating of 0-4 was applied to these sites. The ratings and EDR report were presented in the report in order to assist with land planning in Barrio Logan such that potentially incompatible land uses could be identified and avoided.

The Site Reconnaissance Scoring Criteria assessed the visible past/present discharges to ground surface. The following ten sites were assigned the highest rating of extensive staining covering a significant portion of the property:

- A to Z Auto Dismantling, 3202 Main Street
- Advanced Metal Forming, Inc., 2618 National Avenue
- Deca Forklift, Inc., 3596 Dalbergia Street
- Garcia Auto Repair, 2340 Newton Avenue
- Hytech Metal Forming, 2676 Newton Avenue
- IMS Recycling SVC Iron Department, 2740 Boston Avenue
- Industrial Metals & Sal, 2731 Newton Avenue
- Martines Bodyshop, 1226 31<sup>st</sup> Street
- An unnamed site, 2758 ½ Main Street
- Storage Yard, 1915 Una Street

### **5.2 Phase I ESA – 1629-1651 National Avenue**

A Phase I Environmental Site Assessment was prepared for 1629, 1635, 1637, 1639, 1643, and 1651 National Avenue in 2005 prior to the proposed redevelopment of this area. Potential recognized environmental concerns associated with the site included the potential for burned or incinerated ash from backyard incinerators or burn pits (EBS 2005). Additionally, adjacent sites Central Meat and Provision Company, Triad Marine, and Pacific Treatment were identified as having the potential of impacting the site.

### **5.3 Site Assessment – 1600 Block of National Avenue**

The site assessment evaluated the environmental conditions noted in the Phase I ESA, which is discussed in Section 5.2 (EBS 2005b). Investigation activities included advancing borings, trenching, and soil, soil vapor, and groundwater sampling. The investigation identified VOC and petroleum-impacted groundwater and lead-impacted soil at the site. The site assessment report stated that the risk due to vapor intrusion under the residential scenario was not significant (less than one in a million). The site assessment report did not calculate risk under the residential scenario due to potential ingestion of lead-impacted soils. Rather, the site assessment report contained recommendations for excavation of the impacted soil.

## 6 Conclusions and Recommendations

The purpose of this EDR Area Study was to identify sites with potential environmental concerns within the Barrio Logan Study Area. Sites with potential environmental concerns within the Barrio Logan Study Area should be considered when planning for future redevelopment of Barrio Logan, especially when pursuing brownfield development.

Identification of sites with potential environmental concerns was accomplished by 1) evaluation of an Area Study by EDR, 2) supplemental research of sites identified by EDR, 3) a limited area reconnaissance, and 4) a review of previous reports, including the 2000 Preliminary Hazardous Site Assessment and Mapping Study.

The EDR report identified 384 sites located within the Study Area. Two hundred seventy-five other sites were identified within the ASTM Standard search distance from the Study Area.

The sites were evaluated by determining if the site is located within or outside of the Study Area, if there was a known release, if the release case was closed by the regulatory agency, if the release impacted soil or groundwater, and what type of chemical was released. The sites were ranked from 0 to 4 based on these factors (a value of 4 representing the greatest relative impact to the Study Area and a value of 0 representing the lowest relative impact to the Study Area), as shown Tables 5 and 6.

Although it is appropriate to rank a closed release case lower than an open release case due to regulatory buy-off on the site investigation and remediation, it should be noted that many case closures are based on continued commercial/industrial land use. Many case closures require reevaluation of the site prior to a change in land use to residential.

Twenty-six sites were ranked as a 4 and include NASSCO, Pacific Treatment, Master Plating, Praxair, and Rigel Street Drum Site (Table 5). Figures 4 through 6 show the sites relative to land use. For example, Figure 6 shows Master Plating (EDR ID 63), which has a ranking of 4, located in a residential area.

Although this evaluation identifies sites with known chemical uses, this evaluation does not consider potential impacts of chemical use, especially air emissions, from existing industrial uses on near-by residential or commercial properties. Instead, this evaluation identifies sites which have known soil or groundwater impacts, it identifies the relative level of site contamination, and this evaluation identifies issues that should be considered when evaluating a site for redevelopment and brownfield development. Air quality impacts of future proposed projects will be evaluated under CEQA.

Because the scope of the investigation was limited, it is possible that currently unrecognized conditions or contamination might exist within the Study Area. Dudek

## *Conclusions and Recommendations*

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recommends that a Phase I Environmental Site Assessment, conducted in accordance with ASTM Standard E 1527-05, be prepared prior to acquiring or redeveloping a property. Additionally, Dudek recommends coordination with the County DEH prior to redevelopment of listed release sites. It may be appropriate to evaluate chemical use sites under the County's voluntary assistance program (VAP) and it may be required to evaluate closed release cases under the County VAP, depending on the proposed land use.

## 7 References

- DPLU 2007. County of San Diego Guidelines for Determining Significance, Hazardous Materials and Existing Contamination. July 30.
- EBS 2005a. Report of Site Assessment Activities, 1600 Block of National Avenue, San Diego, California. December 12.
- EBS 2005b. Phase I Environmental Site Assessment, 1629-1651 National Avenue, San Diego, California. May 17.
- DOGGR 2008. Website accessed August 2008 -  
<ftp://ftp.consrv.ca.gov/pub/oil/maps/dist1/w1-7/Mapw1-7.pdf>
- Law Crandall 2000. Report of Preliminary hazardous Site Assessment and Mapping, Barrio Logan Project Area, San Diego, California. August 8.
- RWQCB 1994. San Diego Basin Plan.