SEMS-RM DOCID # 100020722

DEL AMO AND MONTROSE SUPERFUND SITES

COMMUNITY INVOLVEMENT PLAN

JUNE 2020

EPA United States Environmental Protection Agency

INTRODUCTION

Under the federal Superfund program, the United States Environmental Protection Agency (EPA) oversees work for the Del Amo Superfund site and the Montrose Chemical Corp. Superfund site (referred to in this document as the "Sites"). This work includes environmental investigation, the study of cleanup options and cleanup for the Sites. Both Sites impact the same community in the southern portion of the city and county of Los Angeles (LA), California. Therefore, EPA prepared one Community Involvement Plan (CIP) to address community involvement and outreach for both Sites.

The purpose of a CIP is to encourage and facilitate community involvement throughout the Superfund process. A CIP is the foundation of the Superfund community involvement and outreach program. It is also a tool for the public to make sure EPA is responsive to community needs and concerns.

This CIP outlines specific outreach activities that will be used to address community concerns and meet the following goals:

1. Develop a visible presence in the impacted community to demonstrate EPA's commitment to protecting public health and the environment.
2. Provide opportunities for feedback and input and genuinely listen to and address concerns, as appropriate.
3. Provide accurate and understandable information about activities at the Sites on a consistent basis.
4. Establish and maintain relationships with highly interested community stakeholders, other stakeholders and partner government agencies.

EPA interviewed community members, partner government agencies and other stakeholders. In addition, EPA reviewed recent comments and interactions regarding community, stakeholder and partner government agencies' concerns, needs and ideas on community involvement. EPA also issued a draft of this CIP to the public for comments. During the comment period, EPA hosted an interactive booth at the December open house meeting.

This CIP incorporates responses to the questions, concerns and needs raised by all of these sources. In addition, the CIP is a "living document." Therefore, it can be updated and revised as needed to reflect changes within the community or EPA's approach. It is organized such that the appendices can be easily updated, as needed.

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The Del Amo Facility and Montrose Chemical Corporation Superfund Sites

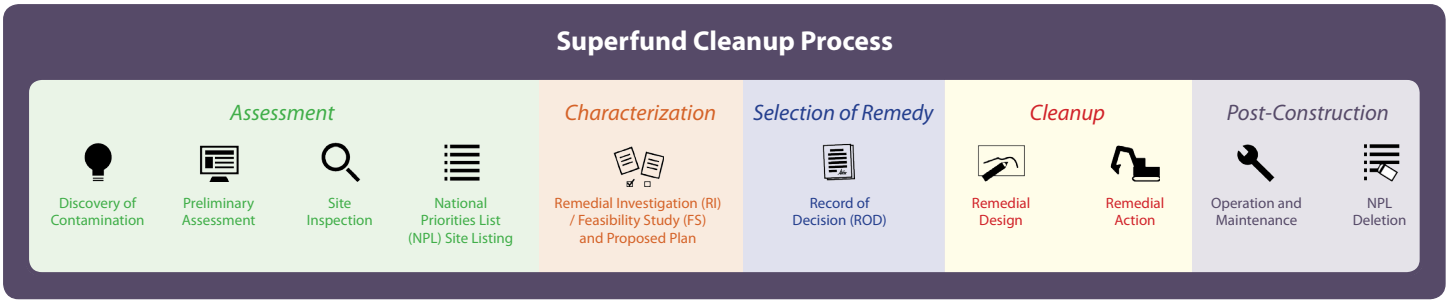
The Superfund Program

Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), informally called Superfund, in 1980. CERCLA was passed in response to rising concerns over the health and environmental risks posed by hazardous waste sites. At the time, news reports and images of hazardous waste in places such as Love Canal and Valley of the Drums captured the public interest and motivated congressional action. EPA regularly adds high-priority hazardous waste sites to the National Priorities List (NPL). Sites on the NPL are typically referred to as "Superfund sites." EPA will identify an area as a potential Superfund site if it contains hazardous substances that pose a risk to human health and/or the environment.

CERCLA requires that potentially responsible parties (PRPs), or those responsible for the contamination, do or fund the site cleanup. PRPs generally include parties who owned or operated a site, generated the waste at the site or arranged for disposal of waste at the site. If PRPs cannot be located or cannot (or refuse to) participate, EPA may do the necessary cleanup actions and recover its costs after site cleanup.

What is a contaminant?

Any physical, chemical, biological or radiological substance found in air, water, soil or biological matter that has a harmful effect on human health or the environment. In casual conversation, words like **pollutant, toxin, hazardous substance** or **chemical** are used to mean the same thing as "contaminant." The term "hazardous substance" is a legally defined term in Superfund law. For this CIP, the term contaminant includes the term hazardous substance.



For more detailed information on the Superfund process, see Appendix 1: Superfund Cleanup Process and Opportunities for Public Participation.

Former Montrose Plant

20201 Normandie Avenue in Los Angeles, California

- 13-acre area
- DDT manufacturing operations

TIMELINE

1947–1982
Montrose manufactured DDT.

1972
DDT banned for most uses in the United States.

1982–1983
Montrose ceased operations and demolished the plant.

1985
Montrose partially regraded and paved the former plant property.

1989
EPA placed the Montrose site on the NPL.

Del Amo Facility and Montrose Chemical Corporation Superfund Sites Background

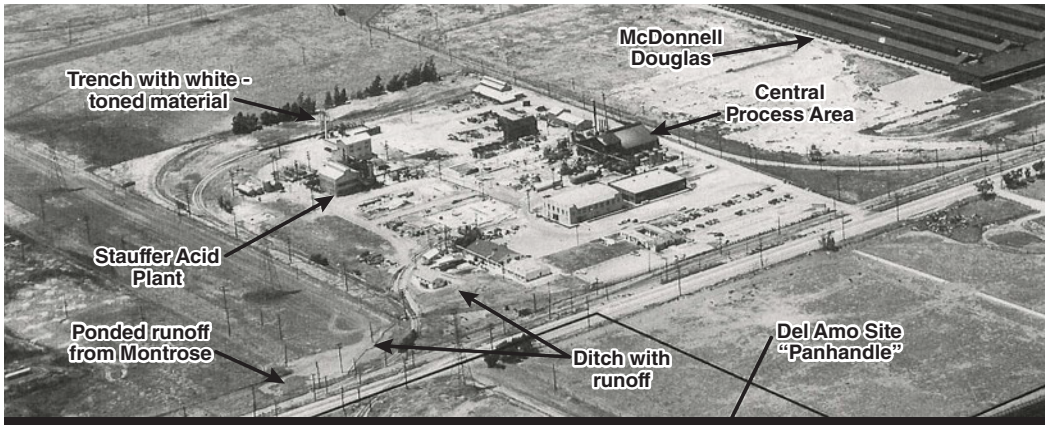


Figure 1. *Aerial photo of the former Montrose plant property*

Montrose Superfund Site Background

The Montrose Chemical Corp. Superfund site (Montrose site) includes the former location of a manufacturing plant that made the pesticide dichloro-diphenyl-trichloroethane (DDT). From 1947 to 1982, the Montrose Chemical Corporation of California, Inc. (Montrose) operated the plant. Over the 35 years of operations, contaminants entered the environment from wastewater and raw materials being released onto the ground (reaching the groundwater) or off-property into an unlined, open stormwater drainage ditch, a lined stormwater drainage collection system and the sanitary sewer system. The contamination has reached as far as the Los Angeles Harbor and the Palos Verdes shelf (Pacific Ocean). In addition, waste was also hauled to a nearby vacant lot near West 204th street and waste was disposed of at landfills and in the Pacific Ocean.

In 1982, during an inspection of the operating Montrose plant, EPA detected contaminants leaving the property through the stormwater drainage collection system. The next year, EPA issued an Administrative Order requiring Montrose to cease all discharges of DDT and to determine the nature and extent of contamination. In 1984, EPA proposed the Montrose site for addition to the NPL. In 1985, Montrose regraded most of the former Montrose plant property and paved it with asphalt, as a temporary measure to prevent DDT in surface soils from moving off property. Between 1985 and 1989, EPA and Montrose worked to further investigate the contamination. In 1989, EPA added the Montrose site to the NPL.

Today, the former Montrose plant property is mostly undeveloped and unoccupied. However, the groundwater treatment facility (part of the Dual-Site groundwater extraction and treatment system) is located on that property. *For more information on the Dual-Site Groundwater Operable Unit (OU), see page 7.*

The former Del Amo facility and the former Montrose plant (collectively "former manufacturing facilities") are located in the Harbor Gateway neighborhood in the city of LA. The Harbor Gateway neighborhood is in the southern portion of the city of LA, about 14 miles south of downtown.

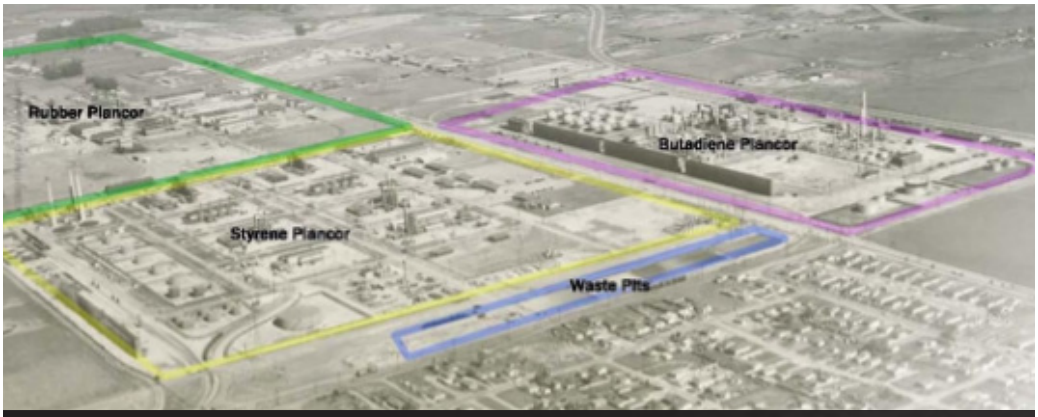


Figure 2. *Aerial photo of the former Del Amo facility property*

Del Amo Superfund Site Background

The Del Amo Facility Superfund site (Del Amo site) includes the location of a large-scale manufacturing facility that made synthetic rubber. In 1942, the U.S. government built this facility to support World War II efforts. This facility included three manufacturing plants operated by Shell Oil Company (Shell), Dow Chemical Company, U. S. Rubber Company, Goodyear Tire & Rubber Company and other companies. In 1955, Shell purchased the facility and operated it until 1971. Shell sold the land to a developer in 1972. The developer tore down the facility, divided the property, and sold parcels to landowners and other developers. Today, the former Del Amo facility property is a busy commercial and industrial business park where more than 250 businesses employ nearly 6,000 people.[i]

During operations at the Del Amo facility, waste was put in six unlined pits and three unlined evaporation ponds. The pits and ponds were located in a 4-acre area along the property's southern boundary. Over years of operations, various contaminants were released into the environment. The primary contaminants are arsenic, benzene, benzo(b) fluoranthene, benzo(a)pyrene, copper, 4,4-DDT, indeno (1,2,3-cd) pyrene, n-nitrosodi-phenylamine, trichloroethylene (TCE), perchloroethylene (PCE), i-propyltoluene and naphthalene.

In 1984, EPA evaluated the Del Amo site for addition to the NPL. At the time, very little groundwater information was available, and EPA determined that the Del Amo site was not eligible for the NPL. The California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) retained regulatory responsibility for the site and continued investigations. In 1989, EPA conducted evaluations of many sites in south-central LA, including the Del Amo site. This study showed an increased likelihood of contaminants from the Del Amo site traveling into the groundwater.

In 1991, EPA proposed the Del Amo site for addition to the NPL, and DTSC turned over regulatory responsibility to EPA. In 1997, EPA added the Del Amo site to the NPL. The Harbor Gateway Commercial Property Owners' Association sued to have the site taken off the NPL, and the court sided with the Association, stating that EPA needed written approval from the governor to add the site to the NPL. Finally, in 2002, EPA put the Del Amo site back on the NPL with the governor's approval.

Former Del Amo Facility

Harbor Gateway neighborhood (City of Los Angeles)

- 280-acre area
- Synthetic rubber manufacturing operations

TIMELINE

1942–1971
Synthetic rubber manufactured at the plant.

1972
Plant dismantled and pits and ponds covered with soil.

1970s–1980s
Land sold to a developer. The property was subdivided and redeveloped.

1992
EPA assumed lead agency responsibilities.

2002
EPA placed the Del Amo site on the NPL.

The Dual-Site Groundwater Operable Unit (OU)

The Dual-Site Groundwater OU is where contamination from both Sites has commingled (or mixed) in the groundwater. Throughout operations at both former manufacturing facilities, contaminants entered the environment from wastewater and raw materials being released onto the ground, making their way into the groundwater. EPA treats groundwater contamination from the Montrose site and the Del Amo site as one cleanup project.

The primary contaminants associated with the Montrose site are DDT and chlorobenzene, the raw chemical used to process DDT. Other contaminants include benzene, benzene hexachloride (BHC), trichloroethylene (TCE), tetrachloroethylene (PCE), and chloroform. A chemical called parachlorobenzene sulfonic acid (pCBSA), a byproduct of DDT processing, is also found in the groundwater. pCBSA is not a hazardous substance under the Superfund law.

Under EPA oversight, Montrose built a groundwater extraction and treatment system, which includes a water treatment facility (*see photo below*). In 2011, in part in response to community concerns about vapor intrusion, EPA began to gather information from across the Sites to better understand the potential for vapor intrusion from groundwater. Altogether, EPA found no health risks associated with vapor intrusion in the neighborhoods near the Sites. For more information, see *Appendix 2: Operable Units at the Del Amo and Montrose Superfund Sites.*

Note: No one is presently drinking or using groundwater contaminated by these Sites. The drinking water provided to nearby communities is regularly tested to meet California and federal drinking water standards.

Aerial photo of the Dual-Site groundwater treatment facility

Primary Contaminants of Concern for the Sites

What is DDT?

Dichloro-diphenyl-trichloroethane was a pesticide made around the world and widely used in the United States. DDT was used primarily for agricultural purposes and to control mosquito populations in populated areas. In 1972, DDT use was banned in the United States (except for special permits) due to harmful environmental and human health effects. DDT lasts a long time (often decades) in the environment, especially in soil. It has been found in every part of the world, and most animals have levels of DDT in their bodies. DDT tends to be stored in the fatty tissues of animals, so predators, including humans, have higher levels of DDT.

Many populated environments have measurable levels of DDT in the soil. This is due to former agricultural and mosquito control activities, as well as past home lawn and garden care approaches.

What is Benzene?

Benzene is a colorless liquid with a sweet odor. Natural sources of benzene include gas emissions from volcanoes and forest fires. Benzene is also found in exhaust from motor vehicles, tobacco smoke and gas stations. Various industries use benzene to make other chemicals, such as styrene (for Styrofoam and other plastics) and cyclohexane (for nylon and synthetic fibers), or manufacture rubbers, lubricants, dyes, detergents, drugs and pesticides. Benzene is found in glues, adhesives, paints, furniture wax and detergents. Benzene can also be found in some arts and crafts. Because of its wide use, benzene ranks in the top 20 in production volume for chemicals produced in the United States.

What is PCE?

Tetrachloroethylene (sometimes called perchloroethylene, tetrachloroethene, PERC or PCE) is a nonflammable, colorless liquid. PCE is used as a dry-cleaning agent and can be found in homes where dry-cleaning services were recently used. PCE is also a metal degreasing solvent, found in older kitchen cleaning products, gun cleaning products and brake-cleaning products. Today, PCE can be found in some glues and adhesives made for arts and crafts and auto-part lubricants as well as spot removers. Industries also use PCE to make other chemicals. In California, dry cleaners are in the process of being restricted from using PCE. PCE is no longer common in new products.

What is TCE?

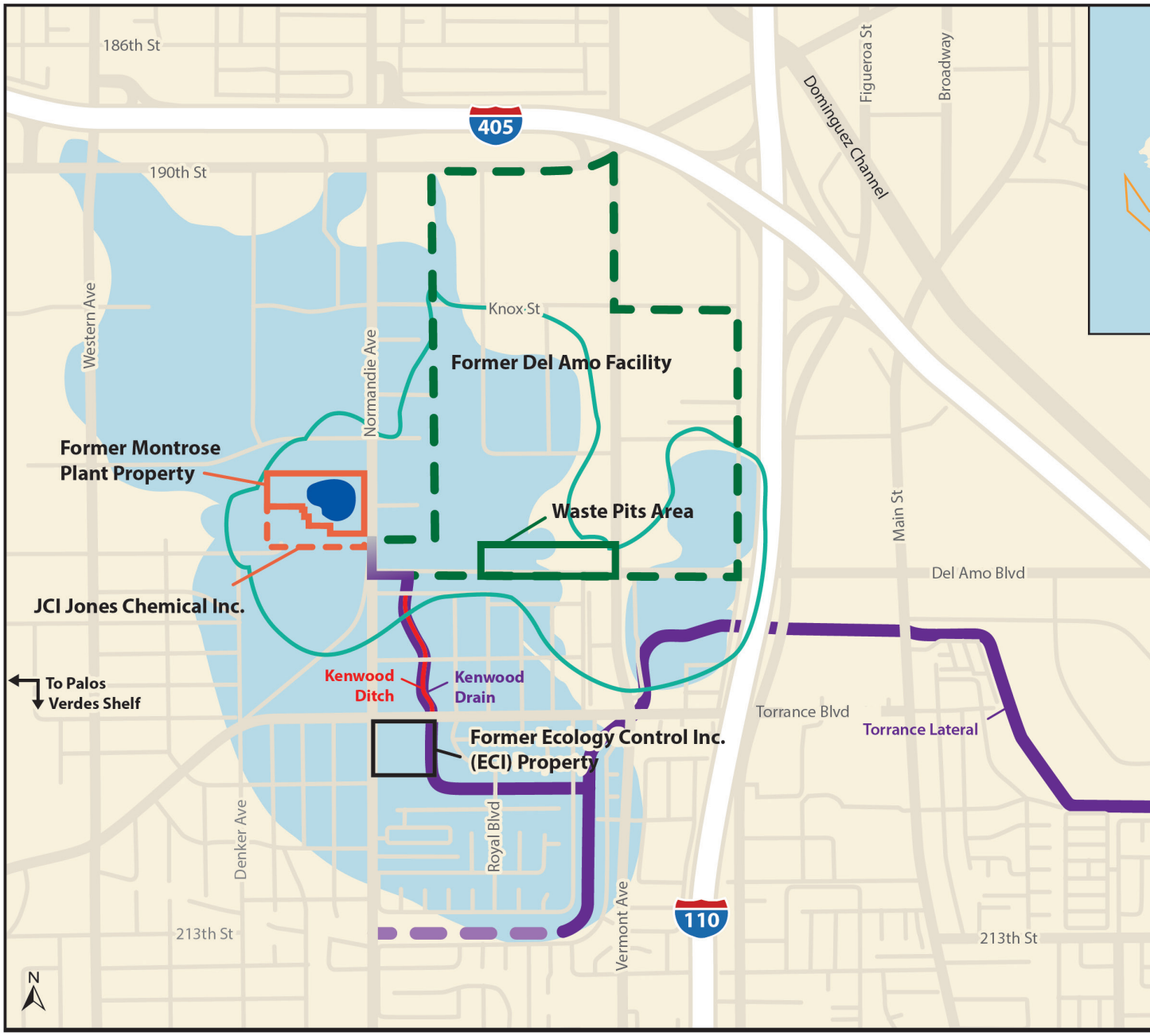
Trichloroethylene (sometimes called trichloroethene or TCE) is a nonflammable, colorless, volatile liquid. TCE is used as a spot cleaner for the dry-cleaning industry and can be found in homes where dry-cleaning services were recently used. TCE is also a metal degreasing solvent, found in older kitchen cleaning products, gun cleaning products and brake cleaning products. Today, TCE can be found in some glues and adhesives made for arts and crafts as well as spot removers. Industries also use TCE to make other chemicals, especially refrigerants. In California, dry cleaners are restricted from using TCE. TCE is no longer common in new products.

Note: Under current site conditions no one is presently being exposed to site contaminants.

The dark blue, black and red markings in the ribbon confirm that there is DNAPL in the sample core. DNAPL at the Montrose site is composed of DDT and chlorobenzene.

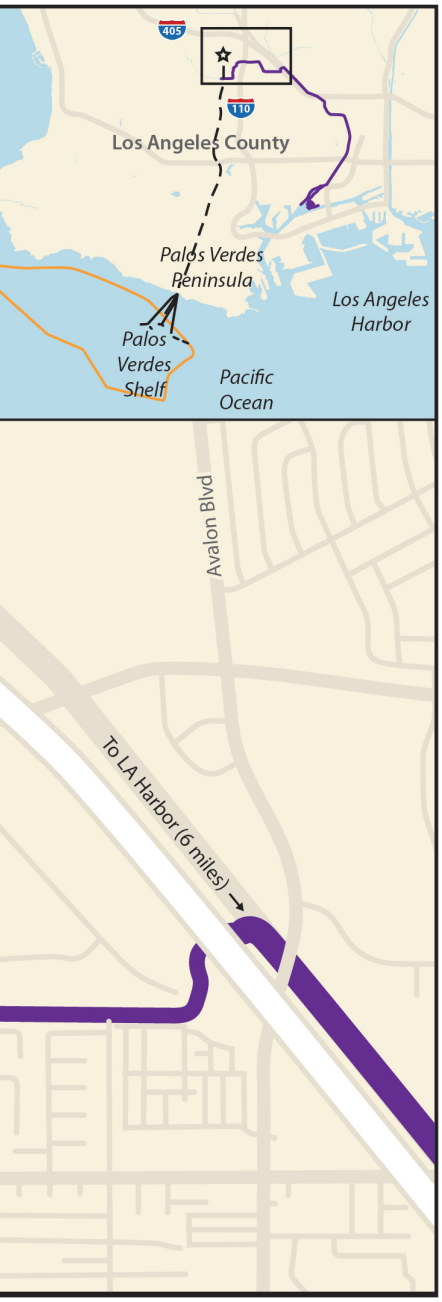
[i] *U.S. Environmental Protection Agency, "Cleanup, Continued Use and Redevelopment in a Thriving Business Park: The Del Amo Superfund Site in Los Angeles, California," February 2016.*

Del Amo and Montrose Superfund Sites



Legend

- Dual-Site Groundwater Contamination Plume
- Stormwater Pathways
- Technical Impractacability (TI) Waiver Zone
- Dense Non-Aqueous Phase Liquid (DNAPL)



Sewer outfalls

Montrose Chemical Corp. Superfund site (Montrose site)

This site includes the location of the former manufacturing plant that made the pesticide dichloro-diphenyl-trichloroethane (DDT) from 1947 to 1982. During the 35 years of operations, contaminants entered the environment from spills, leaks and releases of waste materials, contaminating the shallow soils and reaching the groundwater. In some areas under the former Montrose property, these practices also created **DNAPL**, which is a mixture of chemicals that do not easily dissolve in water and are located underground. Contaminants were also released off property into the **stormwater pathways**, making their way through the former Ecology Control Incorporated (ECI) property, into the Torrance Lateral and Dominguez Channel until it reaches the Los Angeles Harbor. Additionally, contaminants were released into the sanitary sewer system, reaching the Pacific Ocean through **sewer outfalls** in the Palos Verdes Shelf. The Montrose site also includes portions of JCI Jones Chemical Inc. (Jones) property, where Jones released contaminants onto the ground.

Del Amo Facility Superfund site (Del Amo site)

The site includes the location of a former large-scale manufacturing facility that made synthetic rubber to support World War II efforts. During the 30 years of operations, contaminants entered the environment in many ways, contaminating the shallow and deep soil on the former property and creating the **dual-site groundwater contamination plume**. In addition, operational waste was put in six unlined pits and three unlined evaporation ponds located in a 4-acre area along the former Del Amo facility property's southern boundary, called the **Waste Pits Area**.

Dual-site Groundwater Contamination Plume

The contamination from both Sites is co-mingled (or mixed) in the groundwater, and EPA oversees this work at both sites at the same time. EPA has established a **TI Waiver Zone** where the groundwater contamination cannot be cleaned up to drinking water standards using existing technologies. The boundary of the groundwater contamination plume and the **TI Waiver Zone** is different in each aquifer.

No one is presently drinking or using water contaminated by these Sites. The drinking water provided to nearby communities is regularly tested and meets California and federal drinking water standards.

Location of the Sites

The former manufacturing facilities are across the street (Normandie Avenue) from one another in the Harbor Gateway neighborhood in the city of LA. These Sites are not defined by property boundaries of the former manufacturing facilities, because the contamination extends beyond the property boundaries. In general, a Superfund site includes the areas where contamination began and areas (such as air, surface water, groundwater, land) where the contamination may have come to be located. For the Montrose and Del Amo sites, this includes the property boundaries of the former manufacturing facilities as well as the nearby properties, groundwater, the sanitary sewer system, the Pacific Ocean, land near the historical Kenwood Ditch, and areas in the current stormwater collection system, including the Kenwood Drain, Torrance Lateral, Dominguez Channel and Consolidated Slip (part of Los Angeles Harbor).

The area surrounding the Sites is a jigsaw puzzle of jurisdictions and includes several residential neighborhoods as well as industrial and business properties (*see Figure 3*). Nearby cities include Gardena to the north, Torrance to the west, Carson to the east and the city of LA's Harbor City neighborhood to the south. The neighborhood immediately south of the former Del Amo facility is located in unincorporated LA County (sometimes referred to as the West Carson neighborhood).

EPA contractors removing DDT-contaminated soil from a yard on Kenwood Avenue

What is an operable unit (OU)?

Superfund sites are large and complicated. EPA often breaks up Superfund sites into smaller areas to make cleanup more manageable. These areas are called "operable units" or OUs.

For more detailed information on each OU, see *Appendix 2: Operable Units for the Del Amo and Montrose Superfund Sites.*

Figure 3. *Local jurisdictions near the former manufacturing facilities*

The Community

The Sites may have impacted a wide range of individuals. Impacted is a broad term, which may include people being exposed or potentially exposed to contaminants, people concerned about their health and wellbeing, and people affected by construction work or other actions to address the contamination. These individuals may include:

- People who historically lived, worked or spent time near the former manufacturing facilities or other contamination pathways. This includes people who chose to move out of the neighborhoods because of their proximity to the Sites.
- People who currently live, work or spend time near the former manufacturing facilities. The surrounding area is a dense, urban community that includes schools, businesses, and churches. For example, about 14,300 people currently live within a 1-mile radius of the former manufacturing facilities. Furthermore, the property within the footprint of the former Del Amo facility is a busy commercial and industrial business park where more than 250 businesses employ nearly 6,000 people.
- People who live, work or spend time near other areas where the contamination has come to be located, such as land near the former Kenwood Ditch or areas part of the current stormwater collection system.
- People who live, work or spend time in communities whose future sources of drinking water might be impacted by groundwater contamination related to the Sites. This includes communities in the cities of Torrance, Carson, Lomita, Gardena and LA as well as the West Carson neighborhood of unincorporated LA County. *For more information, see pages 23–24.*

Historical Background of the Area Near the Former Manufacturing Facilities

Several ranchos occupied the area after European settlement. The area remained mostly vacant fields with a sparse population before World War II. In 1906, the city of LA annexed the area now called "Harbor Gateway." The purpose of the annex was to eventually link the city of LA to the Port of Los Angeles. Given the long and narrow shape, the area was known for many years as the "city strip," the "shoestring strip" and "the strip."[i]

During and after World War II, factories replaced the vacant fields. The new factories needed housing for the workers, and construction began on small single-family houses and duplexes in the area. The 1950s and 1960s brought other commercial development along major thoroughfares, including one-to-three-story commercial buildings. The surrounding area saw an influx of Cuban immigrants in the 1960s, followed by Mexican immigrants in the 1970s. By the 1990s, the people moving into the area were no longer working at those factories, because many of the factories had closed.[ii]

Between 1980 and 2010, population in the Harbor Gateway area rapidly grew by 50 percent (from 30,328 people to 45,735 people). Starting in 1980, the population growth changed the demographics of the area, greatly increasing the Latino and African American populations and decreasing the Anglo population. Many single-family houses were demolished and replaced with apartment buildings. This led to a rapid increase in the number of people with no increase in public amenities or open space. In 1995, the city of LA razed Normont Terrace, a public housing development 2 miles from Harbor Gateway, and many former residents moved to the Harbor Gateway area.[iii]

Los Angeles County

LA County is one of the nation's largest counties in size (4,084 square miles) and population (nearly 10.5 million people). About 27% of Californians live in LA County. The LA County Board of Supervisors is the governing body, with five supervisors elected to four-year terms by voters in their respective districts. The Board appoints most LA County department heads. The people who live in LA County District 4 and District 2 are in the closest proximity to the former manufacturing facilities.

Because of EPA's presence in communities, EPA staff are often confronted with an array of questions regarding municipal services. LA County provides many municipal services to residents. The website www.211la.org or dialing 2-1-1 will also connect residents with an operator who can provide free information about municipal services. The *LA County Citizen's Guide* can also provide residents with an appropriate list: lacounty.gov/government/county-services/citizens-guide-to-county-services.

In 1985, LA City Council renamed the area "Harbor Gateway" to try to "bring a sense of identity and community pride to its citizens."[iv] However, many businesses continue to identify as being part of other South Bay cities. The postal addresses for properties in the Harbor Gateway area and unincorporated LA County are often identified as Torrance or Gardena.

Government Structure near the Sites

Working in the area requires coordination among multiple jurisdictions. Jurisdictions near the former manufacturing facilities include the cities of LA, Torrance, Gardena and Carson, as well as unincorporated LA County. Within the city of LA, areas near the Sites include the Harbor City, Harbor Gateway and Wilmington neighborhoods. Within unincorporated LA County, the area immediately south of the former Del Amo facility is the West Carson neighborhood. These neighbors rely on LA County for municipal services (e.g., law enforcement, public health protection, social services). *See Figure 3.*

The former manufacturing facilities are in locations served by the Harbor Gateway South Neighborhood Council, specifically in Area 4. Board members include a president, vice president, treasurer and parliamentarian, as well as five "area-specific" board members and five "at-large" board members. The Council meets monthly and distributes regular newsletters (every month or bimonthly) to nearby neighbors. More information can be found at: harborgatewaysouth.org/newsletter-archives.

Del Amo: Soil vapor extraction and cap inspection

Demographics of the Community Near the Former Manufacturing Facilities

EJSCREEN is an environmental justice mapping tool that provides EPA with a nationally consistent approach for identifying environmental and demographic data. The information in this section comes from EPA's EJSCREEN tool, using data from the U. S. Census Bureau's 2010–2014 American Community Survey (ACS).

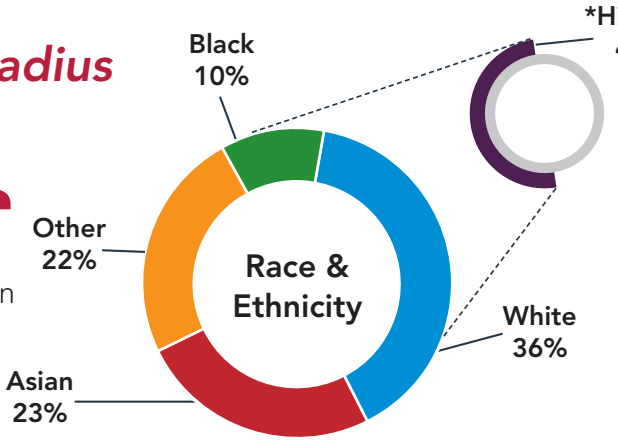
Figure 4. *1-mile and 3-mile radii of the former manufacturing facilities*

Roughly 202,656 people live within 3 miles of the former manufacturing facilities (corner of Normandie Avenue and West 204th Street). People living in the area are more minority and more linguistically isolated when compared with other communities in California.

Roughly 14,310 people live within 1 mile of the former manufacturing facilities. This population is less educated and more low income, minority and linguistically isolated when compared to other communities in California. This population living within a mile of the Sites is even more minority and linguistically isolated than the population living within the larger 3-mile area.

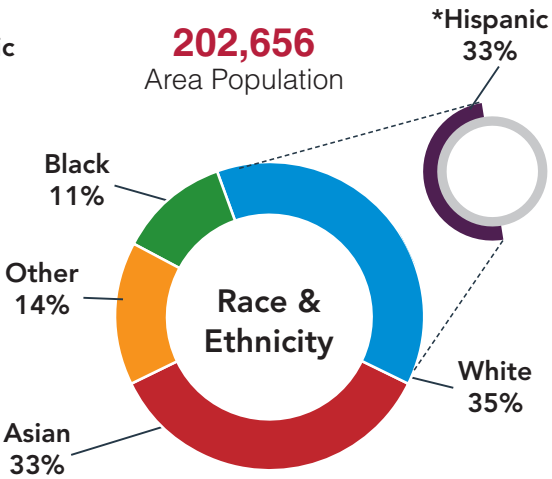
1-Mile Radius

14,310
Area Population



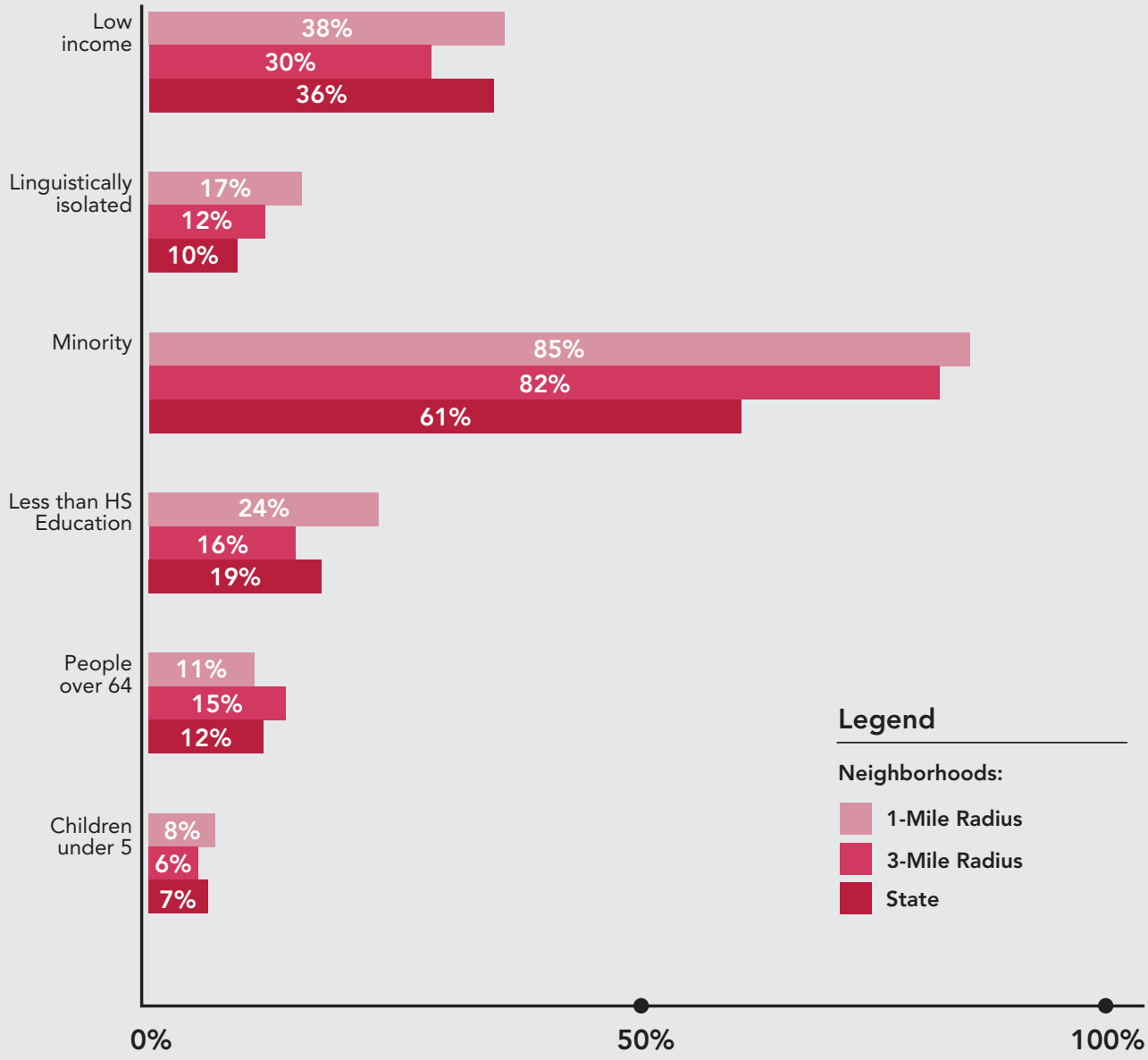
3-Mile Radius

202,656
Area Population



* Hispanic is considered an ethnicity. People are asked to self-report their race separately from their ethnicity.

Table 1: Demographics of the population living near the former manufacturing facilities compared to state demographics



Pages 15–20: Source is U.S. Census data, American Community Survey (ACS), five-year average ACS estimates (2010–2014) via EPA EJSCREEN Tool, accessed spring 2017 at www.epa.gov/ejscreen.

Kenwood Neighborhood

This neighborhood is located directly south of the former Del Amo facility. This neighborhood was directly impacted by several EPA actions related to the Sites. Examples of these actions include the West 204th Street DDT soil removal activities and Shell buyout of homeowners in the 1990s; construction related to the Waste Pits Area remedy in the late 1990s; soil removal actions for Kenwood Drainage Ditch in the early 2000s; construction of groundwater treatment system pipelines in the early 2010s; and a vapor intrusion study from 2012 to 2016.

Most of the people living in this neighborhood are minority (79%) and half are Hispanic (50%). A fair number of the households are linguistically isolated (15%), with almost half of those households speaking an Asian or Pacific Islander language (49%) and almost one-third of those households speaking Spanish (32%). About half of the houses in neighborhood are owner-occupied (51%). Many people have lived in this community for generations and have a long history with EPA staff and cleanup work. This neighborhood is dense, with many homes built on deep, individual property parcels (some are not visible from the street). Some familial generations live in separate households on the same property parcel.

Many distinct neighborhoods make up the areas surrounding the former manufacturing facilities. These neighborhoods each have unique histories with the Sites and distinct demographic compositions. Pages 19–20 provide a snapshot of these three neighborhoods:

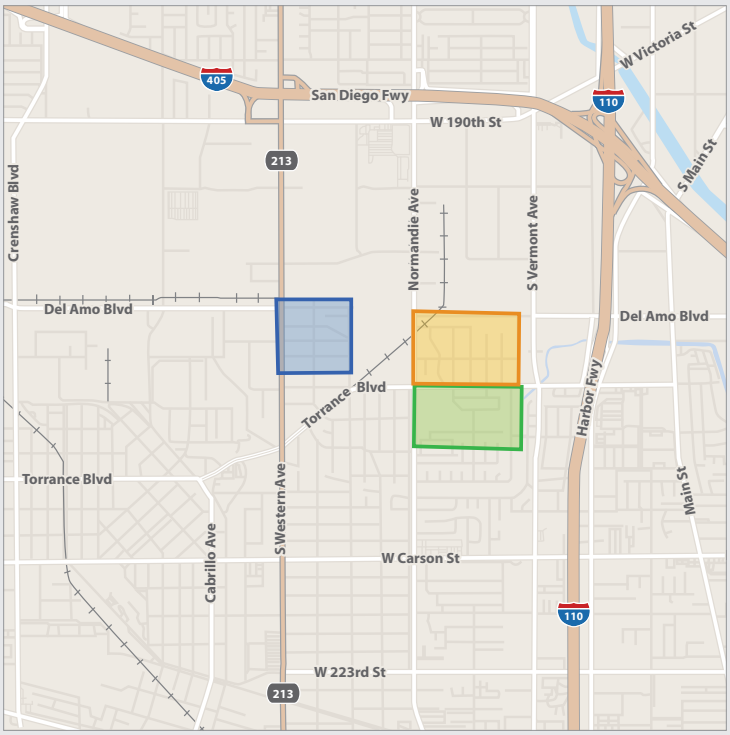
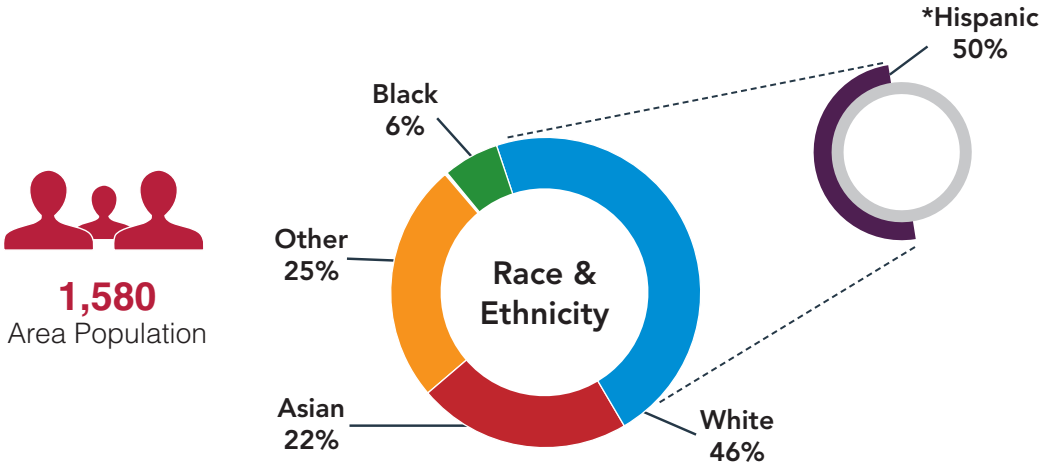


Figure 5. *Neighborhoods near the former manufacturing facilities*

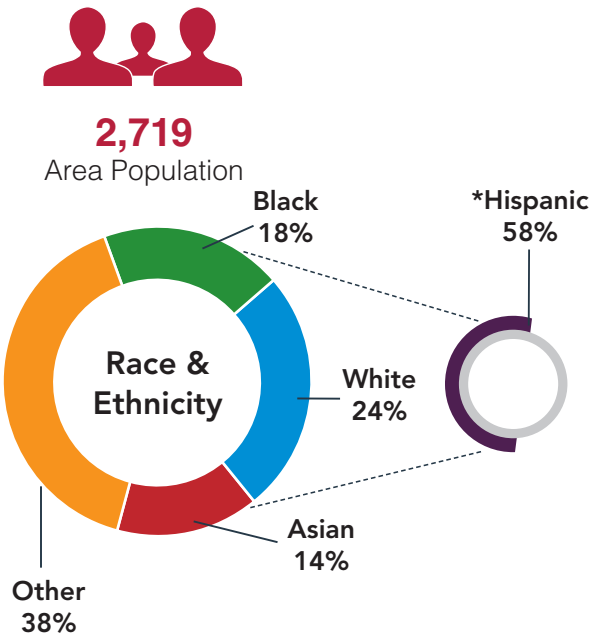


* Hispanic is considered an ethnicity. People are asked to self-report their race separately from their ethnicity.

Denker Neighborhood

This neighborhood is located just southwest of the former Montrose plant property and the JCI Jones Chemicals Inc. (Jones) property. The LA Department of Water and Power (LADWP) maintains power station towers next to the neighborhood. Each day, diesel trucks drive on Denker Avenue to access the industries on the east side of Denker Avenue, including the Jones property. This neighborhood was directly impacted by EPA actions related to the Sites. Examples of these actions include sewer sediment removal actions in the late 1990s, construction of groundwater treatment system pipelines in the early 2010s, and the vapor intrusion study from 2012 to 2016.

Almost all the people living in this neighborhood are minority (95%), with a little over half being Hispanic (58%) and 18% are Black. A fair number of the households are linguistically isolated (22%), with more than half speaking Spanish (56%) and over one-third speaking an Asian or Pacific Islander language (35%). Only a few houses in neighborhood are owner-occupied (10%). Many households are low income (61%).



South of Torrance Boulevard Neighborhood

This neighborhood is located on the southern portion of the historical Kenwood Ditch, as it drained into the historically marshy land south of Torrance Boulevard. Beginning in the early 1990s, Ecology Control, Inc. (ECI), an environmental services firm, operated a storage and staging facility at its property on the corner of Normandie Avenue and Torrance Boulevard. For many years, ECI operated 24 hours a day, seven days a week, which resulted in many diesel trucks moving in and out of the property.

Most of the people living in this neighborhood are minority (78%), and about one-third of people are Hispanic (36%) or Asian (34%). (Nearly half of the people living here also identify as White (46%), suggesting that some Hispanics consider themselves both "White" and "Minority.") A fair number of the households are linguistically isolated (18%), with about a quarter speaking Spanish (26%) and many speaking an Asian or Pacific Islander language (74%). Many of these homes are owner-occupied (72%).

With the high levels of home ownership and low levels of low-income households, this neighborhood is more affluent than surrounding neighborhoods. This neighborhood also has many people over the age 64 and has organized the Good Neighbor Association.

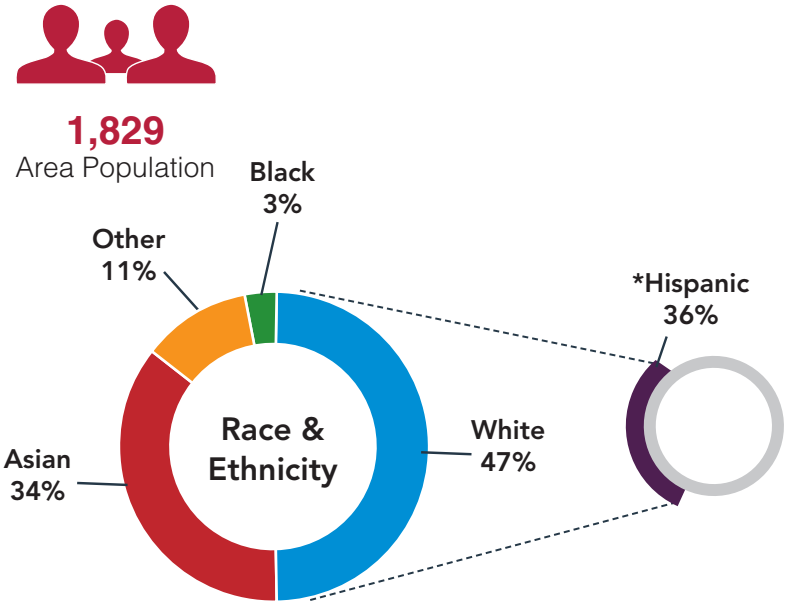
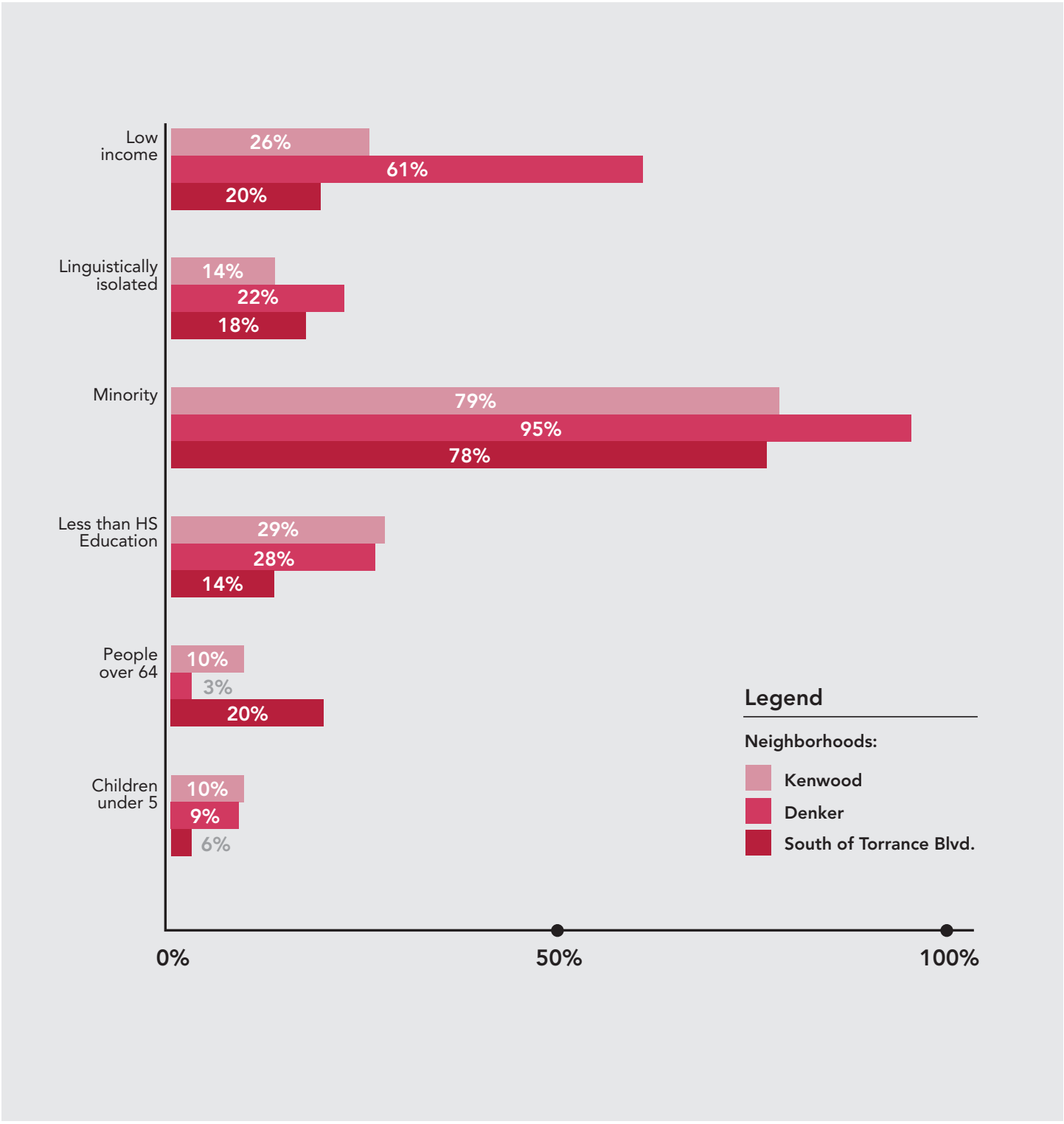
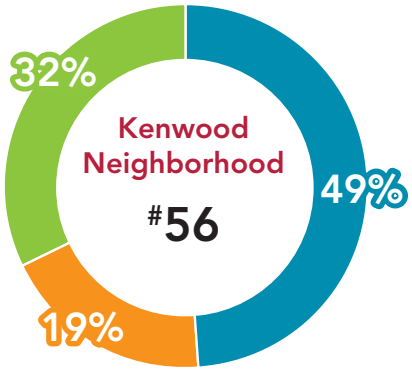


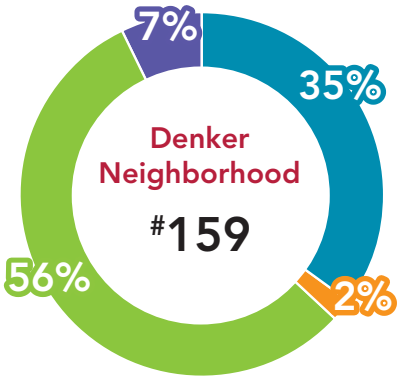
Table 2: Demographics of the population living near the former manufacturing facilities, by neighborhood



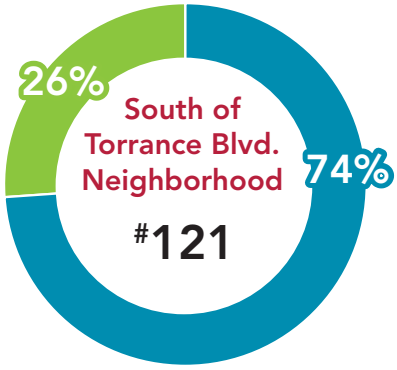
Pages 15–20: Source is U.S. Census data, American Community Survey (ACS), five-year average ACS estimates (2010–2014) via EPA EJSCREEN Tool, accessed spring 2017 at www.epa.gov/ejscreen.

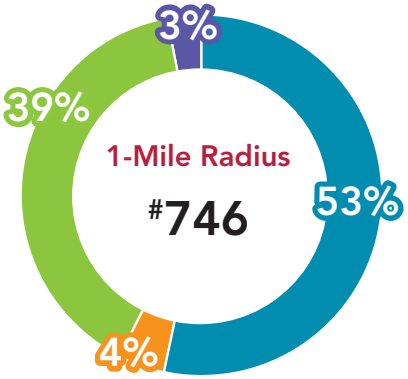
Table 3: Number of Linguistically Isolated Households and Languages Spoken (%)





Linguistically isolated households are households in which no one age 14 or over speaks English "very well" or speaks English only. Languages in this table represent languages spoken within the linguistically isolated households living near the former manufacturing facilities.

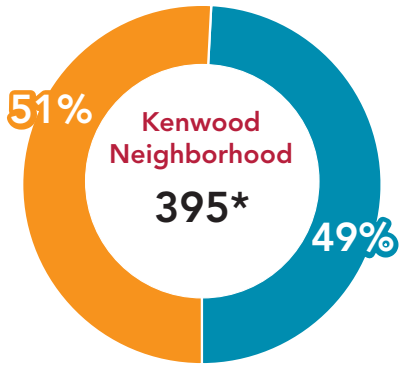


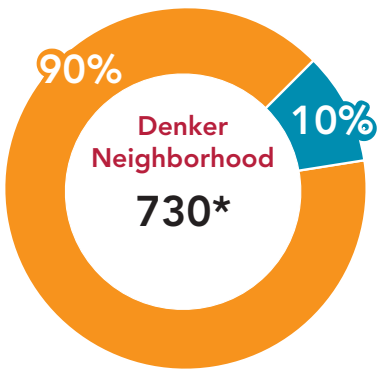


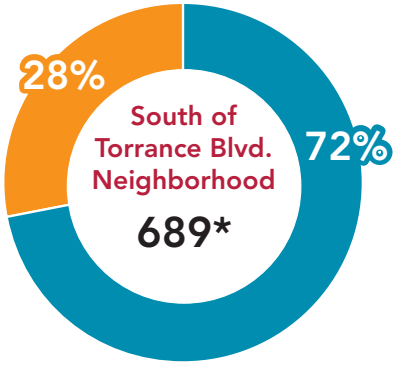
Legend

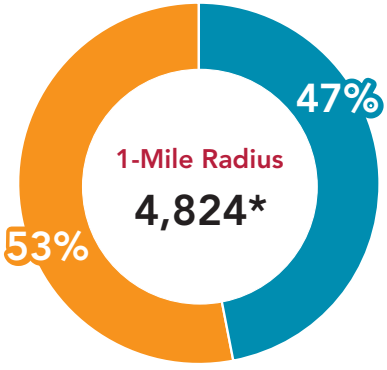
- Spanish
- Indo-European
- Asian-Pacific Islander
- Other
- # Number of Linguistically Isolated Households and Languages Spoken

Table 4: Owner- and Renter-Occupied Households









Legend

- Renter Occupied
- Owner Occupied
- * Total Housing Units

Environmental Justice

What is environmental justice?

Environmental justice refers to the fair treatment and meaningful involvement of all people, regardless of race, color, national origin or income, with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Many communities of color or low-income communities bear the burden of environmental exposures, lack municipal services and have less access to the decision-making processes that impact their lives. Often, these communities can be more vulnerable to environmental exposures because of poor health status, unique behavior norms, lack of access to medical care or increased exposure to multiple chemicals in the environment.

What environmental justice concerns are present?

Overall, the neighborhoods near the former manufacturing facilities have environmental justice concerns. People living here are more likely to be minority, linguistically isolated and less educated than other Californians or even people living further away (3-mile radius). These neighborhoods are also heavily impacted by industrial businesses surrounding the area as well as two major highways.

How can EPA reflect on environmental justice concerns to better serve this community?

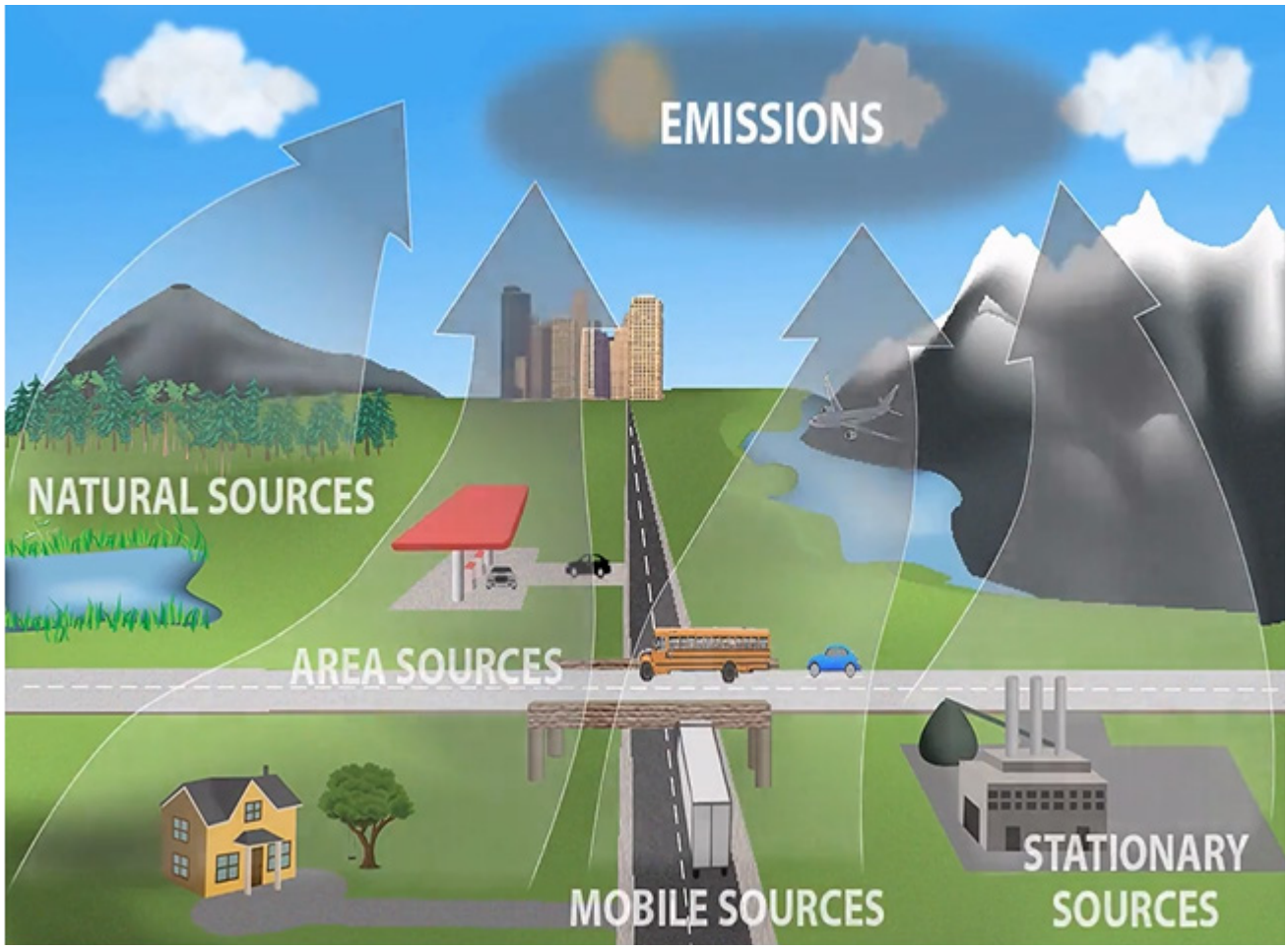
To provide opportunities for low-income and minority communities to become involved in EPA's work, the site team should strive for more active outreach strategies than might be necessary at other Superfund sites. Such strategies would include meeting community members where they are (their homes, their schools, their neighborhoods) instead of expecting them to participate in public meetings. The site team should be working to leverage other programs within EPA and at EPA's partner government agencies to serve this overburdened community. Read more about ways to do this in the Community Action Plan section.

In addition, the site team should consider translating materials into additional languages beyond Spanish. Many linguistically isolated households in the most impacted neighborhoods are speaking Asian-Pacific Islander languages.

Example of an EJ community

Other Environmental Burdens Near the Former Manufacturing Facilities

The south LA area experiences some of the nation's greatest air pollution. The area within 1 mile of the former manufacturing facilities has high levels of traffic volume (top 20th percentile in the state) and high diesel particulate matter (top 15th percentile in the state). Two major highways (Interstate 110 and Interstate 405), which are busy conduits in and out of LA, intersect about 1 mile from the former manufacturing facilities.



In addition, this area is home to a well-established oil industry. An ExxonMobil refinery is about 2 miles northwest of the former manufacturing facilities and a Shell Oil Products refinery is about 3 miles southeast. An explosion at the Exxon-Mobil facility in February 2015 led to two workers suffering minor injuries and debris dispersal into the surrounding community.

This community copes with many other environmental burdens as well. Residents living within 1 mile of the former manufacturing facilities are close to various industrial operations, including industrial warehouses, receiving stations and fulfillment centers. Warehouses use semi-trucks to move shipments in and out of their facilities. Additionally, some of these businesses report to EPA on the use or release of chemicals. This area is home to 23 businesses reporting chemical releases and waste management activities (meaning businesses report to the Toxics Release Inventory). In addition, this area is in the top 20th percentile in the state for major direct water dischargers (meaning businesses that operate under a National Pollutant Discharge Elimination System permit) and in the top 10th percentile in the state for businesses that operate with chemical accident management plans (known as Risk Management Plans or RMPs).

[i] *Sheryl Stolberg, "In Search of an Identity: Area Lacks a Sense of Community," LA Times, January 1, 1989.*
[ii] *Sam Quinones, "How a Community Imploded," LA Times, March 4, 2007.*
[iii] *Sam Quinones, "How a Community Imploded," LA Times, March 4, 2007.*
[iv] *Sam Quinones, "How a Community Imploded," LA Times, March 4, 2007.*

Communities Served by Nearby Water Purveyors

Note: No one is presently drinking or using groundwater contaminated by these Sites. The drinking water provided to nearby communities is regularly tested to meet California and federal drinking water standards.

EPA is focused on protecting the drinking water supplies of nearby communities whose future drinking water might be impacted by groundwater contamination related to the Sites.

Drinking-water purveyors who have active wells in close proximity (about 4 miles) of the former manufacturing facilities include Golden State Water Company (Southwest) and California Water Service Company (Dominguez, Lomita City and Torrance City) (*see Figure 6*).

These water purveyors serve the communities in the cities of Torrance, Carson, Lomita, Gardena and LA as well as the West Carson neighborhood of unincorporated LA County (*see Figure 7*).

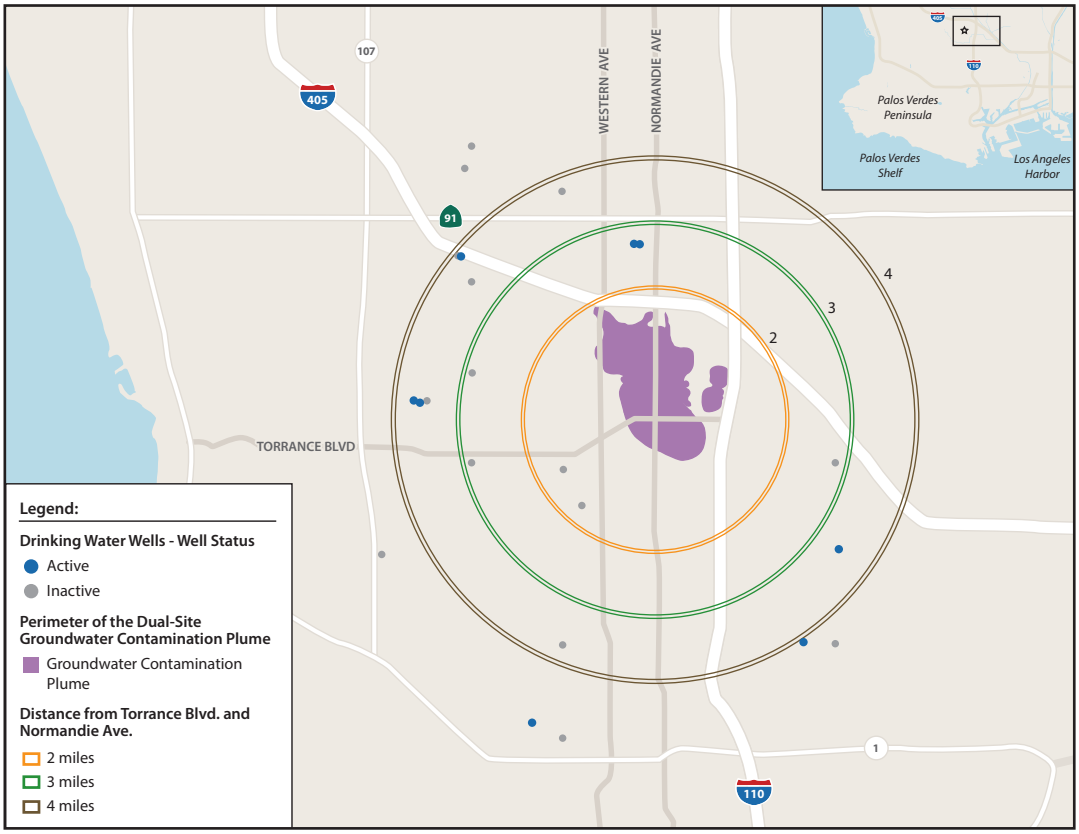


Figure 6. *Drinking water wells near the Montrose and Del Amo Dual-Site groundwater contamination plume*

Nearby water purveyors use groundwater from deep aquifers that are not currently impacted by contamination.

However, groundwater contamination can move horizontally and vertically. EPA's goal is to have a groundwater treatment system in place to prevent these contaminants from moving to deep aquifers used as a drinking water supply for nearby water purveyors.

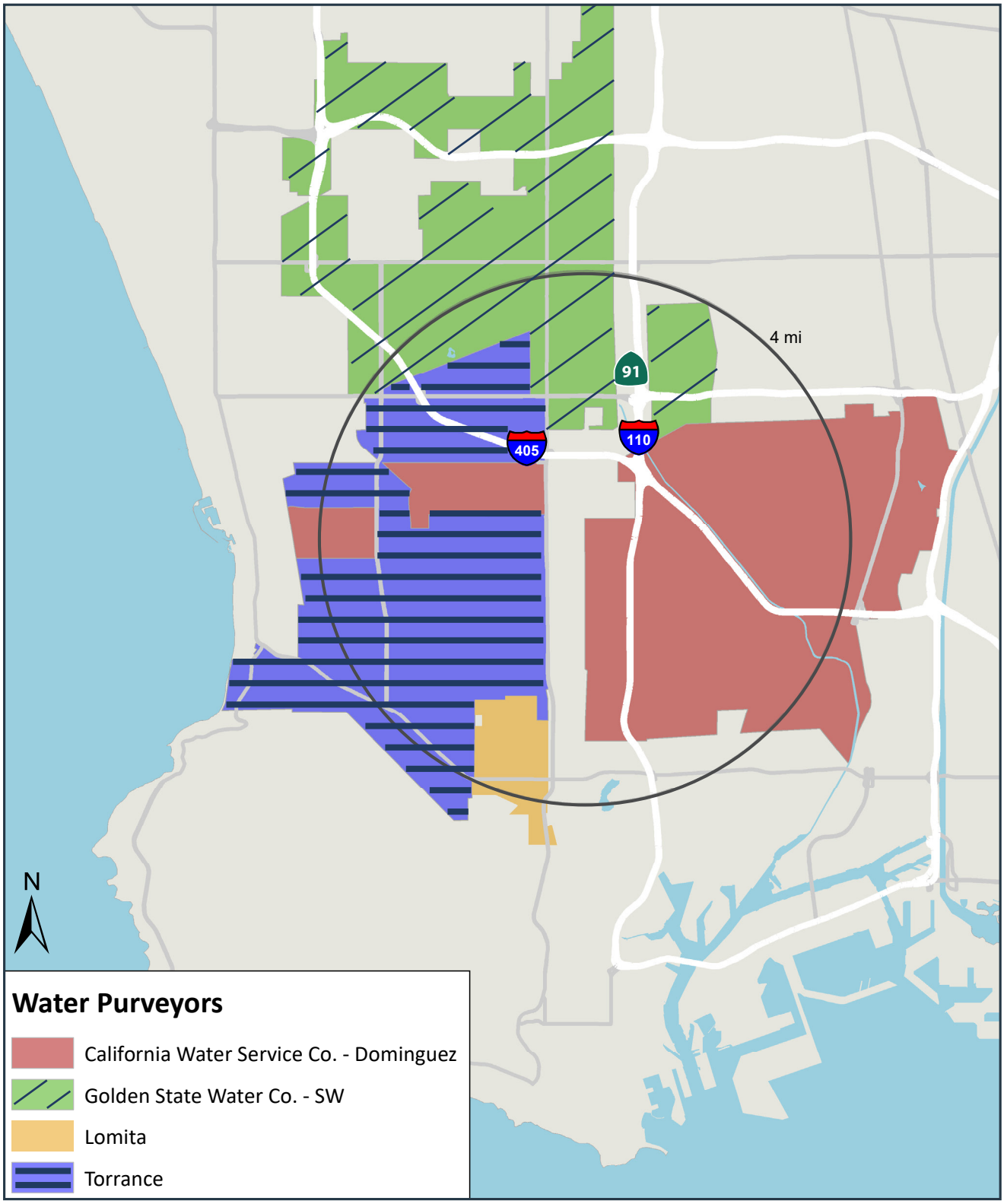


Figure 7. *Service area of water purveyors with active drinking water wells near the Dual-Site groundwater contamination plume*

The Community and the Superfund Process

History of EPA's Work in the Community

EPA has a long history of community involvement at the Sites that dates to the mid-1980s. EPA developed the first Community Involvement Plan (CIP) in 1985 and updated it in 1996 and 2010. For over 30 years, EPA has maintained a mailing list database for the Sites, publishing and mailing over 100 fact sheets or other announcements. Through the years, EPA has hosted scores of public meetings, informal public events and workshops to facilitate dialogue among impacted residents. In addition, EPA has issued hundreds of technical documents and dozens of legal agreements for work on the Sites. See *Appendix 7: Del Amo and Montrose Sites Major Milestones Timeline.*

In 2016, EPA focused its community involvement efforts on exploring options to support an effective community advisory group (CAG), targeting outreach efforts toward the broader potentially impacted communities and revising the CIP for the Sites. Between 2016 and 2018, the site team hosted four community "open house" events, published three site update fact sheets, and led multiple door-to-door outreach and mobile information center "tent" events in the neighborhoods.

Interested Stakeholders

Partner Government Agencies
The Sites are complex, and EPA coordinates with several state and local government agencies. EPA works closely with CalEPA's DTSC. EPA also has a Memorandum of Understanding (MOU) signed with LA County's Department of Public Works (DPW), to keep the Department up-to-date with work under the Dual-Site Groundwater OU3 and ensure that Montrose provides DPW with final reports regarding the Dual-Site Groundwater OU3. EPA also works with staff from the Water Replenishment District (WRD) of Southern California and the Los Angeles Regional Water Quality Control Board (LARWQCB). Many other local government agencies and organizations are on the site mailing list and/or email list, and many have attended EPA's recent community "open house" events.

Local Businesses
Today, the area within the footprint of the former Del Amo facility property is a busy commercial and industrial business park where more than 250 businesses employ nearly 6,000 people. For more information on the redevelopment, see *Appendix 4: Redevelopment on the Former Del Amo Facility Property.* The area south of the former Montrose plant property includes a few large business operations. EPA or one of the PRPs will coordinate with these business owners if there is a need to access their property for studies or cleanup work related to the Sites.

For more information on local contacts, see *Appendix 3: Contact Information for Partner and Key Stakeholder Agencies and Organizations for the Del Amo and Montrose Superfund Sites.*

Del Amo Action Committee (DAAC)
In 1994, DAAC organized to represent people living in the neighborhoods surrounding the Sites, especially the neighborhood just south of the former Del Amo facility. In the late 1990s, DAAC campaigned for a buyout of every home in the entire 204th Street block area. DAAC's vision states that "We believe everyone deserves a healthy and safe community. We believe policy changes that promote environmental justice will lead to healthier communities for everyone" (from the DAAC website, June 2017).

EPA provided DAAC with a Technical Assistance Grant (TAG) from 1995 to 2005. DAAC members were key players in the former Montrose and Del Amo Neighborhood Partners Program from 1997 to 2001, participating in discussions with highly interested partner government agencies. From 2012 to 2015, EPA supported DAAC through the Technical Assistance Services for Communities (TASC) program, which provides independent technical assistance through an EPA contract to help communities better understand EPA's actions. Such TASC support activities included supporting a community fair event in 2014, providing technical advisors to work with DAAC to review and comment on technical documents, and working with DAAC to create fact sheets. TASC also supported a series of in-person stakeholder meetings to discuss a wide range of site activities.

Potentially Responsible Parties (PRPs)

Today, under EPA oversight, much of the Superfund cleanup work is being paid for and conducted by the private and governmental parties that are legally responsible for the contamination. These parties are called PRPs. Currently, EPA has entered legal agreements for specific cleanup activities with PRPs such as Montrose Chemical Corporation of California (Montrose), Shell Oil Company, Inc. (Shell) and JCI Jones Chemical, Inc. (Jones). EPA has also issued notices of liability to a larger number of parties with respect to the Sites' groundwater contamination.

Community and Stakeholder Concerns

From December 2017 to August 2018, EPA interviewed five community members, nine representatives from three partner government agencies and 35 representatives from 11 key stakeholder organizations. In addition, EPA reviewed important recent community comments and interactions regarding community concerns and needs, as well as ideas on community involvement and communication. For more information on the interviewees or the background resources and a fuller discussion on concerns, see *Appendix 5: Extended Community Concerns and Responsiveness Summary for the Del Amo and Montrose Superfund Sites* and *Appendix 6: Draft Situational Assessment for the Del Amo and Montrose Superfund Sites.*

We identified 13 unique concerns, which are captured under the following themes:

- Health and Cleanup.
- Community Involvement and Information Sharing.
- Neighborhood and Property.

Health and Cleanup Concerns

Health Effects

Community members have shared concerns about potential adverse health effects from long-term exposure to DDT as well as other contaminants from the Sites and other industries in the area. Community members and stakeholders requested that EPA examine the cumulative effects of the contaminants on human health. Some community members believe EPA is doing little to resolve health issues they have identified over the years. During the 2017–2018 CIP interviews, stakeholders noted that potential health effects of the contamination are not well understood by community members.

Drinking Water

Many community members have raised concerns about the impact of site contamination on their household drinking water. Questions about the safety of drinking water are common, and the effects of contamination on drinking water are not well understood. In addition, community members, partner government agencies and stakeholders expressed concerns about protecting groundwater resources. Partner government agencies and stakeholders are concerned about the locations of the groundwater treatment system's extraction and reinjection wells and whether the groundwater treatment system will be effective. Representatives from cities whose drinking water resources may be impacted by the Sites requested maps of the groundwater contamination plume and drinking water well locations, as well as information on the groundwater treatment system.

Slow Cleanup Progress

The extended cleanup timeline for the Sites is a concern for community members, partner government agencies and stakeholders. Residents noted that a faster cleanup could reduce the stigma of living near a Superfund site and attract new businesses to the area. Some community members expressed frustration that current cleanup activities are based on decisions from years ago. People want periodic updates about site activities and any major cleanup activities or decisions.

Holistic Approach to the Sites

Community members, partner government agencies and stakeholders expressed concern that there may not appear to be a holistic overall approach to the cleanup of the Sites. Community members are concerned that the individual OUs can be overlooked and that various remedies selected for different OUs may not holistically address overall human health. Many people commented that EPA often changes staff at the Sites, and they worry that there is no one they can talk to consistently who understands both Sites. People requested access to a single contact person who coordinates among the parties involved, provides access to site documents and answers cleanup-related questions.

This page shares information provided by community members and stakeholders. Its contents do not necessarily reflect the policies, actions or positions of EPA.

Specific Technical Cleanup Aspects

Dual-Site Groundwater OU3G Cleanup
Partner government agencies and stakeholders expressed concerns about the future success of the groundwater treatment system. Concerns noted include the long timeline to clean up groundwater contamination. Historically, community members have expressed frustration about the installation of the system's underground pipe network, noting installation noise and poor road conditions left behind following installation efforts. Some partner agencies and stakeholders expressed interest in the status of EPA's Antidegradation Policy Analysis. They questioned the science behind EPA's analysis and whether reinjecting materials can affect the groundwater resources.

For many years, community members expressed concern about vapor intrusion. Although EPA conducted a vapor intrusion study in 2015–2016, community members want assurance that their homes will be free of vapor intrusion into the future. Many noted that the groundwater contamination within the Technical Impracticability (TI) Waiver Zone will remain there for thousands of years. Community members would like the established TI Waiver Zone to be revisited. They noted that they felt it gave the PRPs a "free pass" and that the residents living in the zone are bearing the burden of contamination. Partner government agencies and stakeholders recommended various actions, such as mass removal of the chlorobenzene dense nonaqueous phase liquid (DNAPL), and revisiting the Dual-Site Groundwater OU3G Record of Decision (ROD) now that new technologies are available.

Del Amo Waste Pits Area (OU2) Cleanup
Historically, community members have raised concern about the selection of another community with environmental justice concerns as the location for treating site contaminants. In addition, community members expressed concerns about the perceived lack of safety, security and oversight for the cleanup.

Montrose DNAPL (OU3D) Cleanup
Stakeholders have raised concerns that some cleanup technologies were not considered for the DNAPL remedy Proposed Plan. They requested that EPA complete remedy selection as part of a collaborative process. Partner government agencies and stakeholders noted that EPA's preferred remedy for DNAPL OU3D would not lead to an acceptable timeframe for cleanup in the related Dual-Site Groundwater OU3G (thousands of years). Many noted the viable option is the mass removal of the chlorobenzene DNAPL (which is a source for the groundwater contamination). DAAC requested that EPA develop a plan to ensure that EPA's preferred remedy, which uses electronic resistance heating, will not impact nearby neighbors.

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Community Involvement and Information-Sharing Concerns

Highly Interested Stakeholders

Partner government agencies and stakeholders expressed interest in being kept up to date and being part of EPA's decision-making for the Sites. While several groups, including representatives from Jones and LADWP, stated that they are happy with the amount of information they receive from EPA, many groups and organizations, including DAAC, CalEPA's Department of Drinking Water (DDW), the WRD, CalEPA's DTSC and LA County, requested additional updates. Suggestions for additional updates from EPA included face-to-face meetings, advanced notice of documents, coordination of conference calls and increased participation in technical meetings. PRP representatives also stated their interest in supporting community involvement efforts for the Sites. DAAC staff said that the community should have a role as an equal partner in the decision-making process for the Sites.

Community Involvement Efforts and Building Trust with EPA

Some community members felt that EPA could improve its community involvement efforts. They said that communication with EPA staff about the Sites can be inconsistent and unpredictable. Some community members note that EPA lacks transparency on how the public's comments have been incorporated in EPA's decisions, and EPA fails to follow through on its commitments to public participation. Some community members noted that residents do not trust EPA and have requested EPA staff treat them respectfully and with sensitivity. Other community members said that EPA is working hard to increase community confidence in the cleanup and that EPA staff are accessible and responsive.

Some community members suggested smaller, in-person meetings and door-to-door outreach as ways to help build relationships and trust. Community members asked that EPA distribute meeting announcements in a timely fashion. Community outreach suggestions include the use of the mobile information center as well as television, radio, social media and existing community group networks as ways to share information.

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Understanding the Role of PRPs

Community members expressed concern about the lack of information available on site PRPs and EPA's working relationship with them. A partner government agency noted that they are not always invited to meetings with EPA and the PRPs nor do they have access to all of the site information developed by the PRPs. Some community leaders raised concerns about the validity of information, such as test results, provided by the PRPs. People want transparency and more information about EPA's oversight of PRP work at the Sites as well as access to site documents developed by site PRPs.

Information Sharing

Community members noted that EPA's information repositories could be more useful and accessible. Some have noted that the locations are too far for community members, and the information repositories do not always include the most recent documents. Community members felt similarly about the EPA site websites and found them difficult to navigate. In the 2017–2018 CIP interviews, partner government agencies and stakeholders stated that they prefer accessing the websites over visiting an information repository, although the websites do not include all site documents. People want the ability to access site documents easily, without having to search or make additional requests to EPA or other involved parties. Additionally, community members have requested that EPA host a bulletin board in the neighborhood to share history and current information.

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Neighborhood and Property Concerns

Status of the Vacant Lot from the Former 204th Street Buyout Area (and Potential Park)

The fenced, vacant lot south of the former Del Amo facility is of concern to affected community members. People use the vacant lot for dog walking, as an exercise area, and as a children's play area. Historically, community members doubted that the area would be reused as a park and questioned whether contamination would make the park unsafe. During the 2017–2018 CIP interviews, partner government agency, stakeholders, and community members expressed continued interest in the reuse of the vacant lot as a park; some requested an update on the park's status. One resident said that park development could foster optimism in the community.

Property Value Impacts and Information for Prospective Neighbors

Many community members shared concerns about the negative effect of the Sites on their property values and frustration about the lack of clarity about necessary disclosures prior to buying or selling their homes. Many community members have said they were not made aware of the contamination before moving in. Community members asked EPA for deed restrictions and/or proactive communication measures to inform prospective home buyers and renters in the area, particularly relating to homes in the TI Waiver Zone.

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Relocation of Nearby Neighbors

Over the years, some community members have requested a buyout of their properties and relocation away from the Sites. One community member said that "a plan to relocate the residents of the area should get top priority." Some community members question the use of Superfund resources for cleanup when it would be less costly to relocate residents. Community leaders also noted that treatment of contamination could potentially be more robust if residents were not living there.

Local Government Awareness

Some community members affected by the Sites believe their location in unincorporated LA County has led to limited local government awareness of the Sites. They note that living in this area is why the community "hasn't received the attention that it should." Community members are concerned that local elected officials do not attend EPA's public meetings and seem uninterested. Some community members want their locally elected officials and government to collaborate with EPA regarding cleanup work at the Sites and the local impacts of that work.

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The Community and Stakeholder Involvement Action Plan

EPA Community Involvement Goals

- Develop a visible presence in the impacted community to demonstrate EPA's commitment to protecting public health and the environment.
- Provide opportunities for feedback and input and genuinely listen to and address concerns, as appropriate.
- Provide accurate and understandable information about activities at the Sites on a consistent basis.
- Establish and maintain relationships with highly interested community stakeholders, other stakeholders and partner government agencies.

Partnering and Using EPA Resources

Outreach to the general impacted community by:

- Maintaining a mailing list.
- Publishing bi-annual site-wide site updates factsheets.
- Hosting bi-annual site-wide community open house site update meetings in June and December.
- Hosting site-wide door-to-door outreach or mobile information repository (MIC) events, when timely and appropriate.
- Hosting topic-specific public meetings, when timely and appropriate.
- Advertising a technical assistance grant (TAG) availability for qualified entities.
- Publishing topic-specific fact sheets, when timely and appropriate.
- Participating in community events, when timely and appropriate.[i]
- Posting appropriate Superfund site signs.
- Discussing an option to create a kiosk of site history at the future park at the vacant 204th street lot.
- Developing a plan to comprehensively update and maintain site information repositories and websites.[ii]

Inform and obtain feedback and input from highly-interested community stakeholders, including DAAC, the Los Angeles Gateway Chamber of Commerce, the Los Angeles Neighborhood Land Trust, businesses near the former manufacturing facilities and highly interested members of the community by:

- Maintaining a contact list.
- Sending quarterly site update emails, specifically information on upcoming site work, new technical site documents of interest, open public comment periods, or forthcoming community bi-annual site-wide update meetings and factsheets.
- Maintaining reasonable availability to discuss information related to the Sites (via phone).
- Offering to periodically (every other year) present at the Los Angeles Gateway Chamber of Commerce meeting.
- Offering facilitated, in-person meetings with each community stakeholder group when traveling for the community open house meetings or site work to discuss ongoing and future site activities in detail (including technical work).[iii]

The Availability of Technical Assistance Grants (TAGs)

In addition to community involvement activities noted in this CIP, EPA offers a Technical Assistance Grant (TAG) Program. The EPA TAG program awards one grant per site on the National Priorities List (NPL) to an eligible citizen group who lives near a Superfund site.

This citizen group contracts with an independent technical advisor to help the community interpret and comment on site-related information. If a group is interested, they can send a letter of intent to the community involvement coordinator listed in Appendix 3. Funding through the EPA TAG program is discretionary and based on funding availability.

For more information on TAGs:
www.epa.gov/superfund/technical-assistance-grant-tag-program

Inform and obtain feedback and input from local agencies or elected officials, including local water purveyors and the Water Replenishment District, the Harbor Gateway Neighborhood Council, locally elected city, county, state and congressional representatives, the city of LA's Department of City Planning, and LA County's Department of Public Health, Department of Public Works and Department of Regional Planning by:

- Offering to annually brief local agencies or elected officials on site updates.
- Participating in bi-annual meetings with water providers and offering to update them on dual-site groundwater activities, as appropriate.

Work with state agencies, including agencies such as CalEPA's DTSC, the LARWQCB and the SWRCB's Division of Drinking Water, **and PRPs** including Montrose Chemical Company, Shell Oil Company by:

- Leading site-wide quarterly calls (one in-person meeting) with DTSC.
- Sharing relevant information and documents on a timely basis.
- Participating in monthly technical calls and regular in-person technical meetings with Montrose Chemical Company and Shell Oil Company.

[i] *Community events would include back-to-school events, household hazardous waste events, farmer's markets, community fairs and other events.*
[ii] *To include the administrative records, legal settlements or agreements, newer site fact sheets, and relevant technical reports.*
[iii] *EPA will reach out to each group offering such meetings at least six weeks in advance of the scheduled community open house meeting. Meetings must be scheduled at least four weeks in advance.*

Information Repositories

Information repositories contain documents, reports, fact sheets and letters about the Sites. The purpose of the information repository is to give the impacted community access to site information, so they can participate in the decision-making process. They also contain the administrative records, which are official files containing the information EPA used to document its cleanup decisions.

EPA is maintaining three information repositories for the Sites:

Carson Public Library
151 East Carson Street
Carson, CA 90745
(310) 830–0901

Katy Geissert Civic Center Library
3301 Torrance Boulevard
Torrance, CA 90503
(310) 618–5959

EPA Region 9 Records Center
75 Hawthorne Street, Room 3110
San Francisco, CA 94105
(415) 947–8717

Meeting Locations

The community impacted by the Superfund site is geographically large. To best serve the larger community, EPA will continue to host public meetings in a variety of locations, as appropriate. EPA will continue to rotate locations of the community open house meetings. For topic-specific meetings, EPA will choose a meeting location that is near the most impacted community members.

Carson Public Library
151 East Carson Street
Carson, CA 90745

Katy Geissert Civic Center Library
3301 Torrance Boulevard
Torrance, CA 90503

Torrance Cultural Arts Center
3330 Civic Center Drive
Torrance, CA 90503

Holiday Inn
19800 South Vermont
Torrance, CA 90502

Gardena High School
1301 W. 182nd Street
Gardena, CA 90248

Appendices Summary

The EPA Del Amo and Montrose site team expects to regularly update these appendices. Therefore, the appendices will be kept as documents separate from the CIP. Below is the list of the appendices.

1. Superfund Cleanup Process and Opportunities for Public Participation
2. Operable Units at the Del Amo and Montrose Superfund Sites
3. Contact Information for Partner and Key Stakeholder Agencies and Organizations for the Del Amo and Montrose Superfund Sites
4. Redevelopment on the Former Del Amo Facility Property
5. Extended Community Concerns and Responsiveness Summary for the Del Amo and Montrose Superfund Sites
6. Draft Situational Assessment for the Del Amo and Montrose Superfund Sites
7. Del Amo and Montrose Sites Major Milestones Timeline
8. Potentially Responsible Parties

Acronym List

ACS	American Community Survey
ATSDR	Agency for Toxic Substances and Disease Registry
BEC	building engineering control
BHC	benzene hexachloride
CAG	community advisory group
CalEPA	California Environmental Protection Agency
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (sometimes referred to as the "Superfund law")
CIP	Community Involvement Plan
DAAC	Del Amo Action Committee
DDT	dichloro-diphenyl-trichloroethane
DDW	Division of Drinking Water
DNAPL	dense non-aqueous phase liquid
DPW	Department of Public Works
DTSC	California Department of Toxic Substances Control
ECI	Ecology Control Industries, Inc.
ERH	electrical resistance heating
ESD	Explanation of Significant Differences
EPA	United States Environmental Protection Agency
FS	feasibility study
FYR	five-year review
IC	institutional control
ISB	in-situ bioventing
ISCO	in-situ chemical oxidation
LA	Los Angeles
LADBS	Los Angeles Department of Building and Safety
LADPW	Los Angeles County Department of Public Works
LADWP	Los Angeles Department of Water and Power
LARWQCB	Los Angeles Regional Water Quality Control Board

µg/m3	micrograms per cubic meter
MIC	mobile information center
MOU	Memorandum of Understanding
LNAPL	light non-aqueous phase liquid
NAPL	non-aqueous phase liquid
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
OU	operable unit
O&M	operation and maintenance
pCBSA	parachlorobenzene sulfonic acid
PCE	tetrachloroethylene (sometimes called perchloroethylene or PERC)
ppm	parts per million
PRP	potentially responsible party
RA	remedial action
RD	remedial design
RI	remedial investigation
RMP	Risk Management Plan
ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SBCAN	South Bay Chemical Alert Network
SCAQMD	South Coast Air Quality Management District
SVE	soil vapor extraction
TAG	Technical Assistance Grant
TASC	Technical Assistance Services for Communities
TI	Technical Impracticability
TCE	Trichloroethylene (sometimes called trichloroethene)
TMDL	Total Maximum Daily Load
VI	vapor intrusion
VOC	volatile organic compound
WRD	Water Replenishment District

Glossary

The terms defined below are used in this CIP.

Building engineering control (BEC): Building features redesigned to address potential vapor intrusion.

Cleanup: Actions taken to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. Other words like remedial action, removal action, response action or corrective action are often used to mean the same thing as cleanup.

Comment period: A period during which the public can review and comment on various documents and EPA actions.

Community advisory group (CAG): A CAG is made up of representatives of diverse community interests. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process.

Community Involvement Plan (CIP): A CIP is the foundation of the Superfund community involvement and outreach program. It is also a tool for the public to make sure EPA is responsive to their needs and concerns. The purpose of a CIP is to encourage and facilitate community involvement throughout the Superfund process.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): (commonly known as Superfund): This law, enacted by Congress on December 11, 1980, created the Superfund program. Specifically, CERCLA: (1) established prohibitions and requirements concerning closed and abandoned hazardous waste sites; (2) provided for liability of persons responsible for releases of hazardous waste at these sites; and (3) established a trust fund to provide for cleanup when no responsible party could be identified.

Contaminant: Any physical, chemical, biological or radiological substance found in air, water, soil or biological matter that has a harmful effect on human health or the environment. Many times, words such as pollutant, toxin, hazardous substance or chemical are used to mean the same thing as "contaminant." The term "hazardous substance" is a legally defined term in Superfund law. For this CIP, the term contaminant is consistent with the legal definition of a hazardous substance.

Dichloro-diphenyl-trichloroethane (DDT): DDT was a pesticide made around the world and widely used in the United States. DDT was used primarily for agricultural purposes and to control mosquito populations in populated areas. In 1972, DDT use was banned in the United States (except for special permits) due to harmful environmental and human health effects. DDT lasts a long time (often decades) in the environment, especially in soil. It has been found in every part of the world, and most animals have levels of DDT in their bodies. DDT tends to be stored in the fatty tissues of animals, so predators, including humans, have higher levels of DDT.

Environmental Justice: Environmental justice means that all communities overburdened by pollution – particularly minority, low-income and tribal communities – deserve the same degree of protection from environmental and health hazards, equal access to the federal decision-making process, and a healthy environment in which to live, learn, and work.

Explanation of Significant Differences (ESD): A Superfund decision document prepared when there has been a significant change in cost, performance or scope of a remedy selected in a Record of Decision (ROD).

Extraction well: A well that pumps contaminated groundwater to the surface so that it can be treated.

Feasibility study (FS): An activity during the Superfund process where data from the RI is used to identify, study, and evaluate different options to address the contamination (called "remedies").

Five-year review (FYR): At Superfund sites where contamination is left in place, EPA is required to review the cleanup remedy every five years. FYRs help EPA make sure the remedy is working to protect human health and the environment.

Gas Collection and Treatment System: A piece of the multi-layer impermeable cap that collects contaminated air rising from the waste pits, then treats (or cleans up) the contaminated air and releases the treated air on site.

Groundwater: Water found beneath the surface of the Earth in pores and fractures in soil or rock.

Hazardous substance: A contaminant that poses a potential hazard to human health or the environment, as legally defined in Superfund law.

Hazardous waste: A waste that poses a potential hazard to human health or the environment.

Information repository: A record storage area at or near a Superfund site that contains reports, documents and fact sheets pertaining to the site.

In-situ chemical oxidation (ISCO): The injection of chemical oxidants into the subsurface to destroy organic contaminants in soil and groundwater. The main objective is to help change harmful contaminants into less toxic ones.

Institutional controls (ICs): Non-engineering actions, such as administrative or legal controls, that minimize human exposure to contaminants (examples include deed restrictions, fish advisories, BECs and land use controls).

Kenwood Ditch: An unlined, open stormwater drainage channel that originated at the former Montrose plant property, flowed across Normandie Avenue along the west side of today's Kenwood Avenue, and continued to Torrance Boulevard to empty into a slough (or marshy area) just south of Torrance Boulevard. In 1973, the LA County Department of Public Works replaced the Kenwood Ditch with an enclosed concrete pipeline buried under Kenwood Avenue, under Torrance Boulevard and 209th Street (called the Kenwood Drain), until it merges into the Torrance Lateral stormwater collection system.

Middle Bellflower Sand and Aquitard: Two of the hydrostratigraphic units (rock that forms a distinct hydrologic unit with respect to flow of groundwater) at the Sites. They include three subunits – the Upper Bellflower Aquitard, the Bellflower Sand and the Lower Bellflower Aquitard. These subunits have different soil properties; therefore, the groundwater behaves differently in each subunit.

Montrose and Del Amo Neighborhood Partners: A former group of agency and community representatives from the 1990s who worked collaboratively to exchange information and provide advice regarding the technology for the Sites.

Multi-Layer Impermeable Cap: A cover positioned over the Del Amo waste pits to prevent rainwater from infiltrating through the ground and to prevent soil vapors from being released into the air. The cover consists of several layers of high-density synthetic materials, a layer to capture vapors, and a topsoil layer.

National Priorities List (NPL): EPA's list of high-priority hazardous waste sites, identified as candidates for long-term cleanup.

Non-aqueous phase liquids (NAPLs), Light-NAPL (LNAPL), and Dense-NAPL (DNAPL): Mixtures (or blob) of chemicals that does not easily dissolve in water (for instance, oil in salad dressing will stay separated from water) are called NAPLs. In general, NAPL and water do not mix, and it is difficult to remove NAPL from under the ground. Sometimes, NAPLs are made of chemicals that are lighter than water (and will float in water), and these are referred to as light NAPL or LNAPL. Sometimes, NAPLs are made of chemicals that are heavier than water (and will sink in water), and these are referred to as dense NAPL or DNAPL.

Operable unit (OU): A part of the overall Superfund site that is smaller and more manageable than the entire site. Each operable unit has its own schedule in the Superfund process and specific EPA staff assigned to the work.

Operation and maintenance (O&M): An activity in the Superfund process where the operation and maintenance of the long-term cleanup remedies ensure the protection of human health and the environment.

Parachlorobenzene sulfonic acid (pCBSA): A chemical byproduct of DDT processing.

Parts per million (ppm): Units commonly used to express concentrations of contaminants (for example, 1 part DDT per million parts soil). Other examples of one part per million include 1 inch in 16 miles and one minute in two years.

Potentially responsible party (PRP): Private or governmental parties (e.g., an owner, operator, transporter or generator of hazardous substances or hazardous waste) that is legally responsible for the contamination, and therefore responsible to pay for or conduct cleanup of a Superfund site.

Preliminary Assessment (PA): An activity during the Superfund process where EPA collects and reviews information about a known or suspected hazardous waste site to determine if the site requires further study.

Proposed Plan (PP): The part of the Superfund process where EPA publishes a document with the preferred decision to clean up, contain or manage contamination at a Superfund site. It is subject to a public comment period and a public hearing.

Record of Decision (ROD): The part of the Superfund process where EPA issues a document that explains the Agency's plan to remove, clean up or manage the site contamination (called a "remedy"). The ROD also describes the site contamination, summarizes the information used to select the remedy, and explains the reasons for the selected remedy.

Remedial Action (RA): An activity during the Superfund process where the actual construction or implementation phase of a Superfund site remedial action (or cleanup) occurs.

Remedial Design (RD): An activity during the Superfund process where detailed cleanup plans, such as technical drawings and specifications, are developed for the construction of a remedy.

Remedial Investigation (RI): An activity during the Superfund process to study the extent of contamination and assess the risks to human health and the environment.

Remedy: A remedy includes long-term actions to remove, clean up or manage site contamination. A Record of Decision describes the remedy, which may include many different components of the remedy (or actions), including institutional controls.

Removal Action: Short-term or immediate environmental response actions that address releases of hazardous substances. Removal actions are often started to control high-priority risks while work continues on other portions of a site.

Risk: Probability that a hazardous substance, when released into the environment, will cause negative effects for humans or the environment.

Site Discovery: The initial activity in the Superfund process where a potentially contaminated site is reported to EPA or a similar state or local agency.

Site Inspection (SI): An activity during the Superfund process to gather information (including sampling data) from a site to determine whether the site should be placed on the NPL.

Soil Gas: The air in the spaces between soil particles.

Soil vapor extraction (SVE): A common soil cleaning technology whereby vacuum wells are inserted into the ground and proceed to suck contaminated air from the soil.

Soil vapor extraction and In-situ bioventing technology (SVE/IBT): The system at the Del Amo waste pits that vacuums contaminated air from the soil, then treats (or cleans up) the contaminated air and releases the treated air on site.

Superfund: The program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) that funds and carries out EPA's emergency and long-term removal and remedial activities.

Technical Assistance: The provision of services focused on increasing community understanding of the science, regulations, and policy related to environmental issues and EPA actions.

Technical Assistance Grant (TAG): An EPA grant awarded to eligible community groups for the purpose of hiring an independent technical advisor, enabling community members to participate more effectively in the decision-making process at Superfund sites.

Technical Impracticability (TI) Waiver: EPA's decision to waive cleanup standards (for example, meeting drinking water standards in groundwater) because it is technically impracticable to achieve those cleanup standards, due to site conditions. Impracticability may be due to lack of technology or extremely high costs.

Tetrachloroethylene (sometimes called perchloroethylene, tetrachloroethene or PERC) (PCE): A manufactured chemical, this industrial solvent is widely used for dry cleaning clothes and degreasing metal. It is also used to make other chemicals and can be found in some household products such as water repellents, silicone lubricants, spot removers, adhesives and wood cleaners.

Trichloroethylene (sometimes called trichloroethene) (TCE): A colorless liquid typically used in industrial processes.

Vapor intrusion (VI): A process where underground chemical vapors move (volatilize or evaporate) through cracks and other openings in the foundation slabs of buildings into indoor air. If this happens at high levels, it may create a health risk for those breathing indoor air.

Volatile: Ability to evaporate at room temperature.

Volatile organic compounds (VOCs): A family of contaminants (or chemicals) that can easily become vapors.

Del Amo & Montrose Superfund Sites
Community Involvement Plan
www.epa.gov/superfund/delamo
www.epa.gov/superfund/montrose

Prepared by:
U.S. Environmental Protection Agency
June 2020

APPENDIX 1

Superfund Cleanup Process and Opportunities for Public Participation

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN

Superfund Cleanup Process and Opportunities for Public Participation

Assessment

Discovery of Contamination

EPA is notified about the potential presence of hazardous substances at a site from the entity responsible for the contamination, the public, or state, tribal or local governments.

Preliminary Assessment / Site Inspection

EPA researches the site history and visits the area to determine what hazardous substances are present and how serious the risks may be to human health and the environment. EPA may decide to immediately address hazardous substances through an immediate, short-term response action or to move forward in the Superfund remedial process.

- *Provide useful information about the site or ask questions by contacting EPA's community involvement coordinator (CIC) or remedial project manager (RPM).*

National Priorities List (NPL) Site Listing

When EPA proposes to add a site to the NPL,[1] EPA publishes notice of a public comment period in the Federal Register as well as in local media or though issuance of a fact sheet to the community. EPA considers the comments received during the public comment period and decides whether the site qualifies to be added to the NPL. Finally, EPA will publish a notice in the Federal Register to document the decision and respond to comments received. EPA may also issue a fact sheet to notify the community.

- *Read EPA's proposal to add the site to the NPL and submit comments during the public comment period.*

Characterization

Remedial Investigation (RI)/ Feasibility Study (FS) and Proposed Plan

The RI involves studying where the contamination is and assessing the risks to human health and the environment. The FS uses data from the RI to develop and compare potential options to address the contamination.

EPA will also interview community members and develop a Community Involvement Plan (CIP).[2]

EPA develops a Proposed Plan to recommend a remedy[3] to address the contamination. EPA publishes notice of a public comment period in the Federal Register, publishes a notice through local media or issues a fact sheet to notify the community, and hosts a public meeting.

- *Read the Proposed Plan and submit comments during the public comment period.*
- *Be interviewed for the CIP.*

General Public Involvement Opportunities Throughout the Superfund Process

- *Ask questions or request additional information by contacting EPA's CIC or RPM.*
- *Apply for a Superfund Technical Assistance Grant (TAG) to help the community participate in Superfund cleanup decision-making.*
- *Participate in EPA public events.*
- *Visit the local information repository to read site documents.*
- *Read information about the site from distributed fact sheets, public notices though the local media and EPA's website.*
- *Invite EPA staff to attend community events to discuss the site.*
- *Plan a community event to celebrate major milestones in the cleanup process.*
- *Arrange a site tour with EPA staff.*

Community involvement and planning for a site's redevelopment are integral to the entire process

Cleaning up Superfund sites is a complex, multi-stage process. This document provides more information about how the cleanup process works and highlights opportunities for community involvement.

Selection of Remedy

Record of Decision (ROD)

After EPA's Proposed Plan activities, EPA develops a "responsiveness summary" that summarizes and responds to comments received. EPA then issues the Record of Decision (ROD) to document EPA's plan to address the contamination (called a "remedy"). The ROD also describes the site contamination, summarizes the information used to select the remedy and explains the reasons for the selected remedy.

Cleanup

Remedial Design

EPA staff keeps community members informed about the progress though periodic public events, fact sheets, and presentations to civic groups, schools, and local leaders.

Detailed cleanup plans, such as technical drawings and specifications, are developed to construct or implement a remedy.

Remedial Action

The construction or implementation of the remedy occurs. This might involve building a treatment system, removing contaminated soil, or capping contamination in place. This might also involve establishing institutional controls such as fish advisories or land use covenants.

- *Read EPA's proposal to delete the site from the NPL.*
- *Invite EPA site staff to the community to discuss the deletion of the site from the NPL.*
- *Prepare and submit comments on the proposal during the public comment period.*
- *Plan a community event to celebrate the deletion of the site from the NPL.*

Post-Construction

Operation and Maintenance

The operation and maintenance of the long-term cleanup remedy ensure the protection of human health and the environment. At sites where some contamination remains in place, EPA conducts five-year reviews to make sure the remedy remains protective.[4]

- *Submit comments for EPA's five-year review.*
- *Request to be interviewed by EPA staff as part of the five-year review process.*

NPL Deletion

When all site cleanup goals have been achieved, EPA will start the process to delete the site from the NPL. EPA publishes a notice in the Federal Register, publishes a notice through local media or issues a fact sheet to notify the community, and holds a public comment period. After the public comment period, EPA decides whether the site should be deleted from the NPL. EPA then publishes a notice in the Federal Register to document the decision and respond to comments received.

Five-Year Reviews,[4] when applicable

[1] The National Priorities List (NPL) is a list of the nation's highest-priority hazardous waste sites, identified for cleanup by EPA's Superfund program.

[2] A community involvement plan (CIP) is an action plan to facilitate community involvement throughout the Superfund process. It is also a tool for members of the public to make sure EPA is responsive to their needs and concerns. CIPs identify EPA's community involvement goals and specific activities for the site.

[3] A remedy (or remedies) includes long-term actions to remove, clean up, or manage site contamination.

[4] Five-Year Reviews are regular evaluations of certain Superfund sites to make sure the remedy remains protective of human health and the environment.

Specific Public Involvement Opportunities

Si necesita una traducción inmediata o una aclaración en español, llame a
Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

If you require translation or clarification in Spanish, call
Yarissa Martinez at (213) 244-1806 or Romie Duarte at (213) 244-1801 for additional information.

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Prepared by:
U.S. Environmental Protection Agency
June 2020

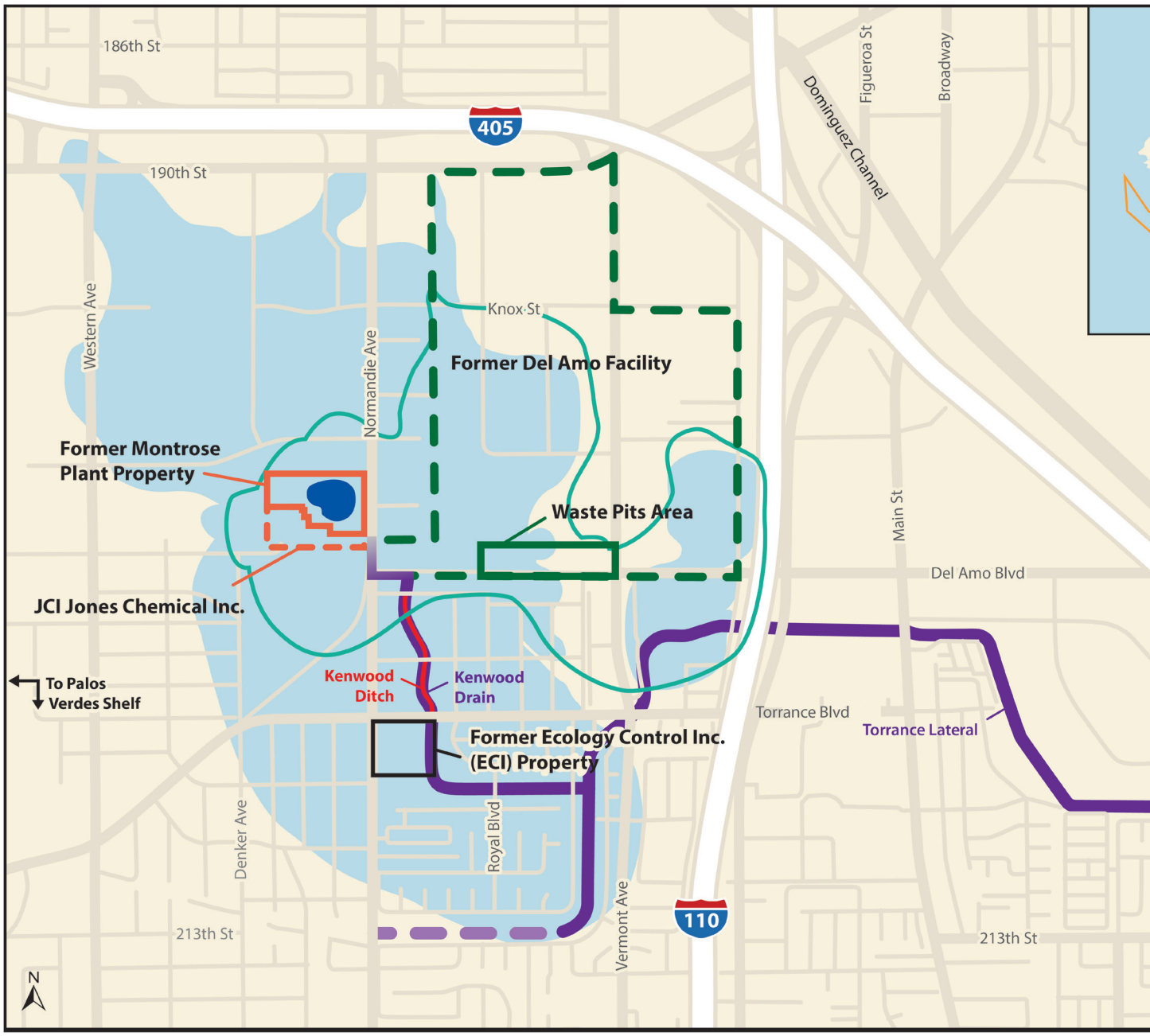
APPENDIX 2

Operable Units (OUs) at the Del Amo and Montrose Superfund Sites

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN

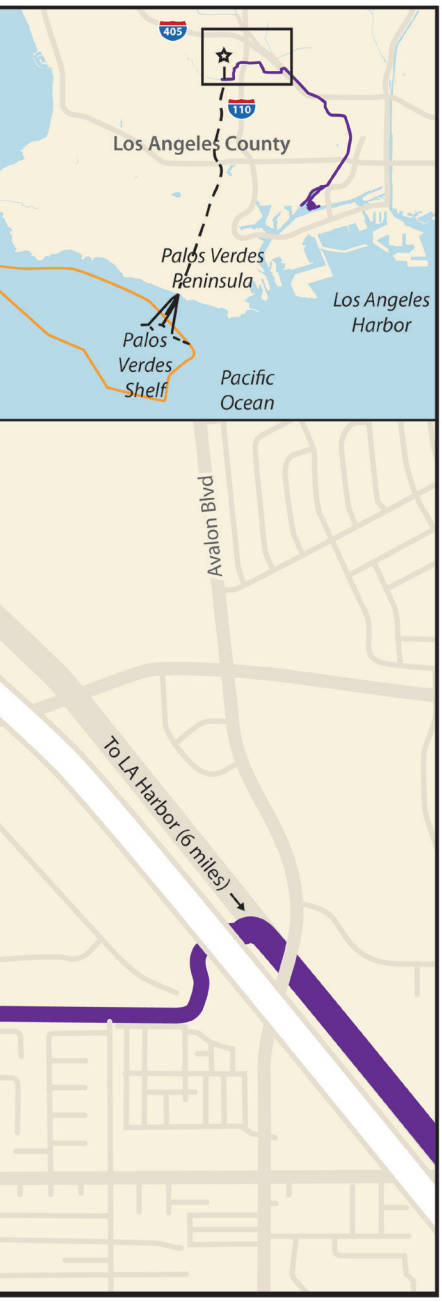
Superfund sites are large and complicated. EPA often divides Superfund sites into smaller projects to make cleanup more manageable. These projects are called "operable units" or OUs. Each OU has different work activities, its own schedule in the Superfund process and specific EPA staff. In addition, OUs of the same Superfund site may impact different communities.

Del Amo and Montrose Superfund Sites



Legend

- Dual-Site Groundwater Contamination Plume
- Stormwater Pathways
- Technical Impractacability (TI) Waiver Zone
- Dense Non-Aqueous Phase Liquid (DNAPL)



Sewer outfalls

Montrose Chemical Corp. Superfund site (Montrose site)

This site includes the location of the former manufacturing plant that made the pesticide dichloro-diphenyl-trichloroethane (DDT) from 1947 to 1982. During the 35 years of operations, contaminants entered the environment from spills, leaks and releases of waste materials, contaminating the shallow soils and reaching the groundwater. In some areas under the former Montrose property, these practices also created **DNAPL**, which is a mixture of chemicals that do not easily dissolve in water and located underground. Contaminants were also released off property into the **stormwater pathways**, making their way through the former Ecology Control Incorporated (ECI) property, into the Torrance Lateral and Dominguez Channel until it reaches the Los Angeles Harbor. Additionally, contaminants were released into the sanitary sewer system, reaching the Pacific Ocean through **sewer outfalls** in the Palos Verdes Shelf. The Montrose site also includes portions of JCI Jones Chemical Inc. (Jones) property, where Jones released contaminants onto the ground.

Del Amo Facility Superfund site (Del Amo site)

The site includes the location of a former large-scale manufacturing facility that made synthetic rubber to support the World War II efforts. During the 30 years of operations, contaminants entered the environment in many ways, contaminating the shallow and deep soil on the former property and creating the **dual-site groundwater contamination plume**. In addition, operational waste was put in six unlined pits and three unlined evaporation ponds located in a 4-acre area along the former Del Amo facility property's southern boundary, called the **Waste Pits Area**.

Dual-site Groundwater Contamination Plume

The contamination from both Sites is co-mingled (or mixed) in the groundwater, and EPA oversees this work at both sites at the same time. EPA has established a **TI Waiver Zone** where the groundwater contamination cannot be cleaned up to drinking water standards by using existing technologies. The boundary of the groundwater contamination plume and the **TI Waiver Zone** is different in each aquifer.

No one is presently drinking or using water contaminated by these Sites. The drinking water provided to nearby communities is regularly tested and meets California and federal drinking water standards.

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Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

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Montrose Chemical Corporation (Montrose) Superfund Site

Over the 35 years of operation (from 1947 to 1982), contaminants entered the environment in several ways:

- During manufacturing operations, the Montrose Chemical Corporation of California, Inc. (Montrose) released wastewater and raw materials onto the ground (*see OU1, On and Near Property Soils*). Over the years, these released contaminants eventually reached the groundwater (*see OU3G, Dual-Site Groundwater*) and pooled underground in one location to create a highly concentrated mass of chlorobenzene in the form of dense non-aqueous phase liquid (DNAPL). The DNAPL is currently a source for groundwater contamination (*see OU3D, DNAPL*).
- After operations finished, Montrose buried plant debris in a series of trenches in the center of the former Montrose plant property (*see OU1, On and Near Property Soils*).
- During early operations, Montrose periodically released contaminated surface water into the Normandie Ditch. This stormwater pathway flowed across Normandie Avenue into the Kenwood Ditch, along the west side of today's Kenwood Avenue (*see OU4, Kenwood Removal*).
- The contaminated stormwater continued across Torrance Boulevard and emptied into a slough (or marshy area) just south of Torrance Boulevard. Today, this area includes portions of the industrial property at 20846 Normandie Avenue (formerly the Ecology Control Industries, Inc. [ECI] property). This area also includes subsurface portions of the backyard of seven homes immediately east of the former ECI property (*see OU6, Southern Stormwater Pathway*).
- After the 1960s, Montrose periodically released contaminated surface water into the Kenwood Drain, which eventually made its way into the Torrance Lateral stormwater collection system, the Dominguez Channel and the Consolidated Slip (an area within the Port of Los Angeles) (*see OU2, Current Stormwater Pathway*).
- During early operations, Montrose released wastewater into the sanitary sewer system under Normandie Avenue (*see Other EPA-related Actions section*). The sanitary sewers flowed into the Joint Water Pollution Control Plant near San Pedro. The treated wastewater was discharged through sewer outfalls on the Palos Verdes peninsula, impacting the Palos Verdes Shelf area in the Pacific Ocean. It is estimated that about 1,000 metric tons of dichloro-diphenyl-trichloroethane (DDT) were discharged from the outfalls from the 1950s to 1971 (*see OU5, Palos Verdes Shelf*).
- During operations, Montrose hired companies to haul large quantities of waste to hazardous material landfills. Some of this waste was also sent to sea by barge to be dumped off the coast and into the Pacific Ocean.
- During early operations, DDT waste was hauled to a nearby ravine on a vacant lot just south of the former Del Amo facility property. Clean soil (or fill) was later brought into this area to build residential homes on West 204th Street between Budlong Avenue and New Hampshire Avenue.

The Montrose Superfund site is being addressed in seven OUs. Each OU focuses on specific locations or environmental media where DDT and other site-related contaminants are found. The following provides a brief description of each Montrose OU.

Operable Unit 1 (OU1), On and Near Property Soils

OU1 consists of the study of site-related contamination in shallow soils and soil gas. The boundaries of OU1 include the former Montrose plant property, as well as neighboring properties located immediately to the north, east and south (*described below*).

On–property soils

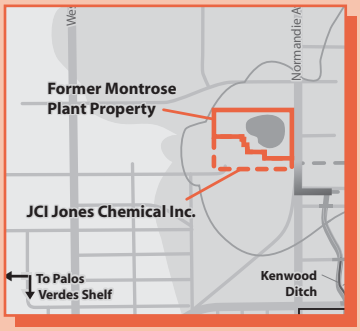
The former Montrose plant property is located at 20201 South Normandie Avenue in the City of Los Angeles (LA). It covers 13 acres and is zoned for industrial use. The property is generally vacant, but serves as the location of the groundwater treatment facility (*see OU3G, Dual-Site Groundwater*). The property also houses six aboveground temporary soil storage cells with the soil and debris from a previous residential yard soil removal (*see OU4, Kenwood Avenue*). Access to the property is restricted by fences, locked gates, signage and a security system.

After closure of the plant, DDT soil levels were very high on the former plant property, exceeding 710,000 parts per million (ppm) in some areas. Montrose's actions to grade the land resulted in lower DDT levels in the soil, due to mixing and spreading the soil across larger areas.

In 1985, Montrose built a temporary asphalt cover (or a "cap") over most of the property. In later years, EPA required that Montrose enlarge this temporary asphalt cover to cover the entire former Montrose plant property. This asphalt cover prevents DDT in shallow soils from being disturbed or carried off-property by wind or stormwater runoff. Montrose currently inspects the asphalt cover monthly and prepares inspection reports for EPA, conducting repairs as needed.

From 1983 to 2008, under EPA oversight, Montrose collected many soil and soil gas samples at different locations to better understand the nature and extent of contamination. Currently, DDT levels in shallow soils at the former plant property (primarily the first 4 to 6 feet below the ground surface) continue to have very high levels of DDT, exceeding 10,000 parts per million (ppm) in some areas. However, these contaminated shallow soils remain covered by the asphalt cap.

*Montrose OU1 is in the feasibility study (FS) stage of the Superfund process.



Near–property soils

Although people are not currently being exposed to contamination, cleanup is not complete, and Montrose-related contaminants have been detected in the shallow soils at these nearby properties:

GLJ Holdings LLC Property - located immediately north of the former Montrose plant property. It includes three commercial warehouse buildings with paved parking areas.

JCI Jones Chemical, Inc. (Jones) Property - an industrial property located immediately southeast of the former Montrose plant property. It includes multiple structures, including offices, a warehouse, chemical manufacturing, distribution and repacking facilities and a railroad spur (a secondary track used by railroads). Most of the property is paved, except for some areas south of the railroad tracks. To contain stormwater away from the facility, a stormwater channel runs along the south side of the railroad tracks. (*See OU7, JCI Jones Chemical, Inc. (Jones) Property, for more information on non-DDT contamination).*

Los Angeles Department of Water and Power (LADWP) Right-of-Way (East) - located southeast of the former Montrose plant property, east of Normandie Avenue. It has overhead power transmission lines but no structures (or paving) on top of the soil.

Los Angeles Department of Water and Power (LADWP) Right-of-Way (West) - located southwest of the former Montrose plant property. It has overhead power transmission lines. There are no structures on it, and the property has been partially covered with asphalt since the 1980s.

Normandie Ditch/Union Pacific Railroad Right-of-Way - runs north-south along the eastern edge of the former Montrose plant property. It is parallel to and immediately west of Normandie Avenue. There are no structures or operating businesses on it. The property has been covered with asphalt since the 1980s.

East Business Area - an industrial property located immediately north of the LADWP right-of-way (east) property. It is also just east of the former Montrose plant property immediately beyond the north-south trending Normandie Avenue Ditch/Union Pacific Railroad Right-of-Way and Normandie Avenue. It has multiple commercial structures. The area is covered with asphalt for access and parking.

Former Farmer Brothers Property - an industrial property located immediately south of the Jones property and the LADWP (west) right-of-way. It includes multiple structures for warehouses and offices. The property also includes a parking lot.

Western Waste Property - a gated industrial property located immediately south of LADWP Right-of-Way (East) property, east of Normandie Avenue. It has undergone a number of changes in occupancy and provides storage for a variety of vehicles, trailers and containers. The parcel does not include structures or significant paving.

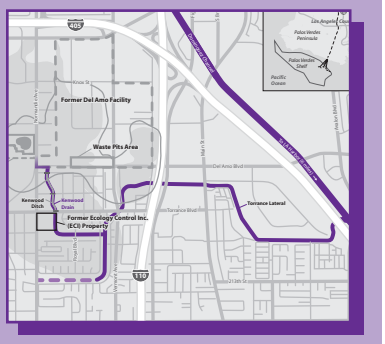
Operable Unit 2 (OU2), Current Stormwater Pathway

OU2 consists of the study of site-related contamination in the Kenwood Drain (which replaced the Kenwood Ditch in 1973), Torrance Lateral, Dominguez Channel and the Consolidated Slip (within the Port of Los Angeles). The Torrance Lateral is a fenced, concrete-lined open drainage sewer that flows eastward until it merges with the Dominguez Channel.

Historical stormwater runoff from the Montrose operations may have had impacts on fish and the marine environment in these areas. In 2008, EPA completed an ecological risk assessment to study the impacts on the marine environment. In 2007, EPA completed a focused human health risk assessment at the Consolidated Slip to study the impacts on human health. EPA has detected high levels of DDT in the sediments and fish collected in the Consolidated Slip. Human health risks are associated with fish consumption. Since 1985, the State of California has maintained a health advisory that recommends limits on the consumption of sport fish caught in the area.

In 1999, the Los Angeles Regional Water Quality Control Board (LARWQCB) designated the Consolidated Slip as a high-priority sediment toxic hot spot under the Bay Protection and Toxic Cleanup program. In 2011, LARWQCB began investigating industrial discharges in the Consolidated Slip, and in 2012, LARWQCB adopted a Total Maximum Daily Load (TMDL) to address pollution (including and beyond the Superfund site contamination).

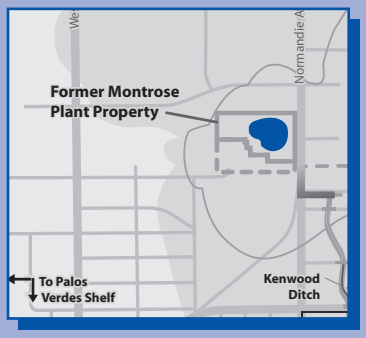
*Montrose OU2 is in the remedial investigation (RI) stage of the Superfund process.



Operable Unit 3D (OU3D), Montrose DNAPL

OU3D consists of the study and cleanup of a highly concentrated mass of chlorobenzene in the form of dense non-aqueous phase liquid (DNAPL) located under the subsurface of the former Montrose plant property. Chlorobenzene is one of the main ingredients used to make DDT. Excess chlorobenzene from the historic DDT manufacturing process has slowly dripped down through the soil and is now trapped in spaces between the soil particles in the form of DNAPL. The DNAPL chlorobenzene mass is a current "source" of the chlorobenzene groundwater contamination, meaning the DNAPL continues to slowly contaminate the groundwater every day. It takes only a small amount of dissolved chlorobenzene for the groundwater to be extremely toxic and unsafe for drinking. Removing the chlorobenzene DNAPL from the ground will make the groundwater cleanup (*see OU3G, Dual-Site Groundwater*) successful and efficient.

*Montrose OU3D is currently in the ROD stage of the Superfund process.



At the Montrose site, DNAPL occurs in both "mobile" and "residual" forms. Mobile DNAPL is a continuous mass of DNAPL that can move with groundwater and/or sink under gravitational forces. Residual DNAPL is trapped in the pore space of soil particles and cannot move under natural conditions.

EPA issued the DNAPL Proposed Plan for public comment in September 2014. EPA's preferred remedy relies on electrical resistance heating (ERH). ERH is a technology that heats the DNAPL to release chlorobenzene in vapor form, which can then be captured and treated by a soil vapor recovery system. This proposed remedy focuses on reducing the amount of chlorobenzene in the DNAPL that can be the "source" of groundwater contamination (known as "mobile DNAPL"). This would limit the further spread of DNAPL underground and reduce the contamination of chlorobenzene into groundwater.

Stakeholders have expressed concerns that a thermal remedy may create a vapor intrusion concern in the nearby community. In part due to those concerns, EPA is working with Montrose to pilot test the ERH technology. Montrose Chemical Corporation successfully concluded an ERH pilot study at the end of April 2019. Using ERH, more than 22,000 pounds of underground chemicals were removed (and properly disposed of) from the former Montrose plant property. The pilot test has helped EPA verify that the ERH cleanup technology is effective and safe to use. EPA will use information from the pilot study to finish the Record of Decision (ROD).

Montrose & Del Amo
Dual-Site Groundwater OU3G, see page 15.

*Montrose OU4 is in the RI stage of the Superfund process.

Operable Unit 4 (OU4), Historical Stormwater Pathway – North

OU4 consisted of the study and removal of DDT contamination in shallow soil of residential properties along the west side of Kenwood Avenue, north of Torrance Boulevard. In 2000, EPA found that soil in some of the residential yards on the west side of Kenwood Avenue contained DDT at levels that posed an unacceptable health risk to residents. This DDT-contaminated soil is a legacy of Montrose releasing contaminated surface water into the historical Kenwood Ditch. From 2001 to 2002, EPA removed shallow soils contaminated with DDT and restored the yards.

EPA placed the soil and debris from these yards into six aboveground temporary storage cells on the former Montrose plant property (*see OU1, On and Near Property Soils*). EPA continues to maintain and inspect the storage cells one or two times per month and conducts repairs if needed to ensure that they continue to protect human health and the environment.

Operable Unit 5 (OU5), Palos Verdes Shelf

OU5 consists of the study, removal and management of site-related contamination, including DDT from Montrose, in the sediment off the Palos Verdes Peninsula in the Pacific Ocean. OU5 is addressed as its own unique Superfund site, with its own Community Involvement Plan (CIP) and different EPA staff contacts. For more information on fish advisories, visit: **www.pvsfish.org**.

*Montrose OU5 is in the remedial design (RD) stage of the Superfund process.

Operable Unit 6 (OU6), Historic Stormwater Pathway – South

OU6 consists of the study and removal of DDT-contaminated soil along the historical Kenwood Ditch south of Torrance Boulevard. Today, this area includes portions of the industrial property at 20846 Normandie Avenue (formerly ECI). This area also includes deep underground portions of the backyards of seven homes immediately east of the former ECI property. The extent of OU6 south of Torrance Boulevard will be better determined after the RI is complete.

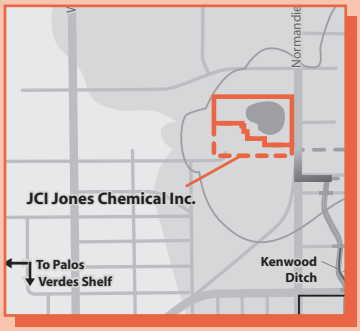
In 2005 and 2006, under EPA oversight, Montrose collected soil samples from this area. In the deep soil (12 to 20 feet below ground), EPA found that levels of DDT were above background levels (above naturally occurring concentrations). In 2010, EPA published a focused human health risk assessment for the property at 20846 Normandie Avenue and the backyards of adjacent residential homes.

ECI performed two different removal actions over the years. In 2005, ECI removed about 2,000 cubic yards of DDT-contaminated shallow soils from its property and transported the excavated soils for disposal off site. In 2015, ECI began activities to remove additional DDT-contaminated soils from its property. When EPA received complaints from the community about dust from the soil removal activities, EPA issued an order requiring ECI to adequately cover and control the soils. In September 2016, under EPA's oversight, ECI removed about 8,000 cubic yards of soil from its property for disposal off site and backfilled the excavated area. In December 2017, the ECI property was purchased by a developer who intends to build a warehouse.

Any remaining DDT-contaminated soil is deep underground, and people are not currently being exposed.

*Montrose OU6 is currently in the RI stage of the Superfund process.

*Montrose OU7 is currently in the RI stage of the Superfund process.



Operable Unit 7 (OU7), Jones Chemical

OU7 consists of the study of site-related contamination in soil, soil gas and groundwater on or near the Jones property. Jones owns and operates an industrial chemical supply plant located at 1401 Del Amo Boulevard in Torrance, California, immediately south of the former Montrose plant property. Operations at the Jones property include repackaging, warehousing, and distribution of inorganic chemicals used mostly in the treatment of drinking water as well as waste and wastewater treatment.

In the past, Jones released volatile organic compounds (VOCs) and other contaminants to a dry well on the property. These VOCs may have contained trichloroethylene (TCE) and tetrachloroethylene (PCE). In 2010, under EPA oversight, Jones began the RI for contamination at its property. Jones sampled indoor air, soil gas, soil and groundwater. The goal of the sampling is to better define areas where VOCs and other contaminants may have been released by Jones' historical operations.

In 2016, EPA completed a soil gas investigation in the neighborhoods and commercial areas near the former manufacturing facilities (*see OU3G, Montrose and Del Amo Vapor Intrusion*). EPA found high levels of PCE in the soil gas immediately south of the Jones property. Therefore, Jones, under EPA oversight, has done additional sampling and has established a monitoring protocol to make sure the community is not exposed to these contaminants.

Other Early-Action Response (Cleanup) for the Montrose Site

Soils in the Neighborhoods near the Former Montrose Plant Property

In the 1990s, EPA extensively studied DDT contamination in shallow soils of residential properties within 30 square blocks of the former Montrose plant property. These investigations showed DDT soil levels in the yards of residential properties to be similar to DDT soil levels in the rest of the southern LA area. There are three exceptions: 1) residential yards on the west side of the Kenwood Stormwater Drainage Pathway (*see OU4, Kenwood Removal*); 2) six residential yards along 204th Street (*see below*); and 3) seven residential properties south of Torrance Boulevard (*see OU6, Southern Stormwater Pathway*).

Soils in the 204th Street Neighborhood

In October 1993, EPA sampled 12 homes located on West 204th Street and New Hampshire Avenue and a nearby vacant area along the Del Amo alley. During that time, EPA found high levels (32 ppm and 11 ppm) of DDT in the shallow surface soils of two residential yards on the north side of West 204th Street. In 1994, EPA further studied these two properties and found DDT at concentrations up to 4,500 ppm, visually finding chunks of DDT. Using aerial photos, EPA concluded that this area was once a ravine where fill material was brought from the former Montrose plant property. In April 1994, EPA removed all the surface soil (down to seven feet deep) of the two backyards where the DDT concentration exceeded 26 ppm, removing over 1,000 tons of material. In July 1994, EPA extensively sampled the soil in the yards of homes between 1117 and 971 West 204th Street for DDT and VOCs, taking core samples up to 25 feet deep. Over 30 households were voluntarily relocated for these removal and sampling efforts. By the end of 1994, EPA completed initial sampling efforts of soil, indoor air, indoor dust and tap water in residential homes along West 204th Street.

In 1995, EPA determined that the DDT-contaminated fill material was contained within six adjacent residential properties on West 204th Street. EPA postponed a cleanup action of the DDT fill in the West 204th Street neighborhood to support residential property purchase negotiations between the community and Shell Oil Company (Shell).

In September 1998, (after the Shell buyout of homeowners in this area), EPA completed an emergency cleanup action to excavate (or dig up) the DDT-contaminated fill material. This material was incinerated at a permitted off-site incinerator facility. Site-related cleanup in the 204th Street neighborhood is complete.

Sanitary Sewer System

During much of the history of its operations, Montrose discharged wastes containing DDT, chlorobenzene and other contaminants into the sanitary sewers under Normandie Avenue. As a result, sediments in the nearby sanitary sewers contained high levels of DDT.

In September 1992, EPA approved plans to clean up DDT-contaminated sediments in the sanitary sewer within a half-mile of the former Montrose plant property. The cleanup action was delayed until LA County finished installation of a replacement sewer line. Between 1996 and 1998, EPA removed over 100 tons of contaminated sediment from the sanitary sewers near the former Montrose plant property. Should additional DDT contamination in other reaches of the sewers be found, EPA will evaluate whether additional investigation or cleanup is warranted at that time.

Del Amo Facility Superfund Site (Del Amo)

The Del Amo Superfund site is being addressed in three OUs. These OUs focus on areas where contaminants used at the rubber-making facility are found, including in soils in the footprint of the former facility, soils and soil gas in the Waste Pits Area, and the groundwater.

Operable Unit 1 (OU1), Soil and NAPL

This OU consists of actions to address site-related contamination, including NAPL, in shallow and deep soils on the former Del Amo facility property outside of the Waste Pits Area. In June 2007, under EPA oversight, Shell and Dow Chemical Company completed the RI Report for OU1, which included a human health risk assessment. In January 2010, under EPA oversight, Shell completed the feasibility study. EPA issued the Proposed Plan for public comment in June 2010, then issued the final cleanup decision in a ROD in September 2011.

The ROD remedy includes many components, which are now under remedial design by Shell with EPA oversight:

- A protective cap in four outdoor areas over contaminated shallow soils.
- Building engineering controls (BECs) to better manage exposure from contaminated shallow soil at one building.
- A soil vapor extraction (SVE) system to manage exposure from contaminated shallow soil at three areas and one building.
- An in-situ chemical oxidation (ISCO) and SVE system to address contamination in deep soil, including NAPL, in three areas.
- Digging up of contaminated soil during future redevelopment/construction.
- BECs, protective capping, SVE and/or restrictive land use covenants during future redevelopment/construction when soil cannot be removed.

*Del Amo OU1, Soil and NAPL, is in the RD stage of the Superfund process.

- Institutional controls (ICs), including a building permit program, proposed general plan amendment and restrictive covenants.

In 2015, EPA completed a five-year review (FYR) for Del Amo OU1. The FYR Report concluded that additional information is needed to determine if the remedy is protective of human health and the environment. The FYR Report documented one follow-up recommendation to reassess the potential for vapor intrusion in the commercial buildings on the former Del Amo facility property. If necessary, a vapor intrusion sampling program should be implemented.

Under EPA oversight, Shell performed sub-slab sampling at one commercial building and both sub-slab and indoor air sampling at another commercial building to evaluate risk from vapor intrusion, as required in the ROD. Additionally, EPA and Shell are currently evaluating potential vapor intrusion on other nearby commercial buildings.

In addition, currently six of the seven required caps are in place and functioning as intended. Sub-slab and indoor air sampling data suggest that additional building controls may not be required, with continued monitoring. Several soil investigations conducted as part of the remedial design concluded that SVE will only be required at one out of the three shallow soil areas.

Operable Unit 2 (OU2), Waste Pits Area

This OU consists of actions to address site-related contamination at a 4-acre area on the southern end of the former Del Amo facility property. This area is referred to as the Waste Pits Area and is located at the corner of Vermont Avenue and Del Amo Boulevard. Historically, sludge and liquid wastes generated from the synthetic rubber plant were disposed of in six unlined waste pits and four evaporation ponds.

In the late 1960s and early 1970s, the Waste Pits Area was covered with clean fill material. Early cleanup actions at the Waste Pits Area occurred in 1982. The landowner excavated one of the evaporation ponds under a DTSC cleanup plan. Throughout the 1980s, interim cleanup actions occurred, such as removing sludge material that seeped through the soil onto the surface.

Under EPA oversight, Shell and Dow completed the Focused Feasibility Study in December 1996. EPA issued the Proposed Plan for public comment in December 1996, then issued the final cleanup decision in a ROD in September 1997. In 1999, EPA led a public involvement process to receive input on which technology to use to treat contaminated vapors captured by the SVE system. After discussion and pilot testing of technology, Shell proposed to add an "in-situ bioventing" component to the SVE system. In 2002 and 2006, EPA updated the ROD with an Explanation of Significant Differences. In 2002, the ESD applied different ARARs for a new absorption technology to treat extracted vapors from the SVE system. In 2006, the ESD described the use of an in-situ bioventing component of the SVE treatment system and estimated this new system will require operation for about 10 to 15 years before cleanup goals are attained.

The ROD remedy includes many components, which are now in place and operated by Shell, under EPA oversight:

- A multi-layer impermeable cap over the Waste Pits Area.
- A soil vapor extraction system with in-situ bioventing (SVE/IST).
- ICs in the form of deed restrictions.
- Security fencing around the Waste Pits Area.
- Long-term operation and maintenance of all components.
- A gas cap collection and treatment system.

In 2000, under EPA oversight, Shell completed the multi-layer impermeable cap. This cap includes several layers of material to prevent rainwater from reaching the ground, to capture and treat underground vapors that rise from the waste pits, and to cover the area with topsoil.

In 2006, under EPA oversight, Shell completed the construction of the SVE/IST system. Through 2017, the SVE/IST system removed about 155,027 pounds of benzene. The SVE/IST system slowly extracts contaminated vapors from underground. It sends some vapors to be treated through a carbon adsorption unit, and the SVE/IST system manages most vapors by adding oxygen to them and re-injecting them back into the ground. The extraction wells recapture these re-injected vapors, after adding additional oxygen to the natural bacteria in the soil. Adding oxygen to the soil enables the natural bacteria to increase their population. More natural bacteria will digest more contamination and help clean up the site.

*Del Amo OU2, Waste Pits Area, is in the long-term operation and maintenance (O&M) stage of the Superfund process.

In 2015, EPA completed the third FYR for Del Amo OU2. The FYR Report concluded that the remedy was protective of human health and the environment, but future protectiveness is uncertain. The FYR Report documented two follow-up recommendations. The first recommendation is that Shell and EPA review and possibly update the benzene emission standards released by the multi-layer impermeable cap and the SVE/IBT system. In addition, the FYR Report recommended revising the sampling plan for perimeter monitoring wells around the Waste Pits Area. These wells can detect if site contaminants are moving away from the Waste Pits Area.

Today, the Waste Pits Area is undeveloped. Shell has placed fencing around it to secure the area, and ICs (deed restrictions) are in place to prevent exposure to site-related contaminants.

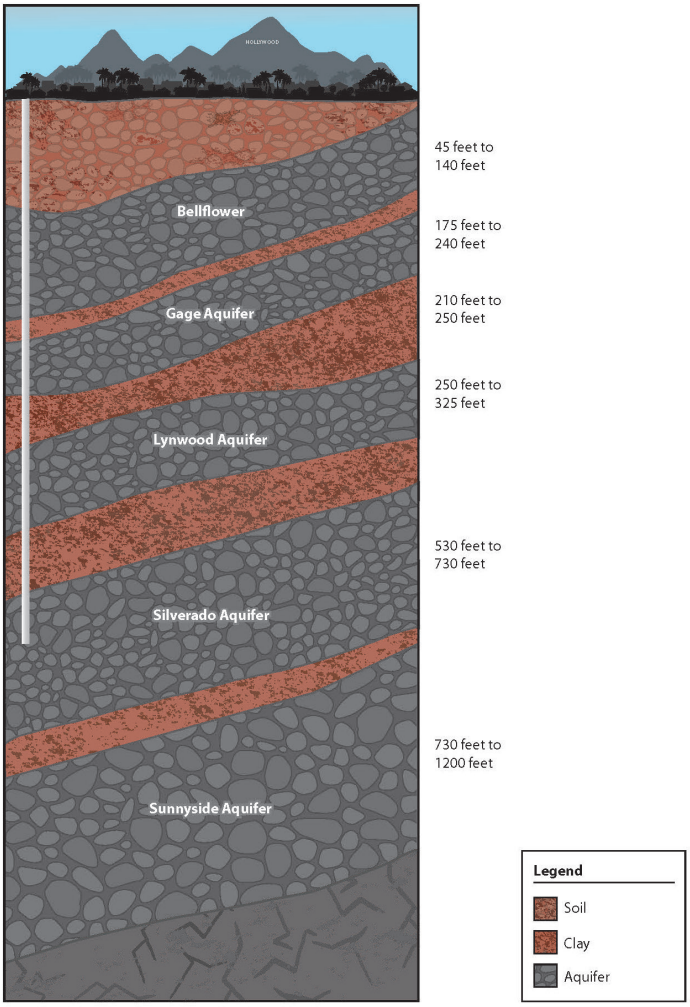
Operable Unit 3G (OU3G), Montrose and Del Amo Dual-Site Groundwater

OU3G consists of the study and cleanup of the groundwater contamination originating from both the Montrose and Del Amo Superfund sites, as well as from additional sources. This contamination has commingled (or mixed), and EPA refers to it as "the Dual-Site Groundwater" or the "Dual-Site Operable Unit." EPA oversees work on the contaminated groundwater (and vapor intrusion pathway) at both Sites at the same time. The groundwater contaminant plume extends more than 1.3 miles from the former Montrose plant property, where it originated and occurs in up to six interconnected "hydrostratigraphic units," or water-bearing layers (*see Figure 1 and Table 1*). The extent (or boundary) of the dual-site contamination plume is different in each aquifer.

Groundwater contamination can move horizontally and vertically. Groundwater pushes its way through soil, moving faster in some water-bearing layers than others. EPA's goal is to have a fully operational groundwater treatment system in place to clean up dozens of hazardous substances in the groundwater and prevent highly toxic, hazardous substances from moving into deep aquifers used as a drinking water supply for local water purveyors. Currently, the contamination has not been detected in groundwater that is used for drinking water. EPA is focused on protecting the drinking water supply of the cities of Torrance, Carson, Lomita, Gardena and LA as well as the West Carson neighborhood of unincorporated LA County.

EPA issued the Proposed Plan for public comment in July 1998, then issued the ROD in March 1999. The ROD remedy includes many components:

Figure 1. Groundwater bearing units underneath the former Montrose property and former Del Amo facility



Four groundwater bearing units are located underneath the former properties. The contamination from the Sites can be found in the Bellflower, Gage, and Lynwood Aquifers. In this area, drinking water purveyors pull groundwater from the Silverado Aquifer.

- Containment and isolation of NAPL (both DNAPL from Montrose OU3D and NAPL from Del Amo Soils and NAPL OU1).
- Intrinsic biodegradation for the Del Amo benzene plume.
- Extraction and treatment of groundwater, disposal of contaminants and reinjection of treated water.
- Technical Impracticability (TI) Waiver.
- Collection of additional field data.
- Well surveys.
- ICs in coordination with appropriate agencies for legal and regulatory restrictions on groundwater use.

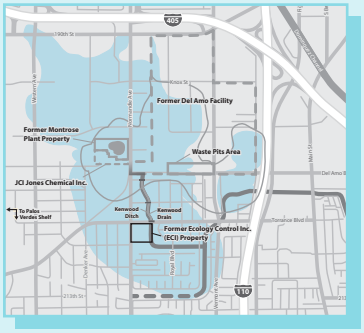
Note: No one is presently drinking or using groundwater contaminated by these Sites. The drinking water provided to nearby communities is regularly tested to meet California and federal drinking water standards.

Groundwater extraction and treatment system

Under EPA oversight, Montrose designed, built and is testing the groundwater extraction and treatment system (groundwater treatment system). In 2013, under EPA oversight, Montrose began constructing the groundwater treatment system, which includes groundwater extraction and injection wells and a water treatment facility located on the former Montrose plant property at 20201 Normandie Avenue (*see Figure 2*). In 2015, Montrose conducted a series of functional tests and redesigned parts of the groundwater treatment system. In 2016 and 2017, Montrose used the information from these functional tests to repair and upgrade the groundwater treatment system. From December 2017 through 2018, Montrose completed more functional tests of the groundwater treatment system.

During the most recent functional test, the groundwater treatment system successfully removed hazardous substances, including chlorobenzene, TCE and PCE. In addition, the groundwater treatment system successfully reduced the concentration of the chemical para-chlorobenzene sulfonic acid (pCBSA). After treatment, the water met all applicable standards.

*OU3G is in the remedial action (RA) stage of the Superfund process.



Once the groundwater treatment system is operating as intended in the ROD, EPA expects the groundwater outside the TI Waiver Zone (*see discussion on next page*) to meet all applicable standards in about 50 years.

Figure 2. Dual-site groundwater treatment facility at the former Montrose property

Technical Impracticability (TI) Waiver Zone

TI Waiver Zones are established when the groundwater contamination cannot be cleaned up to drinking water standards by using existing technologies. Moreover, drinking water standards cannot be reached in a reasonable time frame, even with the most aggressive remedy.

For this site, the same area as the TI Waiver Zone is also defined as a "containment zone." In the groundwater, the containment zone is an area where the contaminants must be contained while groundwater cleanup occurs outside the containment zone.

The extent (or boundary) of the TI Waiver Zone is different in each aquifer; EPA defined the TI Waiver Zone based on the location of NAPL (both NAPL from Del Amo OU1 and DNAPL from Montrose OU3). For example, in the Middle Bellflower Sand and Aquitard (see Table 1 on next page), the TI Waiver Zone includes groundwater beneath both manufacturing facilities. In the Gage Aquifer, the TI Waiver Zone is much smaller, including groundwater only in the immediate vicinity of the DNAPL beneath the former Montrose plant property.

Vapor Intrusion

Over the past five years, EPA has thoroughly studied the potential for vapor intrusion from the contaminated groundwater plume.

In the spring of 2015, EPA began an indoor air investigation in the neighborhoods near the former manufacturing facilities. EPA sampled the air inside 107 homes, looking for 13 VOCs related to the Sites. In 2016, EPA also resampled select homes and expanded sampling to four additional homes closer to the Jones property. While EPA found VOCs in many homes, EPA did not find evidence these VOCs were coming from the Sites. For this vapor intrusion investigation, EPA was looking for two primary pieces of evidence: 1) contaminants in the home crawlspace or foundation sub slabs with comparable levels to the indoor air; and 2) contaminants in outdoor air that are at much lower levels than the indoor air. The VOCs found in indoor air may come from several sources, possibly including the outdoor air or common household products inside the home (or indoor sources).

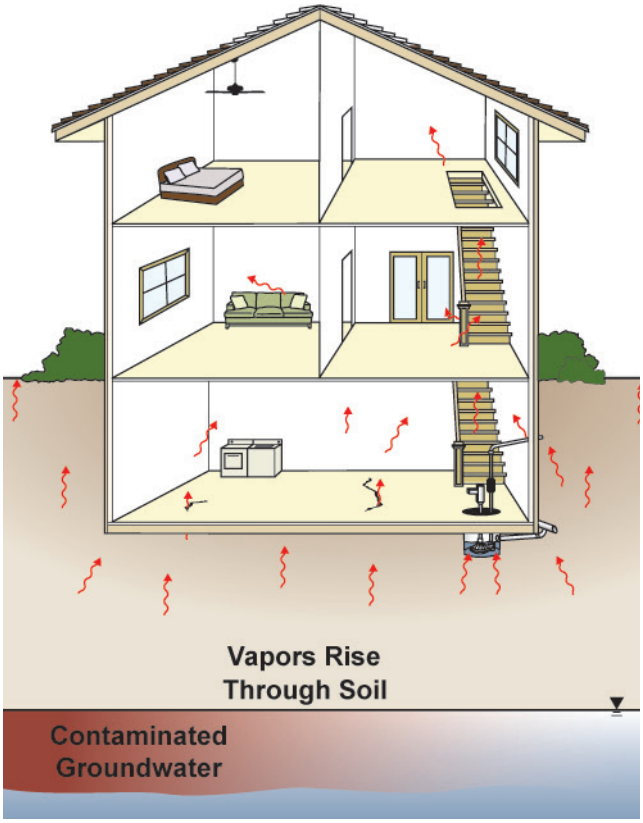


Figure 3. How vapor intrusion can enter a home

In early 2016, EPA completed a soil gas investigation in the neighborhoods and commercial areas near the former manufacturing facilities. EPA collected soil gas samples from over 50 locations at depths ranging from 5 feet to 50 feet below ground. EPA found VOCs in the soil gas. However, EPA did not find soil gas in patterns that suggest vapor intrusion was occurring (or vapors were reaching the indoor air of homes) in the neighborhood areas.

However, EPA found high levels of PCE in the soil gas immediately south of the Jones property. In 2018, under EPA oversight, Jones developed a soil-gas monitoring plan to understand how VOCs are behaving in the subsurface and whether there is potential for vapor intrusion. The investigation was conducted in 2019 and a report was submitted in March 2020.

Table 1. Groundwater Bearing Units Underneath the Former Montrose Property and Former Del Amo Facility

Name of Water-Bearing Unit	Below Ground Surface	Includes the TI Waiver Zone	Groundwater Flow	Site-Related Contaminants Above Drinking Water Standards	Drinking Water Wells
Middle Bellflower Sand and Aquitard	60 feet to 190 feet below ground surface, though thickness is variable	Yes	Southeast Very slow to faster in deeper portions	Chlorobenzene pCBSA Benzene	None
Gage Aquifer	175 feet to 240 feet	Yes	Southeast to east	Chlorobenzene pCBSA Benzene	None
Gage-Lynwood Aquifer	240 feet to 280 feet	--	East to Southeast	--	None
Lynwood Aquifer	280 feet to approximately 400 feet	No	East	Trace chlorobenzene/ pCBSA	Yes
Sunnyside Aquifer	Approximately 730 feet to 1,200 feet	No	--	--	Yes

After an extensive investigation, EPA found no health risks associated with vapor intrusion in the neighborhoods near the former manufacturing facilities.

In 2015, EPA completed a FYR of Dual-Site Groundwater OU3G. The FYR Report concluded that the remedy was protective, but future protectiveness was uncertain. The FYR Report documented many follow-up recommendations, including to: secure full operation of the groundwater treatment system; continue investigating the potential for vapor intrusion in the neighborhood south of the Site; collect additional information to better evaluate the effectiveness of benzene degradation; isolate and contain TCE source areas to prevent further migration; improve the groundwater monitoring well network; coordinate an area-wide groundwater strategy with other agencies; better understand the chemical pCBSA; and complete an anti-degradation policy analysis for reinjection of treated water.[1]

[1] *California State Resolution 68-16 describes the anti-degradation policy analysis. This analysis will answer questions regarding how the reinjection of treated water might impact or degrade the aquifers.*

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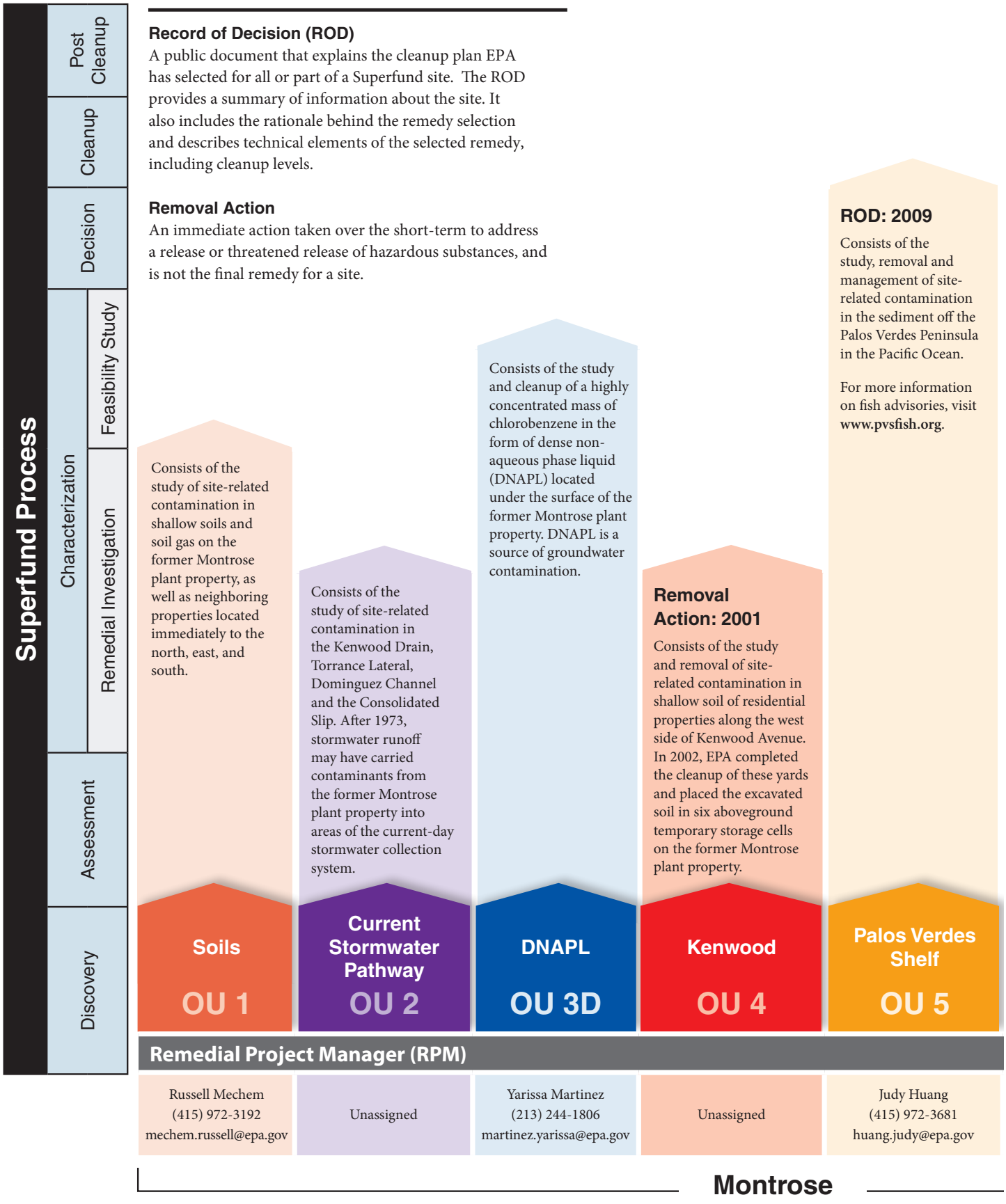
Del Amo and Montrose Superfund Sites and Operable Units



Operable Units (OUs)

Superfund sites are large and complicated. EPA often breaks up Superfund sites into smaller areas to make cleanup more manageable. These areas are called "operable units" or OUs.

Historical Stormwater Pathway
OU 6

Consists of the study and removal of site-related contamination in soil along the historical Kenwood Ditch south of Torrance Boulevard, including parts of the current-day Torrance Lateral and Dominguez Channel. Historical stormwater runoff carried contaminants from the former Montrose plant property into these areas.

Anhtu Nguyen
(415) 972-3443
nguyen.anhtu@epa.gov

Jones Chemical
OU 7

Consists of the study of site-related contamination in soil, soil gas and groundwater on or near the JCI Jones Chemical, Inc (Jones) property located immediately south of the former Montrose plant property. Jones is currently an operating industrial chemical supply plant.

Yarissa Martinez
(213) 244-1806
martinez.yarissa@epa.gov

Dual Site Groundwater
OU 3G

ROD: 1999

Consists of the study and cleanup of the groundwater contamination originating from both Montrose and Del Amo Superfund sites, as well as from additional sources. A groundwater extraction and treatment system has been built to clean up portions of the groundwater contamination.

Additionally, this OU includes the study of potential vapor intrusion (where underground contaminants move into the indoor air of homes and buildings) from the groundwater contaminant plume.

Yarissa Martinez
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Montrose & Del Amo

Soils and NAPL
OU 1

ROD: 2011

Consists of actions to address site-related contamination in shallow and deep soils on the former Del Amo facility property (outside the Waste Pits Area). The remedy includes a protective cap over contaminated shallow soils in four areas, building engineering controls at one building, two cleanup technologies to address shallow and deep soil in various areas, and a building permit program to allow for redevelopment in a protective manner.

Waste Pits Area
OU 2

ROD: 1997

Consists of actions to address site-related contamination at a 3.7-acre area on the southern end of the former Del Amo facility property. Currently, there is a protective cap over the Waste Pits Area, two cleanup technologies to address soil gas contamination, security fencing and land-use deed restrictions.

Anhtu Nguyen
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Del Amo

Prepared by:
U.S. Environmental Protection Agency
June 2020

Del Amo & Montrose Superfund Sites
Community Involvement Plan
www.epa.gov/superfund/delamo
www.epa.gov/superfund/montrose

APPENDIX 3

Contact Information for Partner and Key Stakeholder Agencies and Organizations for the Del Amo and Montrose Superfund Sites

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN

Si necesita una traducción inmediata o una aclaración en español, llame a
Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

If you require translation or clarification in Spanish, call
Yarissa Martinez at (213) 244-1806 or Romie Duarte at (213) 244-1801 for additional information.

U.S. Environmental Protection Agency (EPA)

EPA Staff Contact	Assigned Operable Unit (OU)
Romie Duarte Community Involvement Coordinator (CIC) (213) 244-1801 duarte.romie@epa.gov	Del Amo & Montrose all OUs
Russell Mechem Remedial Project Manager (RPM) (415) 972-3192 mechem.russell@epa.gov	Montrose OU1 – Soils
Yarissa Martinez Remedial Project Manager (RPM) (213) 244-1806 martinez.yarissa@epa.gov	Del Amo & Montrose OU3 – Dual Site Groundwater Montrose OU3D – DNAPL Montrose OU7 – JCI Jones Chemicals Inc.
Anhtu (Tu) Nguyen Remedial Project Manager (RPM) (415) 972-3443 nguyen.anhtu@epa.gov	Montrose OU6 – Stormwater Pathway Del Amo OU1 – Soils and NAPL Del Amo OU2 – Waste Pits Area
Cynthia Wetmore Technical Support Engineer (415) 972-3059 wetmore.cynthia@epa.gov	Del Amo & Montrose OU3 – Dual Site Groundwater
Kelly Manheimer Chief, CA Sites Cleanup Section (415) 972-3290 manheimer.kelly@epa.gov	Del Amo & Montrose all OUs

For more information on the Montrose Superfund site, visit: www.epa.gov/superfund/montrose.
For more information on the Del Amo Superfund site, visit: www.epa.gov/superfund/delamo.

State Agencies

EPA works with State agencies to fulfill its Superfund mission to clean up the Del Amo and Montrose Superfund sites.

Agency Name	Agency Staff Contact
California Environmental Protection Agency (CalEPA)	
Department of Toxic Substances and Control (DTSC)	**Willard Garrett** *Project Manager/Environmental Scientist* Brownfields and Environmental Restoration Program 5796 Corporate Avenue Cypress, CA 90630 (714) 484-5352 willard.garrett@dtsc.ca.gov www.dtsc.ca.gov
Los Angeles Regional Water Quality Control Board (RWQCB)	320 West 4th Street, Suite 200 Los Angeles, CA 90013 *General Line:* (213) 576-6600 www.waterboards.ca.gov/losangeles
State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW)	**Jeff O'Keefe** *Chief, Southern California Section* 500 North Central Avenue, Suite 500 Glendale, CA 91203 (818) 551-2068 jeff.okeefe@waterboards.ca.gov www.waterboards.ca.gov/drinking_water/programs

Key Stakeholder Organizations

EPA is in contact with many highly interested stakeholders, local government agencies, and other elected officials, as well as potentially responsible parties to fulfill its Superfund mission to clean up the Del Amo and Montrose Superfund sites.

Agency Name	Agency Staff Contact
State/Regional Contacts	
California Department of Public Health (CDPH)	**Nancy Villaseñor** *Health Educator* Environmental Health Investigations Branch California Department of Public Health 850 Marina Bay Parkway, Building P, 3rd Floor Richmond, CA 94804 (510) 620-5845 nancy.villasenor@cdph.ca.gov www.cdph.ca.gov
California South Coast Air Quality Management District (SCAQMD)	**Jason C. Low** *Assistant Deputy Executive Officer* Monitoring and Analysis, Science and Technology Advancement 21865 Copley Drive Diamond Bar, CA 91765 (909) 396-2269 jlow@aqmd.gov www.aqmd.gov
Water Replenishment District of Southern California (WRD)	**Brian Partington** *Senior Hydrogeologist* 4040 Paramount Boulevard Lakewood, CA 90712 (562) 275-4249 bpartington@wrd.org www.wrd.org

Los Angeles County Contacts	
Los Angeles County Board of Supervisors District 2	**Karly Katona** *Associate Chief Deputy, Supervisorial District 2* 500 West Temple Street, Room 866 Los Angeles, CA 90012 (213) 974-2222 kkatona@bos.lacounty.gov ridley-thomas.lacounty.gov
Los Angeles County Board of Supervisors District 4	**Jocelyn Olivas-Rivera** *Public Works and Legislative Deputy* 500 West Temple Street, Room 822 Los Angeles, CA 90012 (213) 974-4444 jrivera-olivas@bos.lacounty.gov hahn.lacounty.gov
Los Angeles County Department of Public Health	**Matt Baca** *Project Manager* Department of Public Health 695 South Vermont Avenue Los Angeles, CA 90005 (213) 738-3220 mbaca@ph.lacounty.gov publichealth.lacounty.gov
Los Angeles County Department of Public Works	**Greg Even** *Principal Engineer, Road Maintenance Division* 900 South Fremont Avenue, 10th Floor Alhambra, CA 91803 (626) 458-7001 geven@dpw.lacounty.gov **Dayna Rothman** *Head, Real Estate* 900 South Fremont Avenue, 10th Floor Alhambra, CA 91803 (626) 458-7072 drothman@dpw.lacounty.gov dpw.lacounty.gov
Los Angeles County Department of Regional Planning	**Leon Freeman** *Regional Planner* 320 West Temple Street Los Angeles, CA 90012 (213) 974-6417 lfreeman@planning.lacounty.gov planning.lacounty.gov

City of Los Angeles Contacts	
City of Los Angeles 15th District Office	**Aksel Palacios** *Planning Deputy* 1513 East 103rd Street Los Angeles, CA 90002 (213) 473-7015 aksel.palacios@lacity.org www.la15th.com
City of Los Angeles Department of City Planning	**Teresa Batson** *City Planner* 200 North Spring Street, Room 667 Los Angeles, CA 90012 (213) 978-1165 teresa.batson@lacity.org planning.lacity.org
Other City/Local Contacts	
City of Carson	**John Raymond** *Assistant City Manager* 701 East Carson Street Carson, CA 90745 (310) 952-1773 jraymond@carson.ca.us ci.carson.ca.us
City of Gardena	**Ray Barragan** *Community Development Manager* 1700 West 162nd Street Gardena, CA 90247 (310) 217-9526 rbarragan@cityofgardena.org www.cityofgardena.org
City of Torrance	**Andy Darlak** *Water Operations Superintendent* Public Works Department 20500 Madrona Avenue Torrance, CA 90503 (310) 781-6900 adarlak@torranceca.gov www.torranceca.gov
Los Angeles Department of Water & Power (LADWP)	**Josephine Gonzalez** *Environmental Affairs Officer* 111 Hope Street Los Angeles, CA 90012 (213) 367-0414 josephine.gonzalez@ladwp.com www.ladwp.com

Local Water Purveyors	
California Water Service Company	**Ron Sorensen** *District Capital Manager* 2632 West 237th Street Torrance, CA 90505 (310) 257-1487 rsorensen@calwater.com www.calwater.com
City of Torrance	**Andy Darlak** *Water Operations Superintendent* Public Works Department 20500 Madrona Avenue Torrance, CA 90503 (310) 781-6900 adarlak@torranceca.gov www.torranceca.gov
Golden State Water Company	630 East Foothill Blvd San Dimas, CA 91773 *General Line:* (800) 999-4033 www.gswater.com
Community Contacts	
Harbor Gateway South Neighborhood Council	**Elaine Yuzuki** *President* hgsnc@empowerla.org empowerla.org/hgsnc
Del Amo Action Committee (DAAC)	**Cynthia Babich** *Founder and Director* P.O. Box 549 Rosamond, CA 93560 (310) 769-4813 or (661) 256-7144 delamoactioncommittee@gmail.com www.delamoactioncommittee.org
LA Gateway Chamber of Commerce	**Joeanne Valle** *Executive Director* 1400 240th Street Harbor City, CA 90710 (310) 534-3143 jv@lagchamber.com lagchamber.com
Regional Hispanic Chamber of Commerce	**Sandy Cajas** *President and CEO* One World Trade Center P.O Box 32474 Long Beach, CA 90832 (562) 212-2889 sandy@regionalhispaniccc.org www.regionalhispaniccc.org

Elected Officials	
U.S. Congressional District 43	**Congresswoman Maxine Waters** District Office: 10124 South Broadway, Suite 1 Los Angeles, CA 90003 (323) 757-8900 waters.house.gov
U.S. Congressional District 44	**Congresswoman Nanette Barragan** San Pedro Office: 320 Fifth Street San Pedro, CA 90731 (310) 831-1799 barragan.house.gov
U.S. Senator	**Senator Kamala Harris** Los Angeles Field Office: 11845 West Olympic Boulevard, Suite 1250W Los Angeles, CA 90064 (310) 231-4494 www.harris.senate.gov
U.S. Senator	**Senator Dianne Feinstein** Los Angeles Field Office: 11111 Santa Monica Blvd., Suite 915 Los Angeles, CA 90025 (310) 914-7300 www.feinstein.senate.gov/public
California State Senate District 35	**California Senator Steven Bradford** San Pedro District Office: 302 West 5th, Suite 203 San Pedro, CA 90731 (310) 514-8573 sd35.senate.ca.gov
California State Assembly District 64	**Assembly Member Mike A. Gipson** District Office: 879 West 190th Street, Suite 920 Gardena, CA 90248 (310) 324-6408 assembly.ca.gov/a64
California State Assembly District 66	**Assembly Member Al Muratsuchi** District Office: 3424 West Carson Street, Suite 450 Torrance, CA 90503 (310) 375-0691 assembly.ca.gov/a66

Elected Officials	
Los Angeles County Supervisor, District 2 (includes the cities of Carson and Gardena; unincorporated areas of West Carson and Rancho Dominguez; and the Los Angeles Neighborhood of Harbor Gateway)	**Supervisor Mark Ridley-Thomas** Downtown Office: 500 West Temple Street, Room 866 Los Angeles, CA 90012 (213) 974-2222 seconddistrict@bos.lacounty.gov ridley-thomas.lacounty.gov
Los Angeles County Supervisor, District 4 (includes the cities of Torrance and Lomita and the Los Angeles Neighborhoods of Harbor City, Wilmington, and San Pedro)	**Supervisor Janice Hahn** Downtown Office: 500 West Temple Street, Room 822 Los Angeles, CA 90012 (213) 974-4444 fourthdistrict@bos.lacounty.gov hahn.lacounty.gov
Los Angeles City Council District 15	**Councilman Joe Buscaino** Harbor District Office: 638 South Beacon Street, Room 552 San Pedro, CA 90731 (310) 732-4515 www.la15th.com
Potentially Responsible Parties (PRPs) and PRP Representatives	
Representatives for Montrose Chemical Company (Montrose)	Please leave a voicemail at (949) 485-7005
JCI Jones Chemicals, Inc.	**Timothy J. Gaffney** *Executive Vice President of Environmental Affairs & Risk Management* 100 Sunny Sol Boulevard Caledonia, NY 14423 (585) 538-2314 tgaffney@jcichem.com jcichem.com
Shell Oil Products Company	**Cia Wu** *Shell External Relations* (310) 816-2156 xia.wu@shell.com

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Prepared by:
U.S. Environmental Protection Agency
June 2020

APPENDIX 4

Redevelopment on the Former Del Amo Facility Property
DEL AMO AND MONTROSE SUPERFUND SITES
COMMUNITY INVOLVEMENT PLAN

Si necesita una traducción inmediata o una aclaración en español, llame a
Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

If you require translation or clarification in Spanish, call
Yarissa Martinez at (213) 244-1806 or Romie Duarte at (213) 244-1801 for additional information.

EPA

www.epa.gov

Cleanup, Continued Use and Redevelopment in a Thriving Business Park

THE DEL AMO SUPERFUND SITE IN LOS ANGELES, CALIFORNIA

Introduction

In the Harbor Gateway area of Los Angeles, a former synthetic rubber manufacturing facility is now a busy commercial and industrial business park. More than 250 businesses employ nearly 6,000 workers on site. Collaboration among federal and state agencies, city departments, the site's lead responsible parties and developers have made possible the integrated cleanup, continued use and redevelopment of the Del Amo Superfund site.

With most of the area already developed by the time of site investigations, regulators and the responsible parties faced challenges tackling the cleanup without significantly disturbing active land uses on site. Contamination also delayed new building development and expansion plans, frustrating property owners and developers. To help address these issues:

- EPA, the California Department of Toxic Substances Control (DTSC) and responsible party representatives formed the Del Amo Environmental Review Team (Del Amo ERT) to address additional site characterization and cleanup on an as-needed basis (in addition to the main site-wide investigation), during planned excavation or construction activities at commercial and industrial properties.
- The Del Amo ERT collaborated with the City of Los Angeles to add notification flags to all properties within the site boundary on the City's online system. The flags notifiy owners that the property is part of a Superfund site and instructs owners to contact the Del Amo ERT before any excavation or construction work.
- The Del Amo ERT designed an environmental review pilot program to identify all excavation and construction projects that involved soil disturbance at least 18 inches below ground surface or a change in existing industrial or commercial land use to a residential use, a hospital, a school or a day care center.
- EPA included the program as one of four institutional control layers in the site's final remedy.

The Del Amo site is located in the Harbor Gateway neighborhood in southern Los Angeles, California.

This case study explores the strategies and innovative approaches that contributed to the successful continued use of the Del Amo Superfund site. The following pages trace the evolution of cleanup efforts, highlighting the environmental review pilot program, institutional controls and site activities through 2015. The case study provides information and lessons learned to parties interested in the commercial and industrial reuse and continued use of Superfund sites and how to integrate remedy and reuse considerations during the Superfund process.

Various properties on the Del Amo Superfund site have undergone environmental review as part of the site's institutional control program.

Site History, Contamination and Remediation

From 1942 to 1972, a 280-acre synthetic rubber manufacturing facility operated at the site. Manufacturing activities led to releases of chemicals into soil and groundwater beneath the facility. Plant operators disposed of wastes in unlined pits and evaporation ponds. Other releases included leaks from pipelines, storage tanks and processing units.

The chemical manufacturing facility on site before redevelopment.

Subsidiaries of the United States government initially owned the facility, and private companies operated it under lease. In 1955, the Shell Chemical Company (Shell) purchased the facility and operated it until 1972 when it sold the property to a developer. The developer dismantled the facility and sold off property parcels to other landowners and developers. By 1992, most of the area had been redeveloped.

The California Department of Health Services (DHS) excavated some of the waste pits in 1982. EPA also began a series of inspections around this time. As a result of the inspections, EPA placed the site on the Superfund program's National Priorities List (NPL) in 1997. Following this, the Harbor Gateway Commercial Property Owners' Association sued to have the site taken off the NPL. The court sided with the association in 1999, stating that because EPA did not obtain written approval from the governor, the listing was invalid. EPA then re-proposed the site for listing on the NPL and received the governor's approval to list it on the NPL in 2002.

EPA split the site into three areas, or operable units (OUs), to better manage the cleanup – the Site Soils and Nonaqueous Phase Liquid (NAPL) OU, the Waste Pits Area OU, and the Dual Site Groundwater OU. The Dual Site Groundwater OU refers to the co-mingled contaminants in the groundwater from the Del Amo site and the nearby Montrose Chemical Corporation Superfund site.

Some initial response actions – excavation and off-site disposal of some waste material and soil – took place at the Waste Pits OU before EPA selected the area's final remedy in 1997. In the final remedy, EPA required that Shell and the U.S. General Services Administration (GSA), the primary responsible parties for Del Amo (references hereafter to Shell pertain to work on behalf of the responsible parties), secure the waste pits by placing a Resource Conservation and Recovery Act (RCRA)-equivalent cap over the sludge and contaminated sediments at the waste pits area, install and operate a soil vapor extraction system beneath the waste pits area, and perform routine inspections. Additionally, the remedy included deed restrictions to prohibit future residential use of the waste pits area and prohibit any use of the area that could threaten the integrity of the cap. By 2000, Shell had placed the cap and installed the soil vapor extraction and soil vapor monitoring wells. EPA placed restrictive covenants on the waste pits area properties in 2000 and 2005, and installed the soil vapor extraction and treatment system in 2006.

For the Dual Site Groundwater OU, EPA selected the final remedy in 1999. Design for the groundwater extraction and treatment system was completed in September 2012 and construction finished in December 2014. EPA is overseeing the start-up and commissioning of the treatment system to ensure that all installed equipment is functioning correctly. Groundwater treatment and monitoring is expected to continue over the next several decades.

EPA selected the final remedy for the Soil and NAPL OU in 2011 and updated it in 2013. The remedy includes institutional controls to minimize potential future exposures to residual contamination, capping of some shallow contaminated soils, soil vapor extraction to remove some soil contamination, building engineering controls to prevent unacceptable indoor air exposures, chemical oxidation to reduce contamination affecting groundwater, and addressing any areas of contamination exceeding action levels found during future development or construction. EPA, Shell and the GSA have established an agreement to implement these remedy components.

Throughout investigation and cleanup activities, businesses have remained open and commercial and industrial redevelopment has continued. Property owners and tenants participated in an environmental review pilot program to test an environmental review process. Based on the success of this review process, EPA formalized it as part of the site's four layers of institutional controls.

1992 to Early 2000s

Recognizing Site Conditions, Building Relationships

Redevelopment of the area began in the 1970s after Shell sold the site property to a developer. By the time of the site's remedial investigation in 1992, much of the area had already been redeveloped. Industrial and commercial uses, including many light manufacturing facilities, warehouses and office buildings, spanned across most of the site.

As a result, site characterization proved challenging. Erich Weaver, project manager for Shell contractor AECOM (formerly URS prior to 2015), recalled that disturbance of business owners was a major concern. "Existing businesses emphasized the importance of not disrupting their activities," Weaver explained.

Fortunately, despite these complexities, there was underlying good news. As EPA remedial project manager Dante Rodriguez described, "based on the early studies, EPA concluded that there were no immediate health risks, and there was not any potential for exposure under normal circumstances for people working in the commercial and industrial business park." With continual development and redevelopment at the site, the site team recognized the potential of exposure during subsurface construction work, but also saw this as an opportunity. The site team decided to approach the situation as a way to address additional site characterization and, if necessary, remedial action on an as-needed basis, timing the work with developers' excavation and construction projects. This was in addition to the main site investigation and remedial action process.

Early 2000s to 2008

Designing a Notification System

To align the additional site characterization and remedial action with construction and excavation activities, the team needed a way to know when developers were going to dig into the subsurface. This would not only help the site team gain additional characterization, but also ensure that workers were not being exposed to contamination as a result of the excavation activities.

Developing a system to identify all construction and excavation activities was an evolving process. One particular redevelopment project for a larger property on site made it clear that ongoing communication between developers, the Superfund team and responsible parties would be crucial. "During the project's early stages, they encountered some soil contamination and the project slowed down," recalled Weaver. Based on the characteristics of the contamination at the property, the team went over and excavated impacted soils. Weaver added, "From that interaction, we realized that we needed communication between the developers and property owners and the Superfund team and responsible parties on an ongoing basis."

While that property owner had known the area was a Superfund site, and the site team was able to investigate and remove the contamination, EPA was concerned about scenarios where property owners were not aware of the area's Superfund status. EPA led the site team in developing a system to make sure that all projects with significant construction and excavation activities were notified and that the site team would be contacted regarding any upcoming activity.

EPA talked with the Los Angeles city attorney and worked with the City's Building and Safety and City Planning departments to develop a notification document for properties on site with building permit applications. The notification document provided clear indication that it did not require the permit to be withheld and included general information about the Superfund site and instructions to contact the Del Amo Environmental Review Team, which was formed to review upcoming building or excavation permit requests that came through as a result of the notification system. The Del Amo ERT consists of staff from EPA, DTSC and Shell.

The notification document also included Del Amo ERT criteria used to determine the need for environmental review as well as a map of properties designated for environmental review under the pilot program. Shell and its contractors also managed a website – www.delamosuperfund.com – with information regarding the program. The website includes contact information for the Del Amo ERT, site information and a printable form to initiate a review process with the Del Amo ERT.

EPA pursued this pilot effort – designing a notification system and implementing an environmental review – as part of the site's feasibility study. During the Superfund process, the feasibility study evaluates cleanup options for a site's remedy. The pilot program enabled EPA to interact effectively with the City and permit applicants, adjust processes as needed, and evaluate whether the notification and environmental review system could serve as an institutional control to protect human health and the environment over the long term.

Fae Tsukamoto, a specialist in the City Planning Department, worked with EPA's Dante Rodriguez to create and add notification flags in the Zone Information Map Access System (ZIMAS), the city's detailed online property information database. A geographic information system (GIS) layer of the Del Amo site's boundaries was added to capture all site properties, and then flags that the public would see for identified parcels on site were added. Each flag then linked to EPA's notification document.

The City thus played a key role in setting up the notification system and making sure the start of the pilot program went smoothly. Today, the City maintains ZIMAS and the Del Amo flags and continues to refer permit applicants to the Del Amo ERT, which is responsible for the environmental review and assessment of all construction and excavation projects.

Below and Right: Information and map included in the notification document linked to flagged properties on ZIMAS within the Del Amo Superfund site.

ATTACHMENT 1

NOTIFICATION REGARDING THE DEL AMO SUPERFUND SITE

GENERAL INFORMATION

This parcel is located within the Del Amo Superfund site. The U.S. Environmental Protection Agency (USEPA) has determined that additional environmental controls or sampling may need to be implemented during construction activities. Depending on sampling results, further mitigation measures may be necessary. A permit applicant seeking a Building Permit or Excavation/Grading Permit for work on this parcel that involves soil-invasive activities, such as grading, excavation, trenching, soil boring, or ground-level demolition work, deeper than 18 inches below ground surface, needs to work with USEPA to conduct an environmental review of their proposed project.

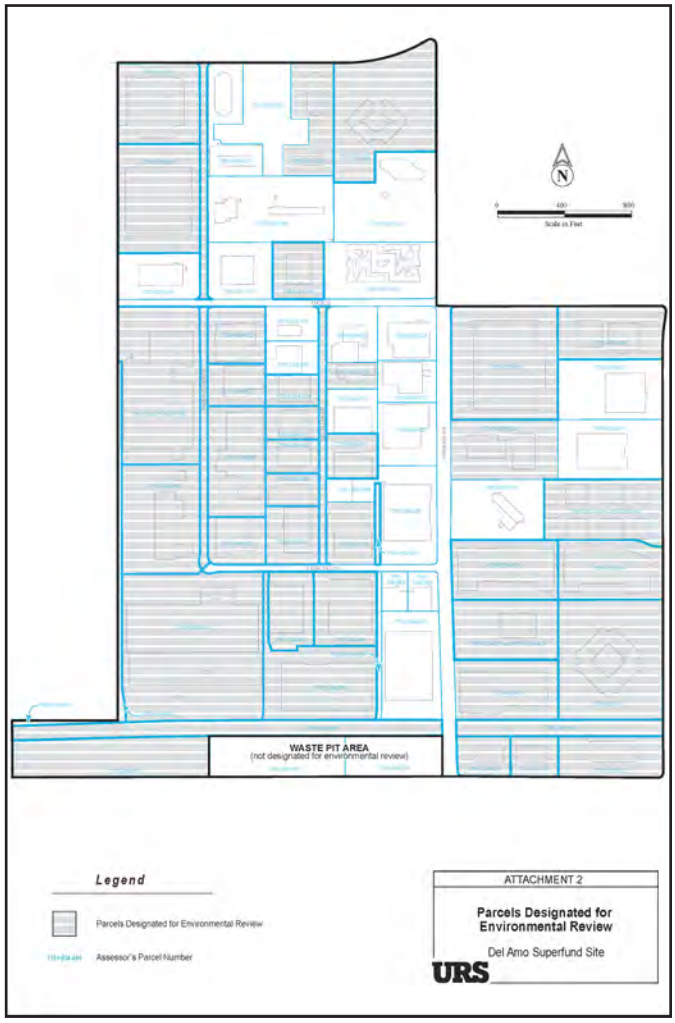
SPECIFIC INSTRUCTION FOR ENVIRONMENTAL REVIEW

When a permit application for this parcel is received, the City of Los Angeles Department of Building and Safety (DBS) is instructed to provide the Applicant with this notification. The Applicant is instructed to contact the U.S. EPA's Environmental Review Team for the Del Amo Superfund Site (Del Amo ERT) to conduct an environmental review. The contact information for the Del Amo ERT is provided below:

Environmental Review Team
for the Del Amo Superfund Site
Toll-free phone number: **(866) 565-4950**
Website: www.delamosuperfund.com
Email address: **info@delamosuperfund.com**

Criteria to be applied by U.S. EPA to determine if an environmental review is needed:

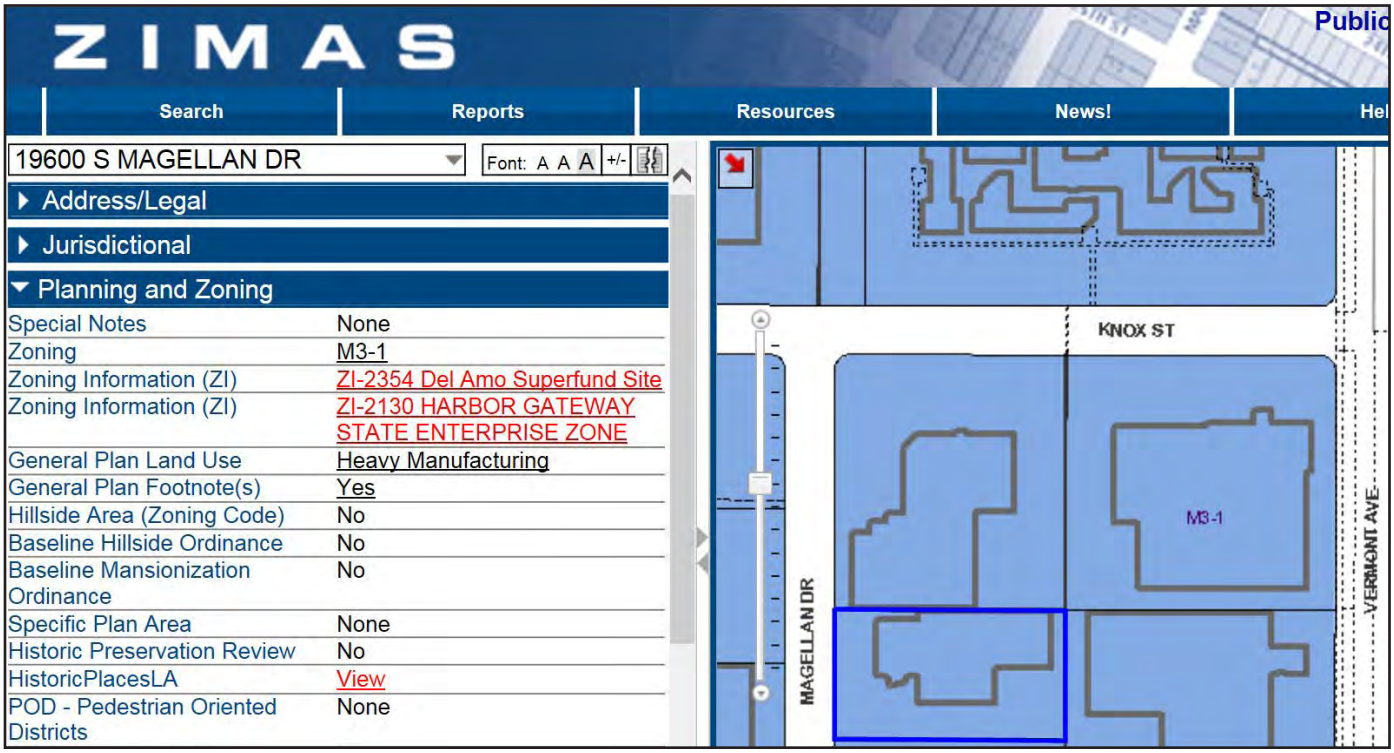
1. The project involves excavation of subsurface soils deeper than 18 inches below the ground surface; and/or
2. The project involves demolition of existing structures; and/or
3. The project involves changing current uses to include residential use, hospital for humans, school for persons under 21 years of age, or day care center for children.

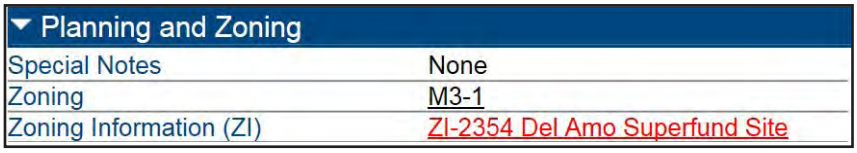


Institutional Controls (ICs): A Brief Overview*

- ICs are legal and administrative tools used to maintain protection of human health and the environment at sites. They do not involve construction or physical changes to a site.
- ICs play an important role when a cleanup is conducted and when it is too difficult or too costly to remove all contamination from a site.
- ICs are designed to lower the potential for people and the environment to be exposed to contamination.
- There are four types of ICs: government controls (local laws or permits), proprietary controls (private property use restrictions), enforcement tools (consent decrees; unilateral orders), and informational devices (deed notices; public advisories).
- ICs are usually most effective when layered (i.e., multiple ICs of different types working together) to improve protectiveness.
- Seeking community input and involvement can maximize the effectiveness of ICs.
- Most cleanups will need to use a combination of engineered remedies and ICs. ICs provide an additional level of safety and help to make sure a site's remedy remains securely in place.

* Information adapted from *EPA's Citizen's Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, and Underground Storage Tanks and Resource Conservation and Recovery Act Cleanups, OSWER 9255.0-98.*





Above: ZIMAS website showing site parcel 19600 Magellan Drive (outlined in dark blue).

Left: Zoning information flag added to the parcel data, which links to EPA's notification document.

2008 - 2011

Trial Run: Implementing the Pilot Program

After the notification system was in place, the next phase was to implement the pilot program. Pilot program activities were organized into three steps: initial pre-screening, supplemental environmental review and recommended follow-ups.

For the initial pre-screening, URS fielded the calls that came in and assessed projects to determine the need for environmental review. URS screened each project to determine if there would be any excavation in excess of 18 inches or any change in land use to a residential use, hospital, school or day care center. "The idea was to identify properties where construction projects or redevelopment was going to occur and identify ones with the potential for exposure," he noted. If the assessment identified any potential for exposure, the Del Amo ERT started a supplemental environmental review.

During the supplemental review, URS personnel talked with permit applicants about their projects in greater detail, learning about specific proposed excavation locations and depths. They also discussed construction plans and the projects' planned uses. This information was then reviewed by Shell and its contractors with EPA oversight. Each review took into account data on contaminants in the area, the proximity of the excavation to any contaminants and the site's risk assessment to evaluate the exposure risk.

After this review, Shell and its contractors prepared a Screening Evaluation Summary Report (SESR). Each SESR included a description of the proposed project with construction drawings and a summary of existing environmental information, a parcel map showing planned excavations and improvements as well as former plant facilities and environmental data sampling locations, data from those sampling locations, a summary of applicable institutional and engineering controls, and preliminary recommendations for any follow-up actions. Erich Weaver noted that recommendations could range from no further action to monitoring an excavation and sampling. "We prepared the SESRs with our recommendations and sent them to EPA," he said. "EPA reviewed them and talked with us. EPA finalized the SESRs, added a cover letter with recommendations and shared them with the property owners."

If EPA recommended follow-up actions, the next step was implementation. For example, if the recommendation was for sampling and analysis, the team would design and execute sampling and analysis activities, present the new data, assess risk based on the new data, and make recommendations for any adjustments or modifications to the construction plans. EPA and DTSC would review any plans, and EPA was responsible for approving them.

"If further work was involved," noted Weaver, "monitoring could be an outcome. We would conduct the monitoring, and if needed, conduct sampling and share a technical memorandum. The results of any sampling would then drive the need for any further action, which sometimes included soil removal." Once any issues were addressed by follow-up actions, Shell submitted the results and any further recommendations for EPA and DTSC review. EPA then issued a letter specifying either no further action or the need for any additional follow ups.

In 2008, EPA shared a fact sheet with site property owners to explain the pilot program and the environmental review process. From 2008 to 2011, environmental reviews associated with development activities took place at six different properties. Some of the projects that underwent environmental review resulted in remedial actions to excavate, transport and dispose of contaminated soil. One project involved excavation and construction of a loading dock. Following characterization, soil sampling by Shell identified volatile organic compounds (VOCs) above cleanup standards. Shell and its contractors worked with the property owner to remove the VOC-impacted soils and backfill the excavated area with clean soil prior to construction.

From the start, the proactive nature of the pilot program – providing information to permit applicants early in the process – worked well. As AECOM's Erich Weaver noted, "development projects were known to us before they moved forward."

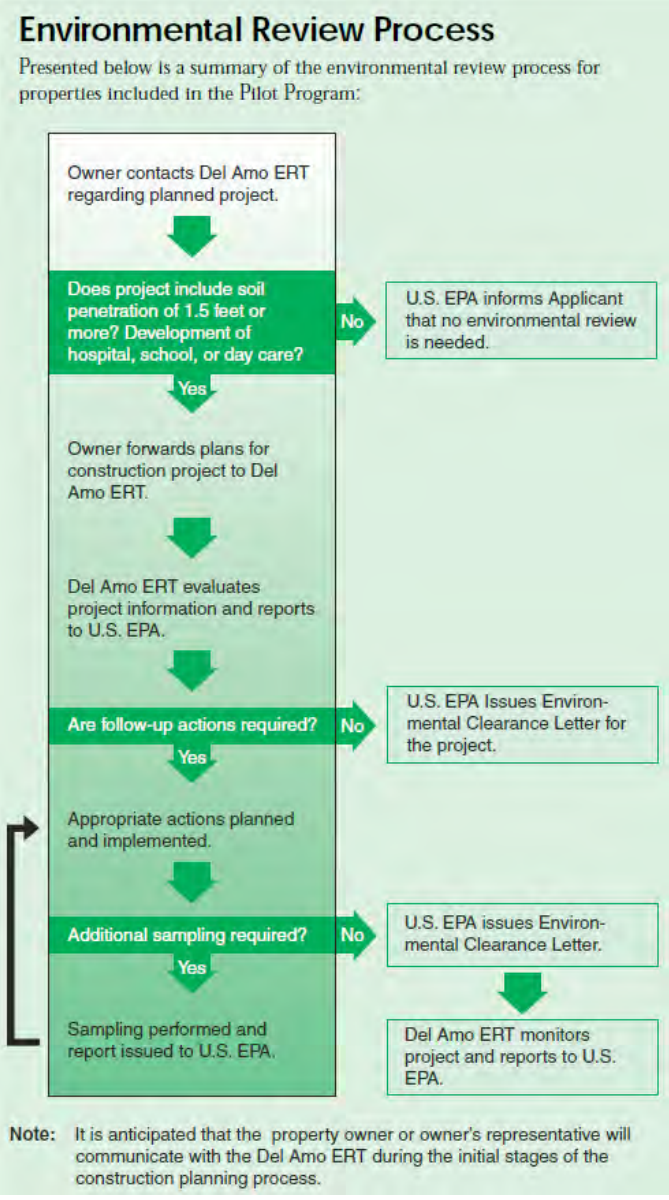


Diagram from EPA's 2008 Pilot Program fact sheet for site property owners detailing the steps of the environmental review process.

2011 - 2015

Finalizing the Environmental Review Process

The pilot program notification system and environmental review process went smoothly, such that the Del Amo ERT did not need to make any substantial changes. Thus, when EPA selected the final remedy for the Soil and NAPL OU in 2011, the Agency incorporated the environmental review process as one of the site's four layers of institutional controls. "In many cases, a property can be screened out and a project can move forward." Aside from officially expanding the review process to include all parcels on site, EPA did not make any other modifications to the pilot program before finalizing it.

The selected remedy included four layers of institutional controls to create multiple layers of reinforcing controls. If one layer fails, remaining layers will prevent potential exposure. The goals of the institutional controls are to minimize the potential for future exposure to residual contamination at the site and to protect the remedy.

The property at 20101 Hamilton Avenue participated in the pilot program in 2008. During the installation of freight elevators and utility trenches, Shell and its contractors conducted soil and soil vapor sampling.

The four layers in the selected remedy include:

1) *Informational Outreach:* Current and prospective owners and tenants, developers, and their project teams receive available information on their property's environmental status and any applicable use restrictions.

2) *Environmental Review:* Identification of areas needing further cleanup, helping to ensure that EPA has an opportunity to review construction plans for projects that may involve soil disturbance.

3) *General Plan Footnote:* EPA and responsible parties will work with the City of Los Angeles to include language in the locality's comprehensive long-term planning report for site areas exceeding action levels for residential use. The footnote will state that these areas are part of the Del Amo Superfund site and are not appropriate for residential use.

4) *Restrictive Covenants:* These land use restrictions, which will run with the land, will apply to site properties with contamination exceeding residential use standards. The covenants will prohibit residential use and state that any construction or redevelopment plans must receive EPA review and approval prior to work proceeding. Some covenants may restrict interference with remedial activities, systems or components, or drilling into or using groundwater.

The site's institutional controls also include a land watch component. As EPA's Dante Rodriguez described it, "the Underground Service Alert entity entered parcels of the Superfund site into their database as if we were a utility – so we receive alerts every time someone goes in to dig in the area." AECOM's Erich Weaver added, "we also have a contractor who monitors building/grading permits, Underground Service Alerts, ownership changes, permits for water uses, and any changes in land use. When they see changes, they give us email alerts about the property, contacts and any other information they have. We review the information and follow up as necessary." The land watch helps ensure that all projects – even small ones, such as the digging of an irrigation line – are monitored, tracked and evaluated by the Del Amo ERT. As Weaver noted, "it provides redundancy and an independent check. It will hopefully catch any smaller projects that may not go through the City."

Project Highlight: 19310 South Pacific Gateway Drive

Marc Selznick, property manager at the Unire Real Estate Group for an institutional owner in the park, shared his experience with the environmental review process and the Del Amo ERT at several properties on site. Selznick noted that "there are challenges working within this business park due to the Del Amo study area but we found them to be manageable." At South Pacific Gateway Drive, for example, they ran into over 2,000 feet of transite pipes as well as contaminated soil during foundation excavations. They brought in Shell contractor URS, who took responsibility for off-siting the soil and removing the asbestos-contaminated pipe. Once URS removed the contaminated material, the project continued, and the building was leased and ultimately sold to its current owner.

"Buying real estate on a known Superfund site was an aggressive investment," Selznick said of his client's activities on site. He noted that it would be difficult to attract institutional property owners without open dialogue between the potential property owners and the Del Amo ERT. In particular, Selznick's client's concerns were addressed contractually and with an environmental insurance policy.

Selznick added that working directly with AECOM and URS over the past decade has made a big difference. "It has been helpful to have an experienced environmental consultant involved," he said. "They understand that delays have financial impacts for property owners. AECOM/URS staff get that. There are businesses and livelihoods at stake and they respect that. They realize they need to be aware of that during their activities."

The client now involves AECOM before making any development-related submittal to the City. For a $7 million project to reconfigure and reposition a building at 19500 South Vermont Avenue, for example, they were in contact from the outset of project planning and design. "It has been so important to have a group that works well with the owner of the properties, the responsible parties and EPA," noted Selznick. "They play a really critical role. It is in everyone's interest – government, public, private – to facilitate a cleanup and put that property back to productive use."

Project Highlight: 19600 Magellan Drive

Mr. Kazuaki Mitsuda of TsuKuRu USA Corporation, a contractor for Toyoshima International America, shared his development experiences at this commercial property. The company first became aware of the property's Superfund status following submittal of project information to the City. The company was seeking to partially demolish an old, 51,000-square-foot office/warehouse building, and then add on to the facility.

After Mitsuda and his colleagues contacted the Del Amo ERT, EPA and Shell contractors conducted soil sampling. Shell contractors later removed contaminated soil from the property. "For me, it wasn't a big deal. It was just removing the contaminated soil. That was it," Mitsuda recalled. Although it resulted in a two-to-three-week construction delay, Mitsuda was pleased that the review process was straightforward and completed at no cost to his client.

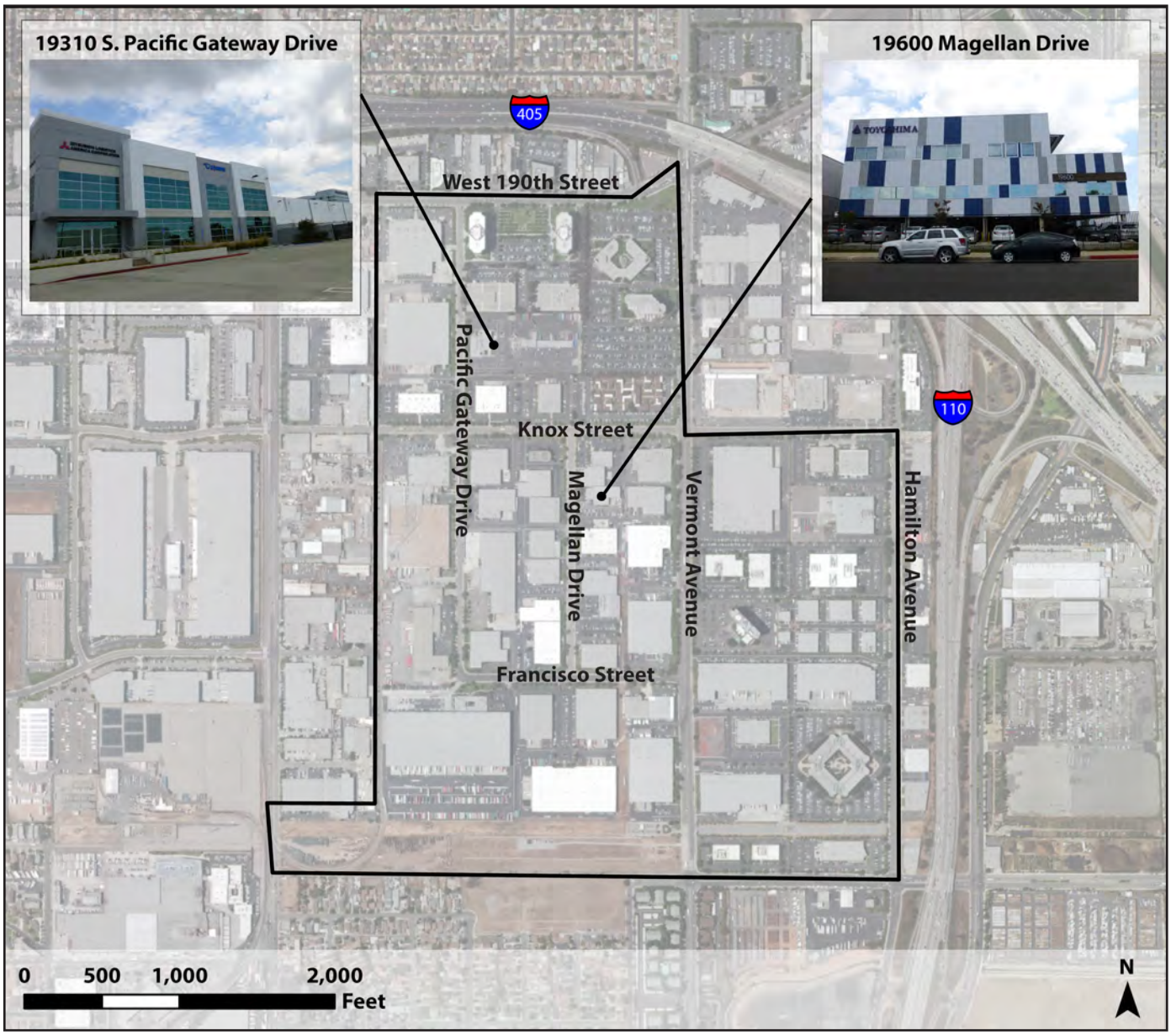
Project Highlights

19310 South Pacific Gateway Drive

19310 South Pacific Gateway Drive, during and after construction. Excavation work for the foundation unearthed underground pipes and contaminated soil. The development manager notified the Del Amo ERT to remove the contaminated soil and piping.

19600 Magellan Drive

19600 Magellan Drive, during and after the partial demolition of a 51,000-square-foot office and warehouse building and construction of a new building addition. Excavations encountered an area of contaminated soil. The Del Amo ERT removed the soil and monitored additional excavation activities.



Detailed site map showing highlighted projects.

2015+

Reflecting on the Process, Looking Ahead

Today the Del Amo Superfund site is abuzz with commercial activity. "It's a very active business area. A booming economy these days," noted EPA's Dante Rodriguez. "There's always new development and redevelopment going on."

Marc Selznick, property manager at Unire Real Estate Group, pointed out that "we're doing everything simultaneously, and that's been the best way to do it. The cleanup process can take a long time – we are talking decades here. It would be a real shame if nothing was done during the time it takes to clean sites like this up. Having remedial action take place on an as-needed basis allowed for commercial activity to continue. Without this approach, a lot of economic activity would never have happened."

DTSC project manager Safouh Sayed emphasized the importance of the project's flagging and notification systems. "This type of process is very, very helpful," he noted. "Without this type of mechanism, the state would not be able to monitor so many properties. The City's collaboration was instrumental in making this system a success."

The importance of collaboration among Del Amo ERT members emerged as a key theme in interviews with project stakeholders. Patrick Gobb, one of Shell's technical consultants, noted that "when issues come up, we talk with EPA ahead of time. There is rarely any disagreement. By the time the SESR gets to EPA, we have already talked about it. EPA generally knows what's coming. There are no surprises. The property owner gets consistent messages from the responsible parties and EPA about what is going on, so they can make their plans knowing that everyone is on the same page. The last thing they want is delays in their projects. They recognize that it's to their advantage to work with us to take care of issues before excavation starts. All together, we make a good team." EPA's Dante Rodriguez agreed. "The Del Amo ERT has worked really well together over the years to tackle these challenges," he said. Shell program manager Carol Campagna noted that when she works on other projects without similar systems in place, she uses Del Amo as an example. "At other sites, without this communication, everything turns into a mini emergency response," she said. "In almost every case, we should be using a process similar to what we have at Del Amo."

Looking forward, much work remains for the Del Amo ERT at the site. EPA, DTSC and Shell continue to work together to ensure that potential exposures to contaminants are closely monitored and addressed while working closely with property owners and tenants to minimize business disruptions. These parties and the City will also continue working together to put remaining institutional controls in place, including the City of Los Angeles General Plan footnote and restrictive covenants for 26 property parcels on site.

At 1011 Francisco Street, Shell removed and disposed of impacted soil during the tenant's planned construction activities.

Lessons Learned

A combination of factors has contributed to the project's successful outcomes.

- Performing additional site characterization and remedial action on an as-needed basis minimizes disruption of existing commercial activity.
- Incorporation of an environmental review process early on, before construction projects begin, helps avoid construction delays and addresses owner/developer concerns.
- Building a notification process into an existing system helps EPA reach all building permit applicants.
- The Del Amo ERT's understanding of property owners' interests makes the environmental review process a win-win – it minimizes delays and lost revenue for property owners and makes sure remedial action can address contamination issues and limit potential exposures.
- Open dialogue between the owner/develop and the Del Amo ERT minimizes issues for all parties.
- The cooperation between the Del Amo ERT and property owners helps make the process smoother and meet everyone's goals.

The Bigger Picture

While these site-specific conditions create an ideal climate for successful reuse outcomes, there are also a range of broader lessons learned that can help guide similar projects at contaminated lands across the country.

EPA and state agencies work closely with communities, site owners and other stakeholders to support reuse outcomes that are compatible with site cleanups.

EPA and state agencies place a high priority on supporting the return of contaminated sites to productive and beneficial uses. At Del Amo, much of the site was already in reuse when the cleanup process started, but there were no exposure risks under normal circumstances. Although the site-wide investigation was able to assess all the properties, the innovative approach to obtain additional site characterization (and remedial actions) on an as-needed basis helped fill in gaps. This approach also supported the area's continued commercial and industrial use and allowed for new building construction and expansion.

Timeline of Events

1940s	Chemical manufacturing facility built to produce synthetic rubber during World War II
1955	Shell purchases facility
1972	Shell sells site property to developer; facility dismantled and parcels sold to other landowners and developers
1982	California Department of Health Services (DHS) excavates part of the waste pits; EPA begins series of site inspections
1992	Site largely redeveloped
May 1992	EPA and DHS Administrative Order on Consent with responsible parties for remedial investigation and feasibility study (RI/FS) for 280-acre former plant site and accelerated RI/FS for waste pits area
1994-1999	Removal of occasional surface seeps of waste pits sludge material by Shell
1996-1997	NAPL in groundwater monitoring well near western edge of former plant property removed by Shell
1997	Site's initial NPL listing; Final remedy for Waste Pits Area OU selected by EPA
1999	Resource Conservation and Recovery Act (RCRA)-equivalent cap placed over sludge and contaminated sediments at waste pits area; soil vapor extraction wells and soil vapor monitoring wells installed
1999	Final remedy for Dual Site Groundwater OU selected by EPA
1999-2006	Soil and NAPL OU risk assessment
2000	Restrictive covenant placed on western parcel of the Waste Pits Area OU
Sept. 2002	NPL site listing finalized
2005	Restrictive covenant placed on eastern parcel of the Waste Pits Area OU
2005-2006	Shell removes contaminated soil from properties in site's western and southern areas
2006	Shell installs waste pits area's soil vapor extraction and treatment system
2008	Environmental review institutional control pilot program put in place by EPA
Feb. 2009	Subslab sampling effort for five buildings as part of additional field investigations
Jul. 2009-May 2010	EPA investigation of NAPL extent in four areas as part of additional field investigations
2010	EPA-monitored removal of contaminated soil by owner during tenant changeover in southwest part of former plant property
2011	Final remedy selected for Site Soils and NAPL OU, includes four layers of institutional controls as well as capping, soil vapor extraction and in-situ chemical oxidation in select locations across site
2012-2013	Groundwater cleanup system design completed and construction began
2015+	Site properties remain open for business; environmental review process for new projects ongoing

Communicate, collaborate and build relationships.

The Del Amo ERT has worked together for several years, and they have learned to communicate effectively and work as a team. They discuss issues ahead of time so there are no surprises down the line. This collaboration helps make sure project reviews are effective and comprehensive, and run smoothly.

Recognize the leadership role and resources of local governments.

As the organizations responsible for their communities' general welfare, local governments may already have tools or processes in place that can be expanded to help address Superfund cleanup. At the Del Amo site, the City's online zoning and mapping system had flags that were used to call attention to special requirements for properties. Taking advantage of this tool was a straightforward and effective way to monitor all site parcels and connect permit applicants with the Del Amo ERT.

Constructive engagement with critical stakeholders can enable simultaneous cleanup and redevelopment.

In the Del Amo environmental review process, the responsible parties and property owners work together to make sure all needs are met. Responsible parties work hard to support reuse and redevelopment by preventing project delays, and property owners cooperate with the Del Amo ERT to make sure workers are protected from exposures and any necessary sampling and monitoring takes place to help protect public health and the environment.

Institutional controls can be tested in pilot programs before finalization as part of site remedies.

By implementing the notification system and environmental review process first as a pilot program, the Del Amo ERT was able to evaluate the feasibility of the institutional control. Additionally, the initial phase of the program enabled EPA to quickly begin interacting with the City and permit applicants and make sure necessary sampling and cleanup actions were taken. The early implementation of the pilot program provided time for the Del Amo ERT and property owners to explore the process, strengthening its implementation when EPA selected the final remedy.

Multiple layers of institutional controls can reinforce each other to make the remedy more protective.

Redundancy in institutional controls can help strengthen protectiveness. At the Del Amo site, if one institutional control layer does not flag an excavation project for review, another layer will.

Conclusion

Activities at the Del Amo Superfund site illustrate how site characterization and remedial action can take place alongside continued commercial and industrial use and redevelopment. Without a system in place to involve the Del Amo ERT during planning for new development and expansion projects, addressing site characterization and remedial action activities would have presented significant uncertainties and challenges. The site's innovative environmental review process shortens construction delays and ensures and streamlines communication among key parties.

Thanks to the collaboration of site agencies, the local government, the site's responsible parties, and property owners, developers and tenants, the Del Amo Superfund site continues to be a busy commercial and industrial business park, a welcoming place for long-time tenants as well as vibrant new development projects. Today, the site has become a leading example of continued use at Superfund sites and how to integrate remedy and reuse considerations effectively over time, ensuring the protection of public health and the environment as well as economic growth.

During construction of the new building on 1000 West 190th Street, sampling identified impacted soil, which the owner later removed.


"The Del Amo ERT has worked really well together over the years to tackle these challenges."
- Dante Rodriguez, EPA Remedial Project Manager
"The City's collaboration was instrumental in making this system a success."
- Safouh Sayed, DTSC Project Manager
"In almost every case, we should be using a process similar to what we have at Del Amo."
- Carol Campagna, Shell Program Manager
"It is in everyone's interest – government, public, private – to facilitate a cleanup and put that property back to productive use."
- Marc Selznick, Property Manager at Unire Real Estate Group

Cleanup, Continued Use and Redevelopment in a Thriving Business Park

THE DEL AMO SUPERFUND SITE IN LOS ANGELES, CALIFORNIA

Sources and Resources

Sources

Images for this case study are from EPA Region 9 and site visits.

Map Sources

Maps for this case study were created with data from Esri, DeLorme, AND, Tele Atlas, First American, UNEP-WCMC, USGS, DigitalGlobe, GeoEye, i-cubed, USDA, AEX, Getmapping, Aerogrid, IGN, IGP and the GIS User Community.

Resources

Los Angeles Zoning Information and Map Access System:
http://zimas.lacity.org

Del Amo Environmental Review Team:
http://www.delamosuperfund.com

Del Amo Data Report:
http://www.delamo.info

EPA Superfund site page, including site decision documents:
http://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0901293

EPA Superfund Redevelopment Initiative:
http://www.epa.gov/superfund-redevelopment-initiative

California Department of Toxic Substances Control:
http://www.dtsc.ca.gov

EPA
United States
Environmental Protection
Agency

EPA Region 9
75 Hawthorne Street
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February 2016

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Prepared by:
U.S. Environmental Protection Agency
June 2020

APPENDIX 5

Extended Community Concerns and Responsiveness Summary for the Del Amo and Montrose Superfund Sites

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN

Si necesita una traducción inmediata o una aclaración en español, llame a
Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

If you require translation or clarification in Spanish, call
Yarissa Martinez at (213) 244-1806 or Romie Duarte at (213) 244-1801 for additional information.

Extended Community Concerns for the Del Amo & Montrose Superfund Sites

From December 2017 to August 2018, EPA interviewed five community members, nine representatives from three state agencies, and 35 representatives from 11 key stakeholder organizations, including representatives from the potentially responsible parties (PRPs) and local government staff and elected officials.[i]

In addition, EPA reviewed recent community comments and interactions regarding local concerns and needs as well as community involvement and communication priorities. Specifically, EPA reviewed:

- Past CIPs (1996 and 2010).
- Historical fact sheets.
- Discussions with community members.
- Written and verbal comments from the 2014-2015 Montrose Dense Non-Aqueous Phase Liquid (DNAPL) Operable Unit 3D public comment period.
- Interviews and comment cards from 2016 Del Amo Superfund Site Five-Year Review.[ii]
- The Draft 2014 Del Amo/Montrose Situational Assessment, which was a third-party review that included interviews, focus groups and informal discussions.

Here are the overarching themes EPA heard:

Health and Cleanup Concerns

1. Health Effects
2. Drinking Water
3. Slow Cleanup Progress
4. Holistic Approach to the Sites
5. Specific Technical Cleanup Aspects

Community Involvement and Information-Sharing Concerns

6. Highly Interested Stakeholders
7. Community Involvement Efforts and Building Trust with EPA
8. Understanding the Role of PRPs
9. Information Sharing

Neighborhood and Property Concerns

10. Status of the Vacant Lot from the Former 204th Street Buyout Area (and Potential Park)
11. Property Value Impacts and Information for Prospective Neighbors
12. Relocation of Nearby Neighbors
13. Local Government Awareness

The following pages share information provided by community members and stakeholders. Its contents do not necessarily reflect the policies, actions or positions of EPA.

HEALTH AND CLEANUP CONCERNS

1. Health effects:

Community members have voiced serious concerns about adverse health effects from DDT through years of exposure. Some people note that community members suffer from "DDT poisoning."

Community members feel they have been exposed to significant contaminants from both Sites over the years, as well as from other facilities in the area. Many community members have lived in the neighborhood their entire life. In the 1990s, a community member voiced that the neighborhood was part of a "human exposure experiment," and the risks posed justified a permanent buyout of the neighborhood. In 2014, community members and local representatives continued to share worries about health impacts from the Sites. In 2016, community members noted that many people in the neighborhood have severe health problems, and people wondered if these health problems are related to the Sites. Community advocates have asked EPA to re-evaluate health studies from the 1990s.

Over the years, community members have suggested EPA is not taking a cumulative approach to the health concerns from the Sites and nearby operating facilities. In 2014, community members suggested that EPA review the cumulative effects of contaminants rather than looking at them individually. Additionally, a community advocate noted that EPA's approach to health risks is on a chemical-by-chemical basis, instead of a combined review. In the 2017-2018 CIP interviews, a stakeholder representative asked if EPA was aware of the total cumulative effects of the contaminants across the Sites.

Furthermore, community members believe EPA is doing little to resolve their health issues. Perceived health effects from the Sites include headaches, skin rashes, cancer, fertility issues, diabetes, autism, Asperger's, behavioral problems, birth defects and respiratory problems, specifically asthma. In 2014, community members noted that little information was available regarding the impacts of contamination on home gardens. One community member expressed: "There is not enough information on how the pollutants affect the food chain." In the 2017-2018 CIP interviews, a community member noted that although they wanted to plant a vegetable garden, they decided against it out of fear of disturbing contaminated soil.

The 2014 situational assessment suggested that EPA evaluate the use of the health educator or "promotora de salud" model used in other communities. Health educators typically engage with community members one on one, to focus on individual concerns ranging from counseling, social support and health.

Overall health concerns discussed by community members and stakeholders varied during the 2017-2018 CIP interviews. A representative from the City of Los Angeles (LA) Councilmember Joe Buscaino's office stated that they continue to receive questions from community members asking if the DDT is still dangerous and whether the soil will be removed. A representative from Shell Oil Company (Shell) noted that they are unsure if residents fully understand the potential human health risks from the Sites. Community members living near the Sites raised the most concerns. Community members asked about the effects of cleanup-related activities such as the groundwater treatment system and whether its installation could disrupt the soil and further the groundwater contamination. A community member wondered if the cleanup could pose additional risks when the contamination is moved, noting that the contamination is "always in the back of our minds."

2. Drinking water:

Over the years, community members have expressed concern about their drinking water. In 2014, several community members voiced concern that their drinking water might be contaminated by the Sites. One community member expressed: "It's (DDT is) going in our showers. It's in our skin."

Local agencies and the Del Amo Action Committee (DAAC) have expressed the need to protect groundwater resources. DAAC expressed concern about the groundwater contaminant plume spreading to nearby drinking water wells and noted: "We know the contamination will continue to migrate." The Water Replenishment District (WRD) commented that EPA should consider designating a buffer zone around the Sites to establish formal notification procedures for the installation of future production wells. WRD also recommended they receive all technical correspondence related to groundwater as WRD is the "agency responsible for groundwater replenishment, water quality and protection…"

Concerns noted during the 2017-2018 CIP interviews focused on potential changes to the groundwater resources as a result of Dual-Site Groundwater Operable Unit (OU) 3G cleanup activities. State agencies and stakeholders expressed interest in the groundwater extraction and reinjection wells and whether they could move the groundwater contaminant plume. LA County asked whether EPA and the LA Regional Water Quality Control Board (LARWQCB) have the same drinking water toxicity thresholds. City of LA representatives requested a map showing the locations of the drinking water wells in relation to the groundwater contaminant plume. DTSC asked that EPA continue working on groundwater modeling. The State Water Resources Control Board's Division of Drinking Water (DDW) had concerns about whether the installation of new drinking water wells or the operation of other nearby groundwater treatment systems might interfere with the Dual-Site Groundwater OU3G groundwater cleanup. State agencies and stakeholders expressed concern about whether groundwater resources for new drinking water wells could be contaminated by the reinjection of treated water from the Dual-Site groundwater treatment system.

State agencies and stakeholders shared concerns about the Dual-Site Groundwater OU3G groundwater treatment system. These concerns included the current status of the system, the type of system and what is done with the treated water. A representative from the Montrose Chemical Corporaton (Montrose) said that the groundwater treatment system has been a "hot-button issue" in the community, and it plays a role in the community's perception of how the cleanup is progressing. A Los Angeles Department of Water and Power (LADWP) representative noted that the effects of the contamination on drinking water are not well understood, and that this lack of understanding can cause fear in the community.

3. Slow cleanup progress:

Community members have expressed frustration that the Superfund process is slow. In 1996, neighbors suggested a faster cleanup can reduce the stigma of living near Superfund sites and attract new development to the area. In 2015, a community advocate noted that the Sites have been in the cleanup process for decades, adding: "The timeline is concerning."

Community members have also expressed concerns about cleanup decisions made long ago. DAAC noted the current cleanup activities based on work done years ago handicaps the Sites. The 2014 situational assessment suggested EPA have a dialogue with interested community members to explore older management actions such as remediation decisions and cleanup approaches.

Several participants in the 2017-2018 CIP interviews noted the extended cleanup timeline for the Sites. A Montrose representative noted that, due to the long-term nature of the cleanup, periodic updates are important to ensure that the community knows that the cleanup is continuing. A representative from LA County asked why the Sites have not been cleaned up already. Another representative from LA County stated that once the Sites

are in the operation and maintenance phase, updates are not as important. However, any intrusive work should require some outreach in advance from EPA.

4. Holistic approach to the Sites:

Over the years, community members, stakeholders and state agencies have noted that EPA is not holistically approaching the Sites. In 2014, many community members and other stakeholders noted difficulty grasping the "big picture" with respect to EPA's remedial efforts. In 2015, community members suggested they lacked clarity on how the various remedies from different OUs will work together to protect health. Furthermore, they do not believe health can be protected with a fragmented approach. In the 2017-2018 CIP interviews, a community member expressed frustration with the complexity of the issues and technologies at the Sites, stating that "[the cleanup] is so complicated, I cannot keep it all straight."

People are confused on how all the OUs fit together and believe EPA shares fragmented information. One community member asked: "Who can keep up?" DAAC noted: "…there are too many OUs with different managers" and this approach makes it difficult for communities to engage. Many have suggested the multiple EPA project managers working on the Sites and many staff re-assignments that have occurred through the years leads to inconsistency in information shared and community involvement approaches. In 2015, DTSC said that EPA "lacked a coordinated approach in communicating with DTSC," due to multiple project managers working the Sites. In the 2014, community members shared frustration about the lack of coordination among the OUs. In a 2014 letter to EPA, DAAC suggested: "The disconnected, piecemeal approach EPA is using to tackle the Site isn't working." DAAC further explained that dividing the Site into different OUs "inhibits the ability of the public to understand the work underway and comment on important decision making." Others have noted difficulty in identifying the appropriate contact person, because there are many project managers.

Community advocates have asked for a single point of contact to help them grasp the "big picture" and how the cleanup is progressing. The 2014 situational assessment suggested EPA assign an overarching technical lead for the Sites. Moreover, this person could speak at all public meetings related to the Sites and explain the "big picture" on cleanup progress. In the 2017-2018 CIP interviews, a community member asked if there was an overall EPA project manager who oversaw all work at the Sites and noted that it would make sense to designate one person to manage all internal coordination.

Many people suggest that multiple staff reassignments through the years has led to "a lack of stewardship" or ownership of the work. It has also been noted that the turnover in community involvement coordinators creates a void in historical memory about cleanup efforts. In 2015, a community advocate noted that EPA's "presence is not consistent or stable, which leads to confusion on behalf of the community and delays in the project." DAAC has noted the lack of accountability from EPA. They point to occasions where project managers suggested an OU isn't theirs and they cannot speak to it. DAAC has suggested that "…there needs to be a comprehensive strategy for the Sites," and "…it needs to be solved holistically." During the 2017-2018 CIP interviews, several state agencies and stakeholders noted that many different EPA staff had been assigned to the Sites over the years. One representative from Montrose stated that each new project manager resulted in a different approach to community relations at the Sites.

In 2015, some community members suggested that some OUs have been "orphaned." For example, one community advocate said that Montrose OU1 was not being addressed by EPA. Another community advocate wondered if the residual contamination in the "stormwater lateral" was still a problem, remembering "some white powder DDT during some trenching during construction, which leads to the questions whether or not the characterization (of the stormwater drainage pathway) is complete." This individual further suggested that several OUs do not have completed feasibility studies and said that characterization might not be complete, either. In 2015, two community advocates mentioned that DAAC had to alert EPA when the

contractor was failing to monitor volatile organic compounds (VOCs) during a construction project. These situations "bring up broader questions about oversight; it might be indicative of more systemic issues."

In the 2017-2018 CIP interviews, DDW noted that tracking down site information can be difficult. DDW felt that there are many cleanup agencies involved at the Sites, and that it did not seem as though staff from the cleanup agencies are working together. This makes gathering information challenging, as they are "always chasing information from the different agencies." DDW also noted that there are many Superfund sites in the area, and that it would be helpful if multiple agencies provided information.

5. Specific technical cleanup aspects:

- **Dual-Site Groundwater (OU3G) cleanup:** In 2015, community advocates and state agencies expressed concerns that the Dual-Site Groundwater OU3G groundwater treatment system has not been designed to control the spread of the groundwater contaminant plume, address contamination from International Light Metals (ILM) and Boeing plumes, or adequately treat the chemical pCBSA. WRD has expressed concerns that EPA has not reopened the Dual-Site Groundwater OU3G Record of Decision (ROD) to incorporate the new California threshold concentration of 3 parts per million (ppm) for pCBSA. Two community advocates noted that EPA should further assess the effects of reinjection, including the decision to reinject outside the existing groundwater contaminant plume. These individuals noted these concerns had been previously provided to EPA, with no response from EPA staff. One community advocate also suggested that a full stakeholder process should be developed to collaborate and move forward on a revised ROD. In 2016, DAAC sent the California Environmental Protection Agency (CalEPA) Administrator more than 200 postcards from community members that raised concerns over the reinjection of pCBSA as part of the Dual-Site Groundwater OU3G groundwater treatment system.

Others have expressed concerns about the long timeline for the Dual-Site Groundwater OU3 remedy. In 2015, community advocates noted a large gap in time between the ROD, the completion of the remedial design and the construction of the groundwater treatment system. One community member specifically noted: "the OU3 remedy is a joke, to spend $22 million on a water treatment plant that doesn't work…" In 2015, DTSC noted that "the amount of time it has taken to implement the (groundwater) remedy… is of concern to DTSC." DTSC further noted that the groundwater contaminant plume continues to spread under the community, while the groundwater treatment system is delayed due to problems with the equipment and components. During the 2017-2018 CIP interviews, a representative from the City of Carson asked if the groundwater contaminant plume is still spreading. LA County staff asked if the LARWQCB is aggressive in monitoring the work and whether they have the same drinking water toxicity thresholds as EPA. DDW staff stated that WRD should conduct more groundwater monitoring.

Some community members mentioned the "year of noise and stress" during the installation of the Dual-Site Groundwater OU3 groundwater treatment system's underground piping network. One community member recalled the construction was "very traumatic for the community." Another person noted the construction setup prevented some customers from entering businesses. This person suggested that when this concern was raised to EPA, the staff responded that there is nothing they could do about it. In the past few years, many community members have complained that since the project construction work, Normandie Avenue has been in a constant state of degradation since the work (potholes, uneven pavement). In 2015, one community noted: "The quality of the road (replaced after the piping construction) is poor."

Participants in the 2017-2018 CIP interviews expressed a high level of interest in the Dual-Site Groundwater OU3G groundwater treatment system. Participants shared multiple questions about the system, asking about the cost of running the system, extraction and

reinjection well depths and locations, how the water is treated, water cleanup levels, and the timeframe for treatment and monitoring. Once the system is operational, City of Carson, DDW and WRD staff requested operational information on the system. Such information could be the number of gallons pumped and treated. Additional information could be data to showcase the facility's success cleaning up contaminants before reinjecting the treated water; WRD specifically asked for total contaminant mass removed. Representatives from the City of Torrance asked if the treatment plant could be called something other than the Torrance Treatment Plant.

Multiple interviewees expressed concern about the locations of injection wells and their proximity to drinking water wells. LA County staff asked if any of the injection wells are located near businesses or residents. A representative from the City of Carson requested a map of the groundwater treatment system and producing drinking water well locations to share with residents so they can see they are not drinking contaminated water.

In 2015, DTSC raised concerns that EPA did not have a well-developed and comprehensive conceptual model of the Dual-Site Groundwater OU3G groundwater contaminant plumes. This model should showcase which parties are responsible for which plumes and how various groundwater systems in the area interact with each other. In 2014, one community member raised a concern about EPA's certainty regarding the extent of the groundwater contaminant plume beneath the community. Furthermore, WRD suggested that EPA require that Montrose develop a monitoring and aquifer compliance plan; WRD further suggested that EPA should then host a public meeting to explain the plan and receive public comments. In the 2017-2018 CIP interviews, DTSC staff also suggested sharing the groundwater model with the community.

- **Technical Impracticability (TI) Waiver Zone:** Community members and advocates have been disappointed with the TI Waiver Zone established in the Dual-Site Groundwater OU3G ROD, suggesting the TI Waiver Zone needs to be revisited. In 2014, one community member suggested "…that TI Waiver gave a lot of the 'responsible parties' a free pass." In 2015, a community member suggested the people who live directly on top of the TI Waiver Zone are bearing the "costs" or burden of the contamination. Another person noted the situation "has been demoralizing and is demeaning to the community." One community advocate noted: "The responsible parties (RPs) are protected by the TI Waiver, which should be examined rigorously because it lets the RPs off lightly." Another community member mentioned that EPA's recent concern over vapor intrusion drives home the fact that people should not live on top of a TI Waiver Zone. In the 2017-2018 CIP interviews, WRD staff stated that they had questions about the Trico Industries area between the Boeing facility and footprint of the former Del Amo facility located in the TI Waiver Zone.

  In 2015, WRD recommended mass removal of the chlorobenenze DNAPL in the TI Waiver Zone, as well as intensive groundwater monitoring. (In their 2015 written comments, WRD noted this suggestion was made by other state agencies back in November 2011.) In 2015, DTSC suggested that EPA require PRPs to address how the benzene mass will be reduced at both the DNAPL source and groundwater contaminant plume areas. WRD also suggested that advancements in remedial technologies have occurred since the 1999 Dual-Site Groundwater OU3G ROD, in addition to new data. Furthermore, WRD said this "warrants another close evaluation of the TI Waiver Zone."

  Other community members have voiced concern over the lack of accountability for the TI Waiver Zone. Community advocates have suggested that given the long remediation timeframes, it's unclear which entities will be around to continue the groundwater cleanup work in the future.

- **Vapor intrusion:** For many years, community members have expressed concerns about the groundwater contaminant plume and the potential for vapor intrusion (read more about vapor intrusion in the Operable Unit Appendix). In 1996, interviewees expressed that groundwater contamination is not an immediate concern; yet, over the years, it could cause health effects through vapor intrusion. At the 2014 DNAPL Proposed Plan public meeting, community members continued to raise concerns about vapor intrusion. In 2014, DAAC sent over 200 postcards/letters to the Regional Administrator, requesting that EPA perform a vapor intrusion study. In the 2017-2018 CIP interviews, DTSC staff suggested developing an internal and external vapor intrusion and soil model.

  EPA's 2015-2016 vapor intrusion study did little to address some people's vapor intrusion concerns. Community members raised concerns regarding EPA's conclusions. In 2015, one community member noted: "Vapor intrusion appears to be occurring in my house… There needs to be an objective look to make sure proper vapor intrusion testing procedures are being followed." Another community member suggested that groundwater contamination "movement in the southeast direction under homes has a negative effect on the psyche of the community." A community advocate noted "there is always the possibility that there could be vapor intrusion in the future." This person further suggested that the long remedial timeframe puts the community at risk and that EPA does not seem to be considering the potential for earthquakes creating new vapor intrusion pathways. Furthermore, "there needs to be a robust system that monitors vapor intrusion until cleanup is complete."

  In the 2017-2018 CIP interviews, DTSC staff noted that the vapor intrusion study had not yet been finalized and that the community should be informed about its status. DTSC staff stated that any impact on the community from vapor intrusion should be shared with the community, and that there is not currently ample closure on the issue.

- **Antidegradation Policy Analysis:** During the 2017-2018 CIP interviews, DTSC staff asked if EPA had completed the Tier 2 Antidegradation Policy Analysis. A representative from the City of Carson asked about the science behind the new analysis at the Sites. A city representative stated that the Antidegradation Policy Analysis affects their aquifer and that reinserting materials can create turbulence. An LARWQCB representative noted that although they supported their staff's work on the Antidegradation Policy Analysis with grant money, that was an anomaly.

- **Montrose DNAPL (OU3D) cleanup:** At the 2014 DNAPL Proposed Plan public meeting, an attendee suggested that "some promising (cleanup) technologies have been screened out." Furthermore, community members requested a formal technology screening done in a collaborative manner with the community. A community advocate suggested EPA consider biological forms of treatment to degrade the DDT. In 2015, one community advocate noted that all available technologies were not evaluated for the DNAPL remedy. This person further suggested that the electrical resistance heating remedy should be reconsidered using the new data from the vapor intrusion investigation.

  In 2015, WRD noted the remedial alternatives for DNAPL outlined in the draft Feasibility Study Report would require more than 3,000 years to achieve groundwater cleanup goals. A community advocate suggested that the "decision to leave DNAPL in place" will lead to the groundwater extraction and treatment system operating for over 3,000 years. This person suggested that EPA does not seem to understand why the community is concerned about this 3,000-year timeline. WRD declared that this timeline is "entirely unacceptable."

  Many people have suggested that EPA has overlooked a DNAPL mass source removal remedy. In 2015, WRD suggests mass removal of the chlorobenzene DNAPL would be another viable approach for remediation. In 2014, a community leader said one of the technical advisors suggested that EPA believes because it is

impossible to remove "all the DNAPL from the Montrose site… it is therefore acceptable to leave a large residual fraction behind even if a potentially significant fraction of this residual DNAPL could be remediated." DTSC also suggested that EPA require Montrose confirm whether the DNAPL mass source can be removed and demonstrate the assumption that the DNAPL mass source will not spread out of the Dual-Site Groundwater OU3G containment zone identified in the OU3G ROD. Additionally, DTSC questioned whether the DNAPL mass source also exists in deeper areas than identified.

Community advocates have raised concerns regarding the potential for vapor intrusion during the implementation of the DNAPL electronic resistance heating remedial action. They believe the heating may cause vapors to migrate to residential areas and impact indoor air. In 2014, a community advocate suggested EPA conduct indoor air sampling prior to and during the remedial action. Over the past few years, DAAC members have consistently requested that EPA develop a robust sampling monitoring plan to ensure the electronic resistance heating remedial action will not impact the indoor or outdoor air of nearby neighbors.

- **Del Amo Waste Pits Area (OU2) cleanup:** In the past, community advocates raised concerns about incinerating the contaminants from the Del Amo Waste Pits in another community. One community member noted: "It's not good enough to incinerate it." The community wanted EPA to consider other remediation options. One community member suggested the waste pits caught on fire when they were being capped, suggesting a lack of safety or oversight on the project. This person also noted that electrical equipment was stolen during waste pits construction, suggesting a lack of security and care for the project. In 2015, one community member noted that the fence around the waste pits area was penetrable, allowing people to walk their dogs, ride bikes and operate ATVs on the Del Amo Waste Pits area.

COMMUNITY INVOLVEMENT AND INFORMATION-SHARING CONCERNS

6. Highly interested stakeholders:

Community leaders and advocates, stakeholders and state agencies have expressed interest in being kept more informed about study and cleanup activities. In 2015, WRD suggested EPA host semi-annual meetings with key regulatory agencies, WRD and DAAC. DTSC requested that EPA project managers hold regular coordination calls with their DTSC counterparts and that EPA management hold semi-annual coordination meetings with their DTSC counterparts. WRD and DTSC also requested more timely transmittal of site-related data and documents for review and comment. DTSC also requested that EPA provide sufficient notice of meetings and conference calls and provide more time for DTSC to consult with sister agencies and community groups.

In the 2017-2018 CIP interviews, community members, stakeholders and state agencies again asked to be kept up to date about site activities. A representative from Montrose stated that the recent weekly calls and frequent emails have led to great working relationships with the EPA project managers, allowing for effective communication about site issues. A representative from LADWP noted that they were happy with the amount and frequency of information they received about the Sites. A

representative from JCI Jones Chemicals, Inc. stated that EPA is responsive to their needs. WRD staff asked for a yearly in-person meeting for updates on the Sites or to meet whenever there are milestones in the cleanup work. Many of the stakeholders and state agencies asked to be informed when outreach is conducted, so they can be prepared for questions from their constituents. A Gardena City government representative stated that face-to face meetings are preferred. LA County Deparment of Regional Planning representatives requested that EPA provide yearly in-person meetings on updates for the Sites. South Coast Air Quality Management District (SCAQMD) staff requested additional information on the Sites' environmental justice designation in order to potentially partner for an upcoming pilot study.

In the 2017-2018 CIP interviews, PRP representatives also expressed a high level of interest in involvement at the Sites. Representatives for Montrose requested advance notice and copies of fact sheets or other documents that EPA distributes as well as an opportunity to provide feedback on fact sheets. The representatives stated that they are willing to provide any support needed to EPA to help reduce contractor costs. Shell representatives requested an opportunity to provide information to include in the site update fact sheets and to comment on them before they are finalized.

Also in the 2017-2018 CIP interviews, DTSC staff expressed interest in a greater level of involvement, including the potential for a DTSC public participation specialist assigned to the Sites. DTSC staff stated that they would like to be included in technical meetings and to provide comments on all documents. DTSC staff also requested more in-person meetings to ensure that all parties are on the same page.

Through the years, DAAC members have expressed an expectation to be partners in the decision-making process: "The EPA culture needs to change so that the community is an equal partner." In 2015, DAAC members suggested EPA should be a "real partner and act in a collaborative way with all stakeholders to move the project ahead." In a 2014 letter to EPA, DAAC suggested: "EPA needs to work with community members to design a communication program that is effective and predictable." DAAC's website emphasizes their ability to highlight issues for EPA action, such as vapor intrusion and completing an Antidegradation Policy Analysis. Many neighbors and interested stakeholders affirm that DAAC is a legitimate stakeholder on behalf of the community. In a 2016 letter to EPA, DAAC affirmed that the stakeholder meetings held in 2015 provided "a forum for productive dialogue" on the Sites. DAAC suggested these meetings allowed for many stakeholder organizations, state agencies, and the members of the community to discuss issues and concerns together. DAAC expressed frustration that EPA was no longer using this approach at the Sites.

7. Community involvement efforts and building trust with EPA:

Overall, residents have noted that EPA does not communicate well. In a 2014 letter to EPA, DAAC noted: "Information sharing for the Site is inadequate, ineffective and unpredictable." In addition, community members and advocates have noted the difficulty of getting meaningful information from EPA. In 2015, one community advocate said, "the communication has generally been slow, inconsistent and sometimes misleading…" One community advocate noted that "EPA shows up in ways that are hard to interact with." Another community advocate noted that "there has not been adequate or consistent involvement with the community." DAAC has suggested that EPA needs to find more creative and meaningful ways to involve the community. A community member participating in the 2017-2018 CIP interviews expressed frustration at being left out of important decisions such as consideration of the future use of the former ECI property. This individual stated that "no effort was made to keep the community in the loop in those decisions."

Many community members suggested that in-person communication is most effective in fostering trust. They suggested smaller, in-person meetings and door-to-door outreach. Community members noted appreciation for EPA's targeted outreach prior to construction activities for the Dual-Site Groundwater OU3G groundwater

treatment system, as well as signs with EPA's contact information during construction. The 2014 situational assessment suggested EPA develop construction project specific outreach plans, which include a door-to-door outreach component at least two weeks before construction activities begin.

The 2017-2018 CIP interviewees provided a variety of community outreach suggestions such as using the mobile information center, Channel 5 television and its website, radio advertisements, social media and www.nextdoor.com to share information. Interviewees identified specific community groups for engagement and outreach, including the Los Angeles Neighborhood Land Trust, DAAC, the Harbor Gateway Chamber of Commerce and the 186th Street Neighborhood Watch. Many interviewees said that they prefer to receive information electronically, and that they prefer the open-house approach for public meetings. Multiple state agencies and stakeholders requested in-person meetings on a regular, potentially annual basis. One stakeholder noted that the previous Community Advisory Group (CAG) for the Sites had worked well. Now that the CAG no longer meets, community members are not as in tune with site activities as they had been previously. The stakeholder added that when the CAG was operating, community members felt they had a voice in the process.

The 2014 situational assessment identified that some community advocates have a significant mistrust of EPA. They have reported EPA staff as defensive, reactive and lacking in transparency. One person noted that EPA's "commitments are not respected…" which leads to "disappointments." Others have noted that EPA staff have made them feel chastised and disrespected, further noting "lack of community sensitivity by key EPA staff." Furthermore, they asked for protocols that reflect greater transparency, such as documenting all meetings (and providing notes). During the 2017-2018 CIP interviews, LARWQCB staff noted that mistrust continues in the community due to "agency action or inaction" rooted in past experiences. DTSC stated that transparency with the community is essential, but meeting community requests to view documents that are not ready for sharing can be difficult.

The 2014 situational assessment suggested that EPA shift toward a more proactive outreach approach. This would ask EPA to recognize the community members as assets "to restore health and safety to the neighborhood." Additionally, the draft report asked EPA to consider a youth model leadership program, working with young people in community outreach. A community member in the 2017-2018 CIP interviews suggested that EPA reach out to schools and students to share information.

Over the years, neighbors have complained about the timely distribution of information. Some community members voiced frustration about the lack of timely distribution of meeting announcements. In 1996, one neighbor said they need more than one-week notice of upcoming events. One DAAC member noted "it seems like EPA does not care" when timely distribution of meeting announcements does not occur. A community member participating in the 2017-2018 CIP interviews stated although it seemed like the cleanup is in a "lull" period, the lack of information sent out recently to residents made him nervous.

The 2014 situtational assessment noted: "Various stakeholders had different preferences regarding the (information) frequency…most mentioned that they would like more predictability…" Community members asked for a more consistent schedule for updates, because they have felt overburdened by a random "bombardment" of information: "(There is)…either too little or too much." Some community members requested a newsletter distributed once or twice a year, while others asked for a "quarterly or biannual newsletter that explains what is happening across all OUs." The 2014 situational assesment suggested EPA prepare a monthly two-page newsletter with progress updates, with a uniform, short format that provides basic information in an accessible manner. The review suggested EPA host a focus group to develop the format. Additionally, the review suggested monthly in-person gatherings to share information.

Some older complaints (in the early 2000s) focus on the use of EPA staff time on issues raised by small segments of the impacted neighborhood. Some neighbors have said that EPA is wasting taxpayers' money by responding to

small segments of the community, and EPA should get on with the cleanup using its authority. Over the years, some community members have even expressed concern about the domination of public meetings by a few individuals, citing it as the reason they refuse to attend such events. Participants in the 2017-2018 CIP interviews discussed a similar issue with public meetings, with one or more individuals taking over much of the time allotted. DTSC staff noted that they prefer an open-house meeting approach and LADWP staff stated that they appreciated the open-house meeting approach.

Some participants in the 2017-2018 CIP interviews shared positive comments about EPA's efforts at the Sites. SCAQMD staff stated that EPA had completed due diligence regarding community involvement during the 2015-2016 vapor intrusion investigation. They noted EPA's proactive work brainstorming techniques for outreach with community members and advocates, producing translated materials, meeting with DAAC, hosting booths at events and going door-to-door. DTSC staff noted increased community confidence in the project. DTSC staff further stated that the community is not as vocal with complaints about the cleanup at this time because they are well informed and more trusting of EPA and DTSC's activities. A community member stated that EPA makes a good effort to communicate remediation methods, and that it seems that EPA makes the best choices for cleanup overall. Another community member noted that EPA is accessible and responsive.

8. Understanding the role of PRPs:

Others have raised concerns about EPA's relationship with the PRPs and a lack of information on the PRPs. The 2014 situational assessment suggested that EPA is not providing enough information on who the polluters are: "(EPA needs to) identify contacts for accountable parties from EPA and Montrose." One community member noted: "I'm concerned about EPA's closeness to polluters." During the 2017-2018 CIP interviews, DTSC staff noted that EPA has meetings with the PRPs and that they are not always invited. They said that they would like to be more involved in the technical meetings. DTSC staff also expressed frustration about the difficulty of using the Montrose portal to access documents and information. To do this, they requested EPA's assistance; it is their impression that the PRPs do not listen to the state.

In 2015, a community member raised a concern regarding a lack of strong agreement between EPA and Montrose to maintain the groundwater extraction and treatment system over time. Over the past five years, community advocates have raised frustration over being left out of conversations between the PRPs and EPA. The 2014 situational assessment suggested that EPA provide greater transparency for the community regarding EPA and PRP interactions. Furthermore, the review suggested EPA explain the ethical guidelines used to interact with the PRPs (in a newsletter or community meeting), as well as share summaries of interactions, to the extent allowable by law.

Furthermore, community leaders have raised concerns about the validity of information such as testing and monitoring results from PRPs. In the 2014 situational assessment, the authors recommended that EPA invite the community to help identify selection criteria for PRP contractors. During the 2017-2018 CIP interviews, a community member expressed gratitude that PRPs have been identified and that there is no question about their responsibility for paying for the cleanup.

9. Information sharing:

Community members have noted the information repositories at the nearby libraries are not helpful. A 2017-2018 CIP interviewee noted that when they visited the information repository, the materials were unorganized and unclear. In 2015, community members noted the information repositories do not contain up-to-date information and the existing information there is not helpful. One person suggested that having documents on a compact disc isn't the same as having printed documents and document summaries or a person to talk to and share questions with. In the 2014 situational assessment, in addition to many in-person communications over the past

five years, community members and DAAC ask that all the information be provided in an accessible repository closer to the impacted neighborhood. State agencies and stakeholders participating in the 2017-2018 CIP interviews stated that they would be more likely to access the site website or search for site documents online rather than visit an information repository.

In 2015, community members also noted the previous Del Amo and Montrose websites were not helpful, because they include a hodgepodge of information put together in an uninviting way (EPA's Superfund Program switched website formats in January 2018). During the 2017-2018 CIP interviews, a key stakeholder stated that EPA's new Del Amo and Montrose websites had fewer documents available than the LARWQCB and DTSC's websites. A representative from LA County noted that when they recently accessed the new websites, they were unable to find site documents. DTSC staff stated that public documents should be posted on the websites and shared immediately.

Over the years, community members and DAAC have requested a bulletin board or kiosk near the vacant lot on 204th Street. This bulletin board could describe the history of the Sites and provide a place to host current information or advertise upcoming public meetings or events for the Sites.

The 2014 situational assessment suggested that EPA work with community members to establish a protocol (or schedule) for frequent updates to the information repositories. The review also suggested that EPA digitalize the information and allow communities to access it online.

NEIGHBORHOOD AND PROPERTY CONCERNS

10. Status of the vacant lot from the former 204th Street buyout area (and potential park):

Community members have voiced concerns about the vacant lot being unsafe. There was a fence around the vacant lot, which was not maintained and people used the area. However, since the Los Angeles Neighborhood Land Trust acquired the lot they have worked with the community.

Others have noted that the area will never become a park. "That was smoke and mirrors," suggested someone in 2014. Another community member places a large sign in her yard when EPA is in the neighborhood; it notes that her children are now adults but there is still no park. The lack of information regarding the potential future park continues to frustrate people. The 2014 situational assessment suggested EPA community involvement staff might provide leadership to help LA County work toward creating a park.

In 2015, a community member identified confusion about whether a park would be safe regarding contamination from the Sites. "…(A) lot of people want to know why in the world we would put a park so close to a toxic waste site."

State agencies, stakeholders and community members participanting in the 2017-2018 CIP interviews expressed interest in the reuse of the area as a park, with some requesting an update on the park's status. One resident stated that the park will foster optimism in the community, and that once it is installed, residents will worry less about DNAPL. A community member suggested that EPA

develop a one-page fact sheet with information about any past or current contamination at the potential park area.

11. Property value impacts and information for prospective neighbors:

Community members and local businesses often voice concerns about property values. During the 2017-2018 CIP interviews, a stakeholder stated that the area lost potential development projects and business revenue during the first five years of the Del Amo site cleanup process. The stakeholder said that the impacts on businesses have lessened over the years. EPA often receives requests for information on the Sites to help with a phase 1 or phase 2 environmental assessment. In a 2018 phone call, a local business owner noted he could not get a refinancing loan from a bank due to his business being located "in a Superfund site."

Community members have voiced frustration about the lack of notice regarding the Sites prior to moving into the neighborhoods. Community members suggest EPA take measures to inform people who are considering buying or renting property in the area. In 2015, community members suggested signage around the neighborhood to alert prospective home buyers or renters. One request was for a sign about the Sites to be added to the groundwater treatment system facility on Normandie Avenue. Other community members have asked for a kiosk near the vacant lot on 204th Street to describe the history of the Sites. In the 2017-2018 CIP interviews, a community membert stated that they were not aware of the contamination before moving to the community. This community member also suggested that the reuse of the former ECI property as a warehouse instead of residential units is detrimental to local property values.

Community members and advocates raised the need for deed restrictions or proactive communication measures to inform people buying a property in the area. This point is particularly raised in relation to homes on top of the Dual-Site Groundwater OU3G TI Waiver zone. The 2014 situational assessment noted community members' frustration about not knowing who to contact for information needed to sell property (i.e., what needs to be disclosed to the buyer). Furthermore, community members have also noted the need for EPA to update local elected officials, so they can be informed of the need for "deed restrictions for occupancy and future development."

12. Relocation of nearby neighbors:

Over the years, DAAC has continued to communicate its interest in a buyout of the entire neighborhood south of the former Del Amo property to EPA. At the November 2014 DNAPL Proposed Plan public meeting, several community members requested that they be relocated away from the Sites. "I have asked them time and time again to relocate," said one community member. "A plan to relocate the residents of the area should get top priority," said another community member. Another community member who was impacted by the Kenwood yard removal and temporary relocation stated: "…it makes me wonder about all the money being spent by a government that doesn't have any money, and they can spend millions of dollars on a cleanup when you can clean and remove the most important thing, the people, for much less." During the 2017-2018 CIP interviews, a community member stated that some residents moved away from the neighborhood because of the contamination.

In 2015, community members noted the treatment of contamination could be more robust if the community was not living in the area. Furthermore, the presence of contamination is dangerous for the neighbors; therefore, "relocation should be considered."

Another community member noted that home values have declined as a result of the Sites. This person also noted that low-income people cannot just choose to move away from the area.

13. Local government awareness:

Many neighbors impacted by the Sites live in unincorporated LA County. Some believe this is the reason why "...this area hasn't received the attention that it should…" There is an overall sense of lack of elected officials looking out for this neighborhood. In 2015, community members noted that elected officials do not attend the EPA public meetings or take interest in the Sites. During the 2017-2018 CIP interviews, one community member stated that LA County and the City of LA do not know as much about the project as the community, and that they should be invited to participate in the process. The community member and representatives from LA City Councilmember Joe Buscaino's office asked if SCAQMD should also be invited to participate in the process.

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[i] State Agencies (all within the California Environmental Protection Agency):

- Department of Toxic Substances Control (DTSC)
- Los Angeles Regional Water Quality Control Board (LARWQCB)
- State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW)

Key Stakeholder Organizations:

- Shell Oil Company (Shell)
- de maximis, inc., Montrose Chemical Company (Montrose) contractor
- Councilmember Joe Buscaino, City of Los Angeles 15th District Office
- Los Angeles County (Department of Public Health, Department of Public Works, and Department of Regional Planning)
- Los Angeles County Supervisorial District 2 and District 4
- Los Angeles Gateway Chamber of Commerce
- Los Angeles Department of Water and Power (LADWP)
- JCI Jones Chemicals, Inc. (Jones)

[ii] In 2015, EPA completed a number of outreach events as part of the Del Amo Superfund site Five-Year Review (FYR). EPA hosted a highly interested stakeholder meeting to discuss the forthcoming FYR and brainstorm ways to provide opportunities for the public to comment. EPA mailed a FYR factsheet, providing information on the process, inviting the community to comment, and advertising the forthcoming Mobile Information Center (MIC) tent event in the Kenwood neighborhood. During the MIC event, EPA canvassed door to door in the neighborhoods (over 500 households) to hand out the FYR fact sheet and a comment card inviting neighbors to visit the MIC or provide input in other ways. More than 25 people visited the MIC to talk with EPA staff. Four people participated in the interviews and three people submitted comment cards. Following the event, more people participated in phone interviews. A complete set of community comments for the FYR are included in Appendix D: Interviews of the "Third Five-Year Review Report for Del Amo Superfund Site Operable Unit #1 and #2, Los Angeles County, California," prepared by the U.S. Army Corps of Engineers for the U.S. Environmental Protection Agency in September 2015. That document will soon be available on the new Montrose Superfund site webpage and the new Del Amo Superfund site webpage.

Responsiveness Summary

EPA shared a draft of this Community Involvement Plan (CIP) with the public for comments. During the comment period, EPA hosted an interactive booth at the December 2018 Open House. This section summarizes the comments that EPA received and EPA's responses to those comments.

As a non-technical document, the CIP is a resource for community members to better understand EPA's involvement in the community and basic site information. Although some of the commenters requested that the CIP include a greater level of technical detail, EPA believes the level of detail is appropriate. Some commenters requested additional technical detail on soil vapor extraction, institutional controls and the TI Waiver Zone. Commenters suggested using specific technical terms in certain places. In response, EPA reworded additional technical detail on those topics and reworded some sections for additional clarity. Some commenters suggested including more technical diagrams and detail on cleanup technologies. In response, EPA added more information where appropriate.

Comments also provided suggestions on the format and presentation of the CIP. EPA made minor formatting changes, such as adding bulleting and page numbering in certain sections. EPA revised the CIP to have more consistent terminology. Commenters requested more details or clarification about site characteristics, including site location and size. EPA added more details where appropriate. EPA also included some comments provided in the CIP Appendix on Community Concerns.

Prepared by:
U.S. Environmental Protection Agency
June 2020

APPENDIX 6

Draft Situational Assessment for the Del Amo and Montrose Superfund Sites

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN

Si necesita una traducción inmediata o una aclaración en español, llame a
Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

If you require translation or clarification in Spanish, call
Yarissa Martinez at (213) 244-1806 or Romie Duarte at (213) 244-1801 for additional information.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

December 17, 2018

SUBJECT: Draft Situational Assessment for Del Amo and Montrose Superfund Sites

This letter is to explain the document titled *Draft Recommendations for an Enhanced Community Involvement Approach for the Del Amo and Montrose Superfund Sites,* dated May 22, 2014. The United States Environmental Protection Agency (EPA) is sharing this draft recommendations document as it was submitted to EPA without corrections. EPA found the information from the draft document important when we developed the Draft Community Involvement Plan for the Del Amo and Montrose Superfund sites, which we issued on December 6, 2018 for public comment.

The Center for Collaborative Policy prepared this draft recommendations document under a contract through EPA's Conflict Prevention and Resolution Center (CPRC) as part of CPRC's Community Involvement as Conflict Prevention program. EPA CPRC's Community Involvement as Conflict Prevention program supports activities that promote conflict prevention, such as developing situation assessments, at Superfund sites. Situation assessments identify stakeholders, issues, and dynamics among parties within a context where there is conflict or the potential for it. Situation assessments typically rely on interviews with relevant stakeholders to understand their perspectives and interests.

In 2013, EPA CPRC contracted with the Center for Collaborative Policy to conduct a situation assessment of the Del Amo and Montrose Superfund sites. One of the outcomes of the work was a report to offer community engagement recommendations that could serve as a foundation for a meaningful and realistic joint community involvement plan for both sites. The work included interviews with community members living in the areas affected by the clean-up activities; local officials and civic leaders; representatives of environmental groups, advocacy groups, and community-based organizations in the area; opinion makers; and business people.

In 2014, the Center for Collaborative Policy encountered scheduling and logistical issues as they tried to present the draft recommendations document for public review. At the same time, EPA's Superfund site team had many on-going site activities which required attention from the community involvement staff and key community members. Eventually, CPRC needed to close-

out the situation assessment project, due to timelines in the over-arching contract, and the recommendations were not presented to the public.

EPA is sharing this draft recommendations document because it provides a well-prepared summary of stakeholder interviews, relevant information about the history of the community impacted by the Sites, and thoughtful recommendations to the EPA Superfund site team. However, it does have some factual errors regarding EPA programs and dates of Superfund site activities. EPA has incorporated relevant aspects of the draft document into the Draft Community Involvement Plan for the Del Amo and Montrose Superfund Sites. Additionally, in 2016, EPA began to incorporate some of the recommendations in this draft recommendations document when doing community involvement work.

If you have any questions, please contact me at 415-972-3350 or yogi.david@epa.gov.

David Yogi
Manager, Community Involvement Section
Superfund Division, Region 9
U.S. Environmental Protection Agency

DRAFT RECOMMENDATIONS FOR AN ENHANCED COMMUNITY INVOLVEMENT APPROACH FOR THE DEL AMO AND MONTROSE SUPERFUND SITES

May 22, 2014

Prepared by the Center for Collaborative Policy,
California State University-Sacramento

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DRAFT RECOMMENDATIONS FOR AN
ENHANCED COMMUNITY INVOLVEMENT APPROACH
FOR THE DEL AMO AND MONTROSE SUPERFUND SITES

I. INTRODUCTION

As part of the US Environmental Protection Agency's (EPA's) clean-up efforts at Superfund sites, EPA seeks to engage the people living and working in the area to provide information about the nature and extent of the contamination, implications for local residents and businesses, and progress on containing and/or cleaning up the contamination. There have been some tensions between community members and clean-up personnel at the adjacent Montrose and Del Amo Superfund Sites in the Los Angeles area; EPA is seeking effective ways of re-establishing and maintaining good relationships with stakeholders so that the agency can effectively engage its members in discussion of future activities. To that end, EPA contracted with the Center for Collaborative Policy (CCP) in early 2013 to conduct a situation assessment and offer community engagement recommendations that could serve as the foundation for a meaningful and realistic joint community involvement plan for these two sites.

CCP, established in 1992, is a unit of the College of Social Sciences and Interdisciplinary Studies at California State University, Sacramento (CSUS). CCP's mission is to build the capacity of public agencies, stakeholder groups, and the public to use collaborative strategies to improve policy outcomes. CCP is based in Sacramento, California, and has offices in the Bay Area and Southern California. In addition to these offices, the Center has a network of collaborative associates throughout California and the western US. CCP provides services to government agencies, stakeholders, and communities to address complex public policy challenges through collaborative stakeholder processes and conflict resolution, collaborative public involvement, strategic planning, visioning, and training. CCP personal also conduct research and teach in the CSUS Public Policy and Administration Program, where students can earn a Certificate in Collaborative Governance. Biographical information for the CCP team involved in this Assessment is provided in Appendix A.

This report is intended as much for the members of the community directly affected by these Superfund sites as for EPA decision makers. Through this report and an anticipated community meeting to discuss and refine these recommendations, CCP hopes to help build bridges between the organizations and individuals who are affected by, or involved in addressing, the contamination at these sites. Ultimately, they share the goal of improving the health and safety of this community, and we hope our recommendations will help all concerned work together more constructively toward those goals.

II. HISTORY OF THE MONTROSE CHEMICAL CORPORATION AND DEL AMO FACILITY

From 1947 until 1982, the Montrose Chemical Corporation of California (Montrose) manufactured the technical grade of the pesticide dichlorodiphenyltrichloroethane (DDT). The production occurred at its site located at 20201 Normandie Avenue, in Los Angeles County, California. Raw materials such as chlorobenzene and DDT were released and contaminated the ground water in the form of a dense non-aqueous phase liquid (DNAPL). Soil contamination from the Site is on and near property soils, in the ground water, in the storm water drainage pathways, and in the Pacific Ocean. The plant was disassembled and removed from the 13-acre property in 1982.[1]

The Montrose clean-up is structured in Operable Units (OU's). There are seven OU's and four Project Managers[2]. The OU's include:

- OU 1 Contamination on and near property soil;
- OU 2 Existing storm water pathway contamination;
- OU 3a Dual site ground water contamination;
- OU 3b Montrose DNAPL;
- OU 4 Historical storm water pathway;
- OU 5 Palos Verdes Shelf contamination;
- OU 6 Historical storm water pathway; and
- OU 7 Jones Chemical.

From 1943 until 1972, the Del Amo Facility was a center of large-scale industrial activities. Originally built to produce synthetic rubber during World War II and owned by the United States Government, the 280-acre operation consisted of a styrene plant operated by Dow Chemical Co., a butadiene plant operated by Shell Oil Co., and a synthetic rubber plant operated by U.S. Rubber Co., Goodyear Tire & Rubber Co., and others. In 1955, the U.S. Government sold all three plants to Shell Oil Company and Shell continued to operate these plants until 1971. Synthetic rubber was produced by manufacturing styrene and butadiene separately, piping them to the rubber plant, and then mixing the two together. Within each facility, wastes from the production processes were directed into separator units. Settled sludge from the separator units was disposed of either off site or in a waste disposal area located on site. Six unlined pits and three unlined evaporation ponds made up the 4-acre on-site disposal area. Upon closure in 1972, the unlined pits and ponds that were still open were covered with soil. Most of the 280-acre facility has since been developed as an industrial park.

In 1984, contamination was discovered in the waste pit disposal area and underlying soils. Groundwater located beneath the site is heavily contaminated, but

[1] www.epa.gov/region09/delamo
[2] April 2010 EPA Community Involvement Plan

is not presently used as a source of drinking water. The deeper drinking water aquifer supplies 34,000 people located within 4 miles of the site. Today, the 4-acre waste pit disposal area is sealed with a RCRA-equivalent cap, and the waste pit area is undeveloped. The Del Amo Facility is bounded to the south by residences and on all other sides by industrial and commercial facilities. Approximately 17,600 people live within 1 mile of the site.[3] The Del Amo clean-up consists of three operation units (OU's) and two Project Managers[4]. The Del Amo OU's include: OU 1 Soil and NAPL; OU 2 Waste pits area; and OU 3 Dual Site.

As shown in Figure 1, these two Superfund sites are surrounded by residential, light industrial, industrial and commercial uses. The Montrose site is located in the City of Los Angeles while the Del Amo site is located in Los Angeles County. Montrose is west of Normandie, while Del Amo is to the east.

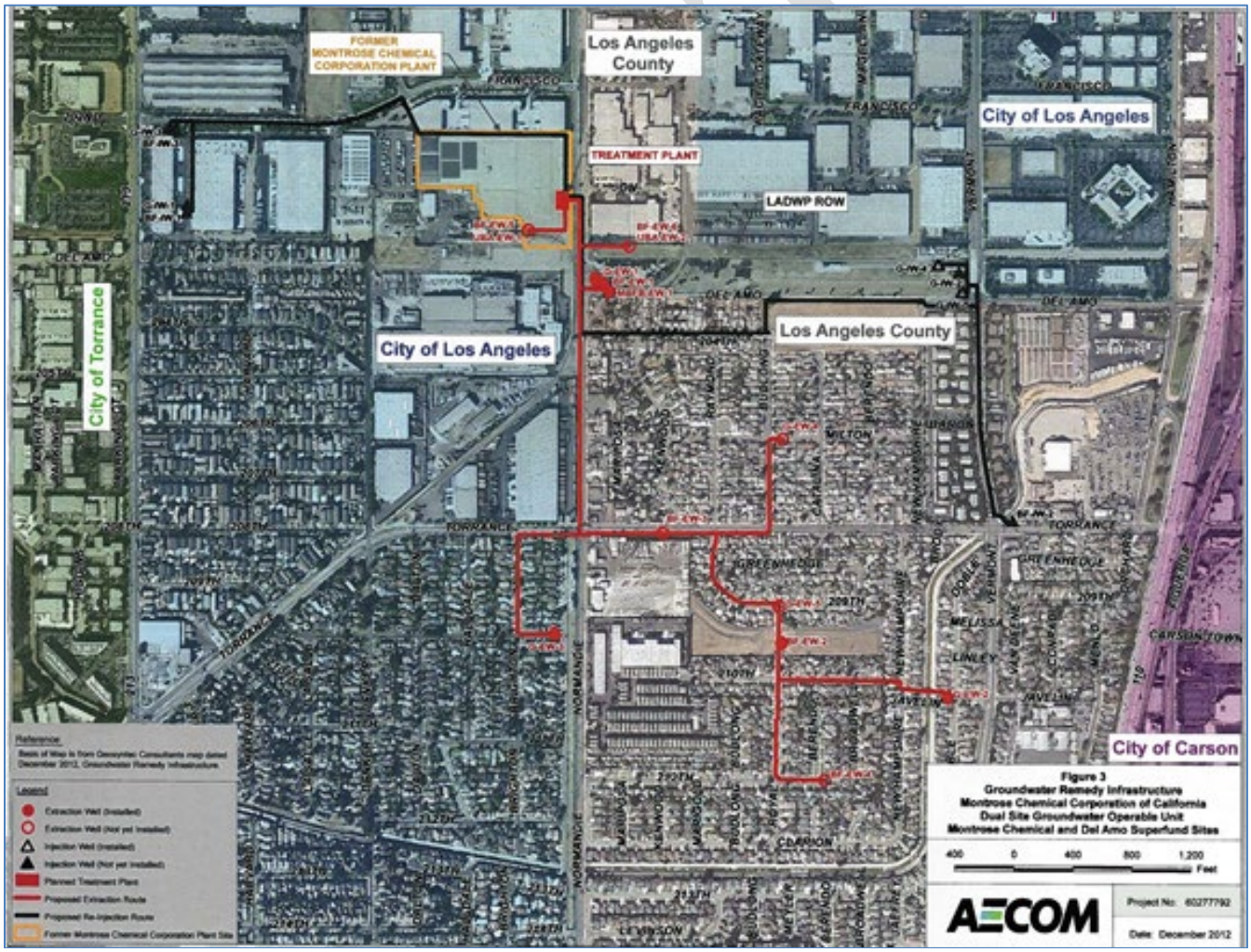

Figure 1: The Montrose Chemical & Del Amo Superfund Sites

[3] http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/ViewByEPAID/CAD029544731
[4] April 2010 EPA Community Involvement Plan

III. SUPERFUND COMMUNITY INVOLVEMENT REQUIREMENTS AND RESOURCES

A Community Involvement Plan (CIP) is a site-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. CIPs specify EPA-planned community involvement activities to address community needs, concerns, and expectations that are identified through community interviews and other means. A CIP is required by the National Contingency Plan (NCP), which is the Federal government's strategy for responding to both oil spills and hazardous substance releases. These requirements outline the steps EPA must take when responding to situations in which oil is discharged into or upon the navigable waters of the United States, or when hazardous substances, pollutants, or contaminants are released into the environment. The NCP is the primary regulation of the Superfund program.

Technical Assistance Grants (TAGs)[5] provide money for activities that help communities to participate in decision making at eligible Superfund sites. An initial grant up to $50,000 is available to qualified community groups so they can contract with independent technical advisors to interpret and help the community understand technical information about their site. Congress made public involvement in decision making an important part of the Superfund process when the program was established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. The Del Amo Action Committee received TAG funding for a few years; this seed funding enable the organization to build capacity and mobilize the broader community.

EPA's Technical Assistance Services for Communities (TASC) [6] provides non-advocacy technical assistance services at no cost to communities to enable them to substantively participate in addressing environmental issues and actions that impact them. EPA staff furnishes the information, education or support that is required by communities to be effectively engaged in EPA actions, decisions and projects. However, in some instances, supplemental technical assistance may be necessary for a community to fully participate in EPA decision-making processes and address its environmental concerns. The Del Amo Action Committee has received TASC funding and has hired consultants to produce briefings on a number of environmental impacts. These funds have also helped Del Amo Action Committee sponsor community forums to discuss technical issues regarding the Del Amo Superfund Site.

[5] http://www.epa.gov/superfund/community/tag/
[6] http://www.epa.gov/superfund/community/tasc/

IV. APPROACH

This situation assessment was designed to obtain stakeholder input that could provide the foundation for a joint community involvement plan for the Montrose and Del Amo Superfund Sites. CCP sought input from stakeholders internal to EPA as well as community entities and residents. CCP wanted to learn whether there were certain aspects of the current community involvement approach that stakeholders valued and others that they would like to change. In the latter case, CCP wanted to hear what kind of changes stakeholders would find helpful. CCP combined all the input (reported in the "Findings" section of this report), and used this as the basis of our recommendations.

A. Document Review

To develop our interview questions and identify potential interviewees, the CCP undertook a brief, but intensive, study of the site and community profiles. This began with an orientation briefing by the EPA Region 9 team and our prime contractor, SRA International, Inc. We then collected and reviewed numerous documents about these sites and the community's past involvement with EPA's remedial efforts. We obtained relevant documents from the EPA Region 9 team, from Skeo Solutions (a consulting firm that manages EPA's technical assistance program for communities near Superfund sites[7]), and from the EPA website. Documents reviewed by the CCP team included:

- Website articles, "EPA Community Involvement Plans" and "The EPA Community Involvement Toolkit";
- Past EPA community involvement plans for the Montrose and Del Amo Superfund Sites;
- EPA records of past community interviews;
- "Montrose and Del Amo Superfund Sites: Groundwater," by Del Amo Action Committee and Skeo Solutions;
- Slides from a past TASC presentation by Angela Johnson Meszaros;
- "Technical Assistance Needs Assessment," by Skeo Solutions;
- "Montrose Superfund Site and Del Amo Superfund Site: Information about the Harbor Gateway Community," by CCP intern Karen Orlansky (see Appendix B ;
- The TASC Fact Sheet: "Revised DNAPL Feasibility Study";
- EPA Flyer, "Kenwood Avenue Cleanup is Complete"; and
- "Overview of TASC and TASC Del Amo Work," by Krissy Russell-Hedstrom.

[7] Skeo Solutions selects appropriate technical assistance specialists to work with stakeholders, responds to questions from the community and from EPA, reports regularly to EPA and notifies EPA when project issues or concerns arise.

B. Interviews, Focus Groups, and Informal Conversations

The core of CCP's assessment approach consisted of stakeholder interviews. The interview questions, which can be found in Appendix C, were designed to:

- Identify issues and concerns important to the community;
- Understand the history of community interactions with EPA and the agency's containment / clean-up process;
- Determine the ways in which residents and other stakeholders seek or receive information about the sites and learn whether these means are satisfactory to the community;
- Identify additional stakeholders; and
- Explore technical assistance needs.

CCP then developed a list of potential stakeholders that could be interviewed. Our goal was to talk with a representative slate of stakeholders. We started with those who had been most involved to date, based on knowledge shared by EPA and Skeo staff and on our document review. As we talked with these individuals, we also asked them for suggestions about others with whom we should speak. We listened for names that came up repeatedly, and pursued interviews with those individuals and/or organizations as well. Our list ultimately included residents of the areas affected by the clean-up activities; local officials and civic leaders; representatives of environmental groups, advocacy groups, and community-based organizations in the area; opinion makers; and business people. Some of those to whom we reached out did not respond, or got in touch but declined to be interviewed. Appendix D lists those with whom we were able to speak.

CCP scheduled and conducted most interviews during March and April 2014. After an initial email introduction from EPA, CCP staff initiated contact with stakeholders through telephone or email. In some cases, the actual input was provided via telephone, and in other cases in person. Some conversations took the form of semi-structured interviews, while others were briefer and more informal, and still others occurred in group settings (e.g., informal focus groups). CCP informed all stakeholders who participated in the interviews that their comments would be combined with those of others in our report, and no comments would be attributed to any one individual. Our intent in doing so was to create an environment conducive to candor.

An initial CCP visit to the community helped the CCP team get a sense for community dynamics, demographics, land uses, distances between uses, geographic connections and multi-jurisdictional dynamics. During this visit, CCP staff introduced themselves to stakeholders and identified additional ones. A second visit was used to interview stakeholders and establish communications with relevant parties.

Some of the stakeholders whom CCP contacted turned out not to have specific knowledge of the clean-up efforts, but still had pertinent insights about the sites, EPA, communication and community involvement. CCP conducted informal conversations with these individuals and noted points that were relevant to the information gathered through the formal interviews.

C. Community Meetings

CCP identified two community groups whose meetings might be important opportunities to collect data for this assessment as well. One was the Harbor Gateway South Neighborhood Council, which was established in 2003 and today represents 22,000 residents. The Council acts as a forum for discussion and advice on neighborhood needs, City service delivery to the neighborhood, City-wide issues, and concerns related to the governance of the City of Los Angeles. Any community member may participate. CCP attended the Council's monthly meeting on April 10, 2014 and was placed on the agenda upon request. Nineteen residents and one law enforcement officer attended the meeting. CCP was able to explain the situation assessment and explore participants' awareness of clean-up activities related to the Montrose Superfund Site.

The second community group from whom we sought input was the Del Amo Action Committee, whose mission is to enhance the health and safety of the residents who live around the Del Amo Superfund Site. This group advocates for policy changes that promote environmental justice through partnerships, networking, and a greater tolerance for economic, cultural and ethnic diversity. The Del Amo Action Committee has sponsored community forums to review and discuss information pertaining to environmental health. CCP representatives held a number of phone interviews with key Committee members. Upon request, the Committee organized a focus group consisting of the Committee's Board of Directors. This meeting was facilitated by CCP on April 11, 2014 at a local restaurant.

In sum, CCP connected with representatives from the following sectors:

- Residents;
- Community-based organizations;
- Businesses;
- Government;
- Educational and daycare institutions; and
- Advocacy groups.

Based on these stakeholder conversations, CCP drafted the below findings and initial recommendations for an enhanced community involvement approach for these two sites. CCP focused on strategies that would meet the underlying interests of all concerned in a manner that would not only avoid exacerbating tensions, but also chart a path toward a more positive relationship between EPA and the community. CCP will revise the draft plan based on review and comment by EPA and community interviewees during spring and summer, 2014.

D. Linkage to Skeo Solutions' Technical Assistance Needs Assessment

Early in the process, CCP, EPA and Skeo Solutions discussed how this situation assessment could complement the Technical Assistance Needs Assessment (TANA) conducted by Skeo Solutions. All parties were interested in minimizing inconveniences for community members and avoiding duplicative efforts. The TANA is a site-specific process to identify whether a community requires additional support from EPA in order to understand technical information and enable meaningful community involvement in the Superfund decision-making process. Members of the community are interviewed in order to get their views on how the community is receiving technical information about a site; whether the community needs additional assistance in order to understand and respond to site-related technical information; and whether there are organizations in the community that are interested or involved in site-related issues and able to act as an appropriate conduit for technical assistance services to the affected community. The TANA process enables Skeo Solutions to design a coordinated approach for meeting the community's technical assistance needs while minimizing the overlap of services provided by the remedial project manager (RPM), on-scene coordinator (OSC), and community involvement coordinator (CIC).[8]

In contrast, the situation assessment is not focused on building technical or subject-specific capacity, nor is it typically geared toward building the community's capacity in general. Rather, the situation assessment enables the team to recommend measures that EPA can take to improve communication and relationships with the community and stakeholders. Despite the different focus associated with each of these types of assessment, there is an overlap in the questions they seek to explore. Consequently, CCP was able to include questions in our situation assessment that would generate the data Skeo Solutions would need to complete its Technical Assistance Needs Assessment.

V. FINDINGS

Interviewees' had a wide range of perspectives. Some responders acknowledged and appreciated EPA's efforts to mitigate site contamination and respond to community concerns, while others were critical of EPA's interactions with the community. Three themes emerged, as follows:

- Stakeholder Concerns: Community members experience site-related stresses in the form of: a) physical disruptions and impacts on the quality of neighborhood life due to the remedial activities; and b) worries about health impacts and property values.

[8] http://www.epa.gov/superfund/community/pdfs/toolkit/tana.pdf

- Mistrust of EPA: While some stakeholders expressed appreciation for EPA's remedial efforts and efforts to convey information accurately, we also encountered a significant level of mistrust of EPA in the community surrounding these sites. A number of stakeholders perceive agency personnel as defensive, reactive, and lacking in transparency.

- Search for the "Big Picture": Many respondents reported difficulty grasping the "big picture" with respect to EPA's remedial efforts.

Respondents did have a number of suggestions for improving the relationship between EPA and those affected by the Montrose and Del Amo clean-up activities. We discerned three focal areas in their suggestions – insights pertaining to: a) project management; b) community involvement; and c) communication / information dissemination. Findings with respect to each of these three focal areas are detailed below.

A. Project Management.

Clearly the complexity involved in clean-up activities at the Del Amo and Montrose Superfund Sites has demanded an equally complex management structure to coordinate activities. However, many respondents suggested that the complexity of the project management structure contributes to miscommunication, misunderstanding, and mistrust. Respondents stated that there are too many program managers, that it is difficult to identify the appropriate contact person, and that the turnover of community involvement coordinators creates a void in historical memory about the clean-up effort. They asked for a single point of contact who could help them grasp the "big picture" of how the clean-up is progressing.

Respondents welcomed the idea of EPA having a written community relations plan laying out the protocols that would guide EPA's interactions with the community. They asked that the protocols reflect greater transparency – i.e., documenting all meetings and creating a repository to hold such information as a means for creating historical memory. Related comments included:

- "It will be good to have a community relations plan/written approach available to all stakeholders so all can monitor its implementation."
- "Document all meetings: record, provide notes, post."
- "Create a repository of information so that people can access anything at any time."

B. Working With The Community

EPA's current community involvement team is recognized for its diligent work and efforts to connect with community members and ensure that accurate information is available. Yet at the same time, some community members expressed suspicion and mistrust of EPA and its handling of the clean-up effort. This sentiment seems to be based primarily on a perceived lack of transparency and on uneven experiences

with the construction crews under EPA's oversight. When asked how respondents view the relationship between the community and EPA, responses included:

- "Variable -- at times good and at times bad."
- "The EPA/community relationship goes up and down."
- "Suspicious, adversarial, angry."
- "Untrusting."
- "Lacks accountability."

EPA's uneven relationship with the community reflected the way community members experienced interactions with EPA staff and contractors. Some respondents said they had felt chastised and disrespected.

- "Lack of community sensitivity by key EPA staff."
- "Efficiency that ignores or rejects community involvement."
- "Commitments that are not respected – disappointments."

Respondents reported that their experience with site-related construction crews has been quite variable. Some have integrated well into the community, while others have been perceived as disruptive. See, for example, the following comments:

- "Construction crews are polite and try to be helpful."
- "The fall construction crew used south of Torrance was excellent, courteous, informative, and engaged."
- "There is lack of phone number and contact person for dealing with construction crew."
- "Crews are not trained to address the community. They are rude as well. This is bad community service."

Respondents provided suggestions on how EPA can build trust and engage with the community in a more positive manner. They suggested that EPA engage the community in honest conversations about the effects of the site and clean-up activities on human and environmental health, including how they are defining and addressing impacts. They urged EPA to treat the community as a partner in working toward a healthy and safe neighborhood. They recommended that EPA personnel make special efforts to be courteous and demonstrate genuine efforts to minimize impacts when interacting with owners or tenants of properties that are directly affected by the clean-up. Related comments include:

- "The EPA culture needs to change so that the community is an equal partner."
- "Stay away from a "trust me" mentality -- trust has to be earned before you can ask for it."
- "Lack of community sensitivity by key EPA staff."

C. Information Dissemination and Communication

Communication, information sharing, and transparency were critical concerns to all respondents. Some respondents wanted targeted, specific content and others wanted more "big picture" information about progress as a whole. They varied in their preferences regarding the frequency of communication. Diverse information delivery methods were suggested. See below for further details.

Content

Many of the responders wanted more specific information about the nature and extent of the contamination and how EPA is going about cleaning it up. Responses indicate mistrust regarding EPA's diligence in cleaning up the site. Several respondents expressed suspicion at how the clean-up is proceeding.

- "Be clear and transparent and helpful to community in understanding complex clean-up."
- "Too much PR / too little collaboration. Superficial information."
- "EPA should tell us exactly what the problem is that they are trying to fix."
- "There is lack of information about what the pollution is that the crews are cleaning up."
- "The community needs information about the problem and about solutions."
- "There is not enough information on how the pollutants affect the food chain."
- "The clean-up is questionable: are we sweeping dirt under the rug or are we really cleaning?"
- "We would like a quarterly or biannual newsletter that explains what is happening across all OUs."

More information is needed to explain testing methods and remedial technology employed at the Montrose and Del Amo Superfund Sites, and give stakeholders confidence in the choices that EPA is making regarding clean-up strategies. See representative quotes below:

- "Residents do not understand the remedial measures."
- "There is not enough information about crucial topics such as containment zones, vapor intrusion, and extraction wells."
- "Residents do not understand the remedial measures that seem to benefit some and not others."
- "There is a lack of information on how testing will be done and how methods are selected."
- "The project involves very complex hydrology and EPA does not understand the changing environment well."

As illustrated by the quotes below, respondents expressed a desire to better understand the relationships between EPA and others as a means for demonstrating transparency.

- "Not enough information is provided on who the polluters are."
- "Identify contacts for accountable parties from EPA and Montrose."
- "EPA seems to be the one taking the hit for pollution created by others. Why?"
- "I'm concerned about EPA's closeness to polluters."

Frequency

Although respondents had somewhat preferences regarding the frequency of communications, there seemed to be agreement on a desire for a more consistent schedule for updates. Since some felt burdened by the constant 'bombardment' of information, there may be a need for to maintain a certain core schedule of updates with more detailed information available to those who want it. The need for transparent, accurate, and relevant content seemed to be more important than the frequency with which that content is provided. Here are some illustrative perspectives:

- "Lack of balance -- either too little or too much."
- "I'd like EPA to provide us with routine updates, not just triggered by field activity. It comes in spurts -- maybe once a year."
- "I'd like more advance notice about what will be happening on our property….we really need a couple of weeks' notice."
- "I'd like to receive that newsletter maybe twice a year, with an overall update and a projection of what will be happening for the next 12 months."
- "I'd like to see a more balanced, consistent approach to keeping the community up-to-speed (needn't necessarily do things as often as quarterly -- maybe once or twice a year-but information seems to ebb and flow, without necessarily matching the need)."
- "We recommend more interaction with the community."
- "Too much information is just as bad, if not worse, than too little."

- "We just need simple facts -- the simpler the better -- put in context relative to safety standards."

Modes of communication

Respondents generally agreed that personal and face-to-face communication is most effective in fostering trust, as evidenced by the following quotes:

- "Direct communication is best."
- "I would like the CIC and RPMs to have more informal face-to-face interaction with the community for trust-building."
- "1:1 interactions with the community seem successful, along with make it easy for community members to email the responsible parties and the EPA project manager and community involvement coordinator."
- "When EPA shares information in person or in small groups, community members have a positive attitude toward EPA."
- "Offer a weekly meeting for those who are interested."
- "Door to-door outreach is effective."

Respondents agreed that providing information in English and Spanish is important in reaching out to the community, both with written materials and during public meetings. Other specific suggestions for communication included:

- "Different audiences require different strategies."
- "We'd like to see on a map -- one that shows the depth of contaminants."
- "We need to know who to contact at EPA for information needed in the context of selling neighborhood property, including the sites themselves (e.g., what information about contamination needs to be conveyed to potential buyers)."
- "It would be helpful if EPA put the site name in the email subject line of their updates."
- "Fact sheets can be focused on one particular activity."
- "Send out a list of the construction crews with contact information and label the trucks and the crews."
- "Consider participation in community venues and events like the farmers' market, the pier, Chinese New Year, fishing events, and Del Amo Action Committee events.
- "Address different literacy styles of affected households."
- Provide flyers with "frequently asked questions."
- "Consider making an information video about the contamination and clean-up."

VI. RECOMMENDATIONS

This report offers recommendations in three specific areas: project management, working with the community, and information dissemination / communication.

Appendix E summarizes these recommendations in table format. CCP's intent in formulating these recommendations was to build upon the essence of what we heard from stakeholders, rather than to include every suggestion we heard. In framing these recommendations, we also considered feasibility, potentially available resources, and our knowledge of effective community engagement practices.

A. Project Management Structure

The recommendations in this section relate to EPA's project management structure. They are intended to contribute to transparency, understanding, and trust.

Recommendation A1: Establish Over-Arching Technical Lead.
We understand that EPA's community involvement staff and technical staff work in partnership and that their expertise complements one another's. We further understand that there is a single point of contact for dual sites on the community involvement side. However, if there is a comparable individual with over-arching responsibilities for all OUs on the technical side, this is not readily apparent. Between the two sites, there are ten OUs and six Project Managers. If there is an overall "Clean-up Manager," we recommend that EPA make this person's name and contact information known to the community. If there is no one with this responsibility at this time, we recommend EPA consider making that assignment.

The absence of such a contact person on the technical side enables assumptions, rumors, myths, and anxieties to flourish. It is understandable that the average resident is confused about the role and responsibilities of multiple program managers. As stated in interviews and further documented in the letter from the Del Amo Action Committee in Appendix F, this structure is perceived as a strategy for evading responsibilities and "passing the buck."

This person should attend and speak at all public meetings related to these sites. Ideally, the person filling this recommended role should be very accessible to community members, should have the authority to speak for EPA, and should have the support of top management to serve in this role. This person becomes not only the technical face of EPA for the community, but also should be in a position to coordinate adjustments in technical work plans when deemed appropriate to respond to community needs. At a minimum, this person should be able to explain the "big picture" on clean-up progress to a lay audience on a monthly basis, and answer ad hoc questions in between. Next Steps:

- Appoint overall "Clean-up Manager. "Publicize this new role to the community, along with contact information.

Recommendation A2: Establish Mechanism for Producing, Summarizing, & Disseminating Monthly Operable Unit (OU) Updates.

EPA has developed and distributed a number of quality public information documents. To complement EPA's current information efforts, CCP recommends that Project Managers generate a periodic update on clean-up progress associated with each OU, for inclusion in a monthly newsletter and for use at community meetings. These updates should follow uniform formats and provide basic information that can be expanded upon as needed for in-person community meetings. These reports should use text as well as illustrations to convey the information in an accessible manner.

The overall Clean-up Manager (per Recommendation A.1. above) should synthesize the individual OU progress reports into a 1-page summary progress report each month as well. These updates should be placed in all information repositories for the sites each month, and should be available upon request from the overall Clean-up Manager and from the Community Involvement Coordinator.

Next Steps:

- ❖ Establish a mechanism for collecting OU-specific monthly progress reports so that the overall Clean-up Manager can ensure they are included in a monthly newsletter along with a summary of overall clean-up progress.
- ❖ Hold a focus group discussion with community members to determine what information would be useful and should be included in monthly OU updates and summaries. Provide the focus group with a first draft newsletter for review and confirmation.

Recommendation A3. Provide Greater Transparency for Community Regarding EPA/Responsible Party Interactions.

One manifestation of the distrust community members feel toward EPA is suspicion about the relationship between EPA and generators. Community members are concerned that EPA personnel hold meetings with Responsible Parties without memorializing these interactions for public review. Community members are concerned that EPA is too aligned with generators; they note that industry access to EPA staff during conferences enables deal-making and unfair influence to occur. EPA needs to address this perception to build trust between EPA and the community. Community members would like to see limits on these interactions and / or documentation when they occur. Recognizing that the legal landscape may be complex in this area, CCP suggests that: a) EPA explain to the community (at a future community meeting and/or via newsletter) the applicable ethical guidelines they follow to ensure interactions with generators are ethical; and b) Document and share via information repositories summaries of EPA / Responsible Party meetings to the extent legally possible to do so.

Next Steps:

- ❖ Determine extent to which EPA can legally share summaries of EPA/Responsible Party meetings. Establish standard operating

procedures for putting such summaries in the site information repositories for community review.

- ❖ Identify and implement opportunities to explain to the community applicable guidelines that EPA personnel follow to ensure interactions with Responsible Parties are ethical. Two possibilities include a newsletter article and a verbal discussion at the next community meeting.

B. Working With The Community

Recommendation B1. Better Align and Expand Existing Capacity Building Programs.

The Del Amo Action Committee has received both TAG and TASC grants. The purpose of TASC has been to provide non-advocacy technical assistance services at no cost to the community to empower residents to substantively participate in addressing environmental issues that impact them. Members report that this assistance has effectively empowered them to articulate their needs and desires. Committee members were some of the most informed individuals interviewed by CCP in terms of site contamination and clean-up activities. In addition, many of the stakeholders interviewed mentioned that they had received information about the clean-up from individuals associated with the Del Amo Action Committee.

However, there have been tensions between EPA and this Committee over acceptable uses of EPA grant funds. Committee members' knowledge and investment in the site remediation process represents an important community asset upon which to build. At the same time, the Committee's focus is solely on the Del Amo site, and thus EPA cannot rely on this group as its primary mechanism for communicating with all stakeholders affected by the dual sites. (We suggest additional strategies elsewhere in the "Recommendations" section.) CCP suggests a facilitated meeting between EPA and the Committee to clear the air and establish a shared understanding of grant management protocols and the extent of outreach that the Committee is able to undertake. Once EPA and Committee members are in better alignment, we encourage EPA to look to Committee members as a source of insight and advice as EPA seeks to build a stronger relationship with the community.

One possible enhancement EPA might want to consider for its capacity-building programs in this community is a modified version of the Health Promoter (Promotores de Salud) model, which could be used for informing the communities affected by the Montrose and Del Amo Superfund Sites regarding health issues. CCP observed the importance of neighbor-to-neighbor interactions in the Del Amo area and the value that residents place on keeping each other informed. These community norms seem conducive to the Promotores model, which essentially means "Promoters of Health Information," and is used by the U.S. Department of Health and Human Services (HHS).

This model could give EPA a framework to involve community members in meaningful ways. Transparency in the interactions however, is imperative. Community members who participate can't be perceived as "doing EPA's dirty work" or in any other negative light. CCP recommends further exploration of the criteria that can be used for selecting participants, program elements, capacity building activities and evaluation of the program. Appendix G includes useful literature on the model.

HHS defines Promotores de Salud/Community Health Workers (CHWs) as volunteer community members and paid frontline public health workers who are trusted members of the community served, and/or have an unusually close understanding of that community. Promotores de Salud/Community Health Workers (CHWs) generally share the ethnicity, language, socioeconomic status, and life experiences of the community members they serve. These social attributes and trusting relationships enable CHWs to serve as an intermediary between health and social services and the community to facilitate access to and enrollment in services and improve the quality and cultural competence of service.

Promotores/CHWs can enhance provider-patient communication; preventive care; adherence to treatment, follow-up, and referral; disease self-management; and navigation of the healthcare system. Additionally Promotores/CHWs build individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy among communities such as Hispanic/Latino communities[9].

EPA currently funds the City of Tucson's Business Pollution Prevention Program, run by the Sonora Environmental Research Institute, Inc. (SERI) in partnership with the University of Arizona. SERI uses promotoras to increase awareness about environmental health issues. The purpose of EPA's grant is to reduce the amount of hazardous substances entering the environment, conserve energy and water and improve the environmental health of the community through promotoras -- trained community members -- who provide vital information on an array of topics to members of their communities by going door-to-door.

SERI delivers educational information on environmental health threats at the community level to families through home visits by promotoras and presentations at community events and schools. SERI also has visited more than 500 businesses, delivering information on pollution prevention strategies targeted to auto repair and paint and body shops, print shops and nail salons.

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[9] Adapted from the American Public Health Association, 2009, Community Health Workers National Workforce Study (HRSA) and the Patient Protection and Affordable Care Act of 2010. http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlid=207

The use of a public health strategy in promoting health-related information in the Montrose and Del Amo areas opens a bridge to engage the California Endowment, The California Wellness Foundation, The Robert Wood Johnson Foundation and local health-focused philanthropic organizations that could potentially help fund such a program. CCP recommends that EPA's community involvement staff consider the possibility of adapting this cutting-edge model for use in EPA's community engagement activities at the Del Amo and Montrose Superfund sites.

Next Steps:

- ❖ Convene a facilitated meeting between EPA and the Del Amo Action Committee to clear the air and establish a shared understanding of grant management protocols and the extent of outreach that the Committee is able to undertake.
- ❖ To the extent possible, and consistent with newly-clarified protocols per the above recommended "next step," consider continuing to support informed community engagement through TAG and TASC grants.
- ❖ Supplement outreach that occurs through the Del Amo Action Committee with complementary outreach activities as described in the "Information Dissemination / Communication" section of these recommendations. Remain open to TAG/TASC applications from a stakeholder group focused on the Montrose site, should such a group emerge.
- ❖ Evaluate use of the Promotores model in Tucson's Business Pollution Prevention Program to assess fit and feasibility for the community surrounding the Montrose and Del Amo Superfund Sites. If applicable:
    - Identify and recruit a Program Design Committee to guide program implementation; and
    - Reach out to potential funding partners in the philanthropic community.

Recommendation B2. Reframe Community Engagement Approach As A Partnership.

Community stakeholders seek a change in the way EPA technical staff members seem to see and interact with the community. Nearby residents perceive EPA as disconnected and disinterested in the community; some perceive EPA's communications approach as being reactive and defensive and lacking transparency. To turn the "distrust dynamic" around, community stakeholders would like to see: a) a shift toward more proactive outreach approach by EPA; b) recognition of the community as assets in the effort to restore health and safety to the neighborhood; and c) an invitation to work in partnership with EPA toward community health and safety. Community members would like to perceive EPA's message as "This is what we have done and you can review and evaluate our actions so you can trust us," rather than "Don't worry, you can trust us." This approach may take more work, but can enable the remedial work to proceed more smoothly and

effectively with more positive working relationships, conditions, and outcomes for all concerned.

One concrete tool that might help chart the way forward on such a shift for both site teams and community members would be a visual diagram showing the major milestones in the clean-up over time, with roles that each party plays with respect to each milestone. It might take the form of a flow chart that includes goals, resources, evaluation points and protocols for interaction. This graphic directive can reflect both what needs to be done and how it will be done in a way that values community partners.

We recommend that EPA identify ways in which interested community members can play a role in the remediation process, contributing to a sense of shared ownership in the wellbeing of area neighborhoods. One such strategy could be creating an Environmental Health Youth Leadership Program to help local youth develop skills through which they can contribute to the remediation process, as well as to the neighborhood's quality of life and their own resumes. EPA and the Del Amo Action Committee have identified a number of youth who already have helped to convey information about the remediation process in target parts of the community, strengthening relations between the community and EPA. CCP recommends that EPA continue to work with these young people, but to expand upon this promising strategy by formalizing the effort into a "program" and adding a leadership and professional skills development component. This effort could be a cutting-edge pilot program that other Superfund site teams might want to replicate. Beyond EPA, potential sources of funds and expertise for designing a culturally appropriate model, curriculum, format, participation criteria and evaluation procedures include city and county community development departments, community foundations, and/or area universities.

Another possible approach for involving the most invested members of the affected community in both the remediation process and the process of strengthening the relationship between EPA and the community would be to design a mechanism that gives community stakeholders such as TASC and TAG recipients a substantive role at strategic points in the clean-up process where community members particularly desire more transparency. For example, Del Amo Action Committee members have expressed concerns about the validity of tests conducted by Responsible Parties and the EPA processes that allow Responsible Parties to conduct their own testing. One possible way of instilling more community confidence in the test results is to invite TASC and TAG partners to suggest criteria for the selection of testing firms that can be used by Responsible Parties, and/or to help identify testing firms that meet selection criteria. Responsible Parties could select the testing firms they use, but from a pre-selected list that community members have helped to establish.

We know that at some other Superfund sites, it has been possible to assist the neighborhood in securing targeted improvements in neighborhood safety or quality of life during the course of the remedial work. We also understand that EPA and/or its contractors can tap into a job training program that could enable local residents to enhance their employment options. Such opportunities are very much in keeping

with the "partnering" outlook that CCP is encouraging EPA to foster. Collaborating with affected residents on realizing substantive neighborhood improvements can be a meaningful and effective way of demonstrating sincere good will and building positive working relationships.

In the Kenwood community, very near the Montrose and Del Amo Superfund sites, there is a tangible opportunity for doing just that. Voices from a variety of sectors have suggested that the vacant lot at 1021 W. 204th Street, between Del Amo and W. 204th Street, west of S. New Hampshire, would make an excellent neighborhood park. The lot is in Los Angeles County and so ultimately, a County lead is imperative. Despite much talk, no such lead has emerged. The question has arisen as to whether the EPA community involvement staff might be able to provide the necessary leadership and credibility to engage the County and get some traction toward creating a neighborhood park on the site of this vacant lot.

Next Steps:

- Develop a visual diagram for EPA site teams and the community that shows the major milestones in the clean-up process over time with associated roles played by various parties. Show what needs to be done over what period of time, as well as how it will be done in a way that values community partners.
- Identify ways in which interested community members can play a role in the remediation process, contributing to a sense of shared ownership in the wellbeing of area neighborhoods. Possibilities include creating an Environmental Health Youth Leadership Program, inviting community participation in identifying criteria for the selection of testing firms that Responsible Parties can use and/or helping to develop a list of firms that meet those criteria.
- Allow EPA's community involvement staff to help residents organize targeted community and/or economic development projects. Two possibilities include: 1) helping to catalyze a County-led effort to establish a much-discussed park on the site of a particular vacant lot; and 2) tapping into an available job training program to help local youth enhance their employment options.

Recommendation B3. Engage in Dialogue With Community About Their Technical Requests.

EPA and community members agree that the timeline for the remediation of environmental and health issues at Del Amo and Montrose has been very long, and will continue for many years. A remedial timeline that extends over decades means that during the course of the clean-up, the state of relevant technology and science will undergo major developments. Community members have raised the possibility that it may be time to review a number of pre-1995 assessments and clean-up related decisions. In addition, they currently have a strong desire for additional groundwater contamination tests and for vapor intrusion testing. Given the level of

distrust between community members and EPA, the tone and approach to this discussion are quite important; it may be most productive if facilitated.

Next Steps:

- ❖ Invite Del Amo Action Committee and other interested community members to participate in a facilitated dialogue or workshop exploring their requests to revisit several pre-1995 management actions (e.g., health impact assessments, remediation decisions, and clean-up approaches), to obtain additional groundwater contamination tests, and to obtain vapor intrusion tests.

C. Information Dissemination and Communication

Recommendation C1. Strengthen and Preserve Institutional Memory.

CCP understands that there are two existing information repositories for information related to the Del Amo and Montrose Superfund Sites. These are located at the Torrance and Carson public libraries. Community members report that these repositories are not kept up to date and that hard copy repositories are not very convenient. Consequently, CCP recommends: a) inviting community input on the desired contents of the repository; b) establishing to and adhering to a protocol for more frequent updates to repository contents on a set schedule that is shared with the community; and c) considering whether it would be possible to digitize the repositories so that stakeholders can access their contents on-line as well as in hard copy at the libraries.

Next Steps:

- ❖ Invite community input regarding the desired contents of the information repositories. Populate the repositories accordingly.
- ❖ In consultation with the community, establish an inventory update protocol identifying documents that should be put in the repositories and on what timeframe. Advertise the existence of these repositories.
- ❖ Seek resources to create a digitized information repository for online access. Design this virtual repository in consultation with the community.

Recommendation C2. Conduct Targeted and Personalized Outreach.

Residents have appreciated EPA's outreach to specific neighborhood blocks to alert them in advance to impending construction activities on their blocks. CCP recommends continuing to do that in a systematic and intensive manner. This form of outreach offers an opportunity to gather targeted information that will help construction crews minimize impacts on residents, such as the presence of individuals with special needs in a household (e.g., disabilities, extreme age, or

unusual working hours). This information can then be used to alert work crews that special accommodations may be needed at specific addresses.

Next Steps:

- ❖ Coordinate outreach to precede the initiation of construction activities on a particular block by approximately two weeks. A carefully drafted construction/community outreach work plan should be created for each affected area. This work plan should consist of chronological steps for outreach and construction, leads for key functions, outreach materials, and performance measures.
- ❖ Provide residents with an optional form they can use to provide feedback to EPA on the timeliness and quality of outreach efforts and interactions with construction crews under EPA's oversight.

Recommendation C3. Offer Monthly Updates in Writing and In Person.

Stakeholders expressed appreciation for the signs containing contact information, which can be found in areas where construction is taking place with these telephone numbers in the areas where construction work is taking place. CCP experimented with calling the telephone numbers listed south of Torrance Blvd., and found that the contact people listed were helpful and prompt to respond. We recommend sustaining this successful arrangement.

While various stakeholders had different preferences regarding the frequency with which they would like to receive progress reports on site clean-up, most mentioned that they would like more predictability as to when they will receive such updates. CCP recommends that EPA begin providing such updates on a monthly or quarterly basis in two different modalities – one written and one in person. We suggest the written update take the form of a newsletter, which residents could choose to obtain in the mail or electronically. Stakeholders requested that electronic communications from EPA put the site name in the subject line so that they can more readily re-locate them when desired.

To make more frequent in-person updates manageable, we suggest that they normally take the form of an informal gathering. For example, the community involvement coordinator and overall "Clean-up Manager" could invite interested residents to eat lunch together once a month at a particular neighborhood fast food restaurant or park to get filled in on how things are going. The location for the informal gathering could be announced in the preceding monthly newsletter. Contact information for general questions, as well as contacts for questions pertaining to various aspects of the construction work, should be provided in both the newsletter and at the informal gatherings.

Next Steps:

- ❖ Prepare a monthly two-page newsletter with visual and narrative descriptions of remediation progress in lay language. Invite community input regarding content and format proactively, as well as in response to the first issue.
- ❖ Offer monthly informal gathering at local establishments as mean to connect with the community and provide information.

VII. Next Steps

CCP looks forward to receiving feedback from EPA and community stakeholders on our draft recommendations. We anticipate holding a community meeting in July 2014 to share these recommendations verbally with community stakeholders and invite their feedback. We will then finalize the recommendations, integrating EPA and community feedback as appropriate.

The CCP team wishes to thank EPA and community stakeholders for the time they have given to the CCP team in sharing their knowledge of the Del Amo and Montrose Superfund Sites and the history of community involvement in their remediation. We firmly believe all those with whom we spoke share the desire to protect the health of the community affected by these sites. We hope that our recommendations help all concerned work constructively together to accomplish that aim.

VIII. Appendices

A. Team Bios
B. Harbor Gateway Community Profile
C. Interview Questions
D. List of Interviewees
E. Summary of Recommendations
F. Letter from Board Chair, Del Amo Action Committee
G. The Promotor Model of The California Wellness Foundation

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APPENDIX A
Team Bios

Marci DuPraw is a consensus-building practitioner with more than 26 years of experience in environmental and cross- cultural collaborative problem solving and conflict resolution. She designs consensus-building, conflict resolution, and public involvement processes to fit the needs of particular situations and stakeholders. She provides facilitation and mediation to help stakeholders frame shared goals and works assertively but respectfully to support them to achieve those goals. Marci also consults with public agencies and private sector organizations to help them strengthen their collaborative capacities through the development of new institutional systems and procedures, training, and coaching. Marci has assisted clients and stakeholders to reach agreement that address a wide range of issues, including public and environmental health, management of both solid and hazardous waste, and water quality. As part of her work with the National Institute for Dispute Resolution in the mid 1990's, Marci provided technical assistance, training, and facilitation to support a community collaborative in Santa Rosa, CA, to address gang related crime and a collaborative process in Savannah, GA, to address youth violence. Marci holds a Master's in Natural Resource Policy, Economics, and Management from the University of Michigan, Ann Arbor, with a concentration in environmental conflict resolution.

Ana Cortez is an experienced facilitator of community dialogues and strategic planning processes. She has worked with philanthropic, non-profit, university and government partners throughout the U.S., and is proficient at conducting situation assessments and designing creative problem-solving processes. She has worked extensively with at-risk populations and disadvantaged, Spanish-speaking communities on issues ranging from community health to environmental justice. For almost a decade, Ms. Cortez was an outreach consultant for the California Office of Child Abuse Prevention and various Child Abuse Prevention Councils in California. Her family support work in the Central Valley included implementing gang prevention and intervention programs. Ms. Cortez also assisted the California Wellness Foundation's Violence Prevention Initiative as an organizational development consultant. She currently consults for the Joyful Child Foundation in Orange County through a grant from the U.S. Department of Justice. Additionally, Ms. Cortez has 22 years of public sector work, and acts as the City of Richmond's Environmental Record lead for projects funded with HUD dollars.

Orit Kalman has experience in dispute resolution, mediation, facilitation, public engagement, and training. She has provided community mediation services for non-profit organizations. Her public policy and dispute resolution experience focuses on issues related to natural resources. She provides facilitation support for projects of the Center for Collaborative Policy.

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APPENDIX B

Draft by K. Orlansky
Staff Working Document
March 14, 2014

Attachment E.1.
Montrose Superfund Site and Del Amo Superfund Site:
Information about the Harbor Gateway Community

Introduction

U.S. EPA's Community Involvement Plan (CIP) for the Montrose Superfund Site and Del Amo Superfund Site, dated April 2010, identifies the Harbor Gateway community as the community most affected by the two sites.[1] Consistent with the 2010 CIP, the information compiled in this paper focuses on the Harbor Gateway community, which is surrounded by the communities of Southeast Los Angeles, Wilmington-Harbor City, Gardena, Torrance, and Carson.

Harbor Gateway is located mostly in the City of Los Angeles (L.A.) with a small portion in unincorporated land in Los Angeles County. Harbor Gateway's shape is approximately eight miles long and eight blocks or 0.5 miles wide. It is situated about 14 miles south of downtown L.A. and measures a total of 5.14 square miles.

Los Angeles annexed the area in December 1906 for the purpose of eventually linking to the Port of Los Angeles. The city's plan worked out several years later when L.A. took over the cities of Wilmington and San Pedro as well as the adjacent bay. With the help of federal funds for a breakwater and dredging, the bay was transformed into the revenue-rich Port of Los Angeles.

Because of its long and narrow shape, the area was known for many years as the "city strip," the "shoestring strip," or simply "the strip."[2] The area in the middle that connects the north strip to the south strip is referred to as the "granny knot." In 1985, the L.A. City Council rechristened the entire area "Harbor Gateway" for the stated purpose of trying "bring a sense of identity and community pride to its citizens--some of whom do not even know they live in Los Angeles."[3]

The Harbor Freeway (the 110) takes up a large portion in the middle of the northern strip. The southern strip is the part of Harbor Gateway that attracted national attention in December 2006 following a gang-related murder of a 14-year old girl. The granny knot is where the Montrose and Del Amo EPA Superfund sites are located, along with office parks and trucking centers.

In July 2012, more than 25 years after Los Angeles named the area Harbor Gateway, a report by the City of Los Angeles' Department of City Planning observed that the Harbor Gateway area "due to its geography, continues to function more as an extension of surrounding areas than its own cohesive neighborhood." [4] This is consistent with comments offered in an Opinion L.A. column published in December 2011, which stated:

> If you live there [Gateway Harbor], the post office and almost everyone else says you live in Gardena or Torrance, not Los Angeles. Even the high school, located in Los Angeles, is called Gardena High. The Holiday Inn is called the Torrance Gateway. Fallas Paredes, the discount chain, says its headquarters is in Gardena. The Wal-Mart says it's in Torrance. The many trucking, shipping and logistics companies that have quarters in the granny knot area identify with either of those South Bay cities.[5]

The balance of this paper on Harbor Gateway is organized into three parts:

Part A, Demographics of Harbor Gateway includes information on: total population; the race/ethnicity of residents (including the history); household language; age distribution; educational attainment; and household income.

Part B, The Economy of Harbor Gateway includes: a general history of commercial and industrial development; a brief history of the Montrose Chemical Corporation and Del Amo facility; and the types of occupations and businesses currently located in Harbor Gateway.

Part C, Public Sector Facilities/Services in Harbor Gateway includes some background about the history of government services in the area, and current information about government facilities and services in Harbor Gateway, including: two Neighborhood Councils, the public transit center; a library; a community center; parks; schools; and brief mention of Harbor Gateway's designation as a State Enterprise Zone.

Appendix-1 contains a list of the resources used to compile the information in this paper, along with the abbreviations used to cite these resources in the text.

A. Demographics of Harbor Gateway

1. Population

As shown by the data in Table 1, the population of Harbor Gateway grew by 50% between 1980 and 2010, increasing from 30,328 to 45,735. The area grew at the fastest rate (18%) between 1980 and 1990, during which time the Los Angeles Planning Department identified Harbor Gateway as tied with Westwood as Los Angeles' second-fastest growing area.[6] Since 1990, Harbor Gateway's population has continued to grow at about 3,000 persons every ten years.

Until the 1980's, the dominant housing type in Harbor Gateway was single-family residences and multi-family residential duplexes. Between 1985 and 1992, as the number of businesses located in Harbor Gateway increased, the housing stock in Harbor Gateway was transformed to house the workers. During this time, numerous single-family houses were demolished and replaced with apartment buildings. This led to a rapid increase of residents, with no concomitant increase in public amenities or open space.[7]

Table 1
Population of Harbor Gateway
1980-2010

Year	Population	Data Source
1980	30,328	U.S. Census
1990	36,009	U.S. Census
2000	39,688	U.S. Census
2008	42,005	Los Angeles Department of City Planning
2010*	45,735	Los Angeles Almanac
*U.S. Census data for 2010 should be available, but would likely require a special data run.		

2. Race/Ethnicity

The April 2010 CIP (based on U.S. Census, 2000 data) described the race/ethnicity of Harbor Gateway as follows: "Approximately 54 percent of the population is Latino, 16 percent is African-American, 15 percent is Asian, 12 percent is Anglo, 2 percent is two or more races, less than one percent is Pacific Islander, and less than half a percent is Native American/Native Alaskan."

Mapping L.A. describes Harbor Gateway as "highly diverse for the City of Los Angeles and highly diverse for Los Angeles County."[8] According to Mapping L.A., about 40% of the residents in Harbor Gateway are foreign born with 62% (of the 40%) coming from Mexico. The second most common foreign place of birth is the Philippines (9% of the 40%).

The July 2012 CPA Report describes the history of the population shifts in Harbor Gateway as follows:

> Populations that moved into the area in the decades following World War II included Japanese Americans, Hispanics, and African Americans. Prior to World War II, the strip was home to a small Japanese and Japanese American population. As in neighboring Gardena, they were mostly farmers or operated nurseries in the area. The post-war era saw the growth of a thriving Japanese American community in the strip, as well as in Torrance and Gardena. Today, the area has a diverse mix of Anglo American, African American, Hispanic, and Japanese American populations.

To provide some perspective on the changes in racial/ethnic make-up of the Harbor Gateway community over the past 30 years, Table 2 contains data taken from the Los Angeles Almanac's report on the Harbor Gateway community for the years 1990, 2000, and 2010.[9] These data show a steady growth in the percent of the population that is Hispanic/Latino and a steady decline in the percent of the population that is White. The African American population has fluctuated between 15-21% of the population, increasing between 1990 and 2000, followed by a small decrease in the past decade. The Asian population declined from 19% to 13% of the population between 1990 and 2000 and increased by only 1% in the past decade.

Table 2
Race/Ethnicity of the Harbor Gateway Community
1990-2010

Year	Hispanic or Latino	African American	Asian	White	Other
2010	58%	19%	14%	7%	2%
2000	54%	21%	13%	10%	2%
1990	44%	15%	19%	22%	Less than1%

Data Source: LA Almanac

A March 2007 *LA Times* article by Sam Quinones (titled "How a community imploded" and sub-titled "L.A. long ignored Harbor Gateway. Now a Latino gang calls the shots") offers some history on the area. Quinones describes how the mostly vacant fields before World War II were replaced by factories, which needed housing for its workers. Small houses and duplexes were

built and inhabited by a wave of Cuban immigrants in the 1960s followed by Mexican immigrants in the 1970s. At that time, there were few blacks locating in Harbor Gateway and "homeownership anchored the community." As Quinones writes:

> All that changed in the late 1980s. Southern California was absorbing immigrants and refugees from Vietnam, Cambodia, Iran, Mexico, and Central America. Demand for housing rose – especially for apartments . . . By 1992, the real estate boom had ended; recession arrived. Building owners needed tenants. The union jobs that had sustained earlier residents were disappearing . . . The people who moved in were cashiers, gardeners, mechanics, and swap-meet vendors. Most were Latino immigrants.[10]

According to Quinones, African Americans also moved in "fleeing the gang war zones of South Los Angeles, Inglewood and Compton in search of affordable housing. Others came from housing projects, as federal policy shifted, and concentrated developments for the poor fell into disfavor. They came with Section 8 vouchers, tickets to subsidized housing, in hand. Many were former residents of Normont Terrace, a housing project two miles from Harbor Gateway that the city's housing authority razed in 1995."

Racial tensions grew as the 204th Street gang (Latino) started to assert their dominance in the Harbor Gateway area as a small black gang formed – the 208th Street Crips. Quinones writes that, "The Crip gang's willingness to go the police with complaints offended the Latino gang's sense of honor. Blacks were 'writing on our walls, throwing bottles at us and tell on us at the same time' said a gang member. The 204th Street gang figured 'that's kind of disrespectful . . .. So we are going to shoot every black guy up there.'"

An Opinion L.A. column, published in December 2011, describes this piece of Harbor Gateway history as follows:

> African Americans whose parents and grandparents were restricted in their living patterns around Los Angeles by racially restrictive covenants into the 1950s (although by then such covenants were outlawed) now found their movements restricted by Latino gangs, which reportedly declared areas of Harbor Gateway and adjacent areas off-limits to blacks. The violence drew citywide attention with the 2006 murder of 14-year-old Cheryl Green.[11]

In a June 2012 Los Angeles Times article that reported on the sentencing of the final defendant in the Green murder (6/22/2012), Sam Quinones (the reporter) reflects back on how the tiny Harbor Gateway neighborhood became a symbol of these racial tensions: "Black residents told The Times that they were often harassed and beaten by members of the Latino 204th Street gang and could not patronize the area's only market [the Del Amo market], which the gang used as its hangout. The neighborhood had averaged about one Latino-on-black homicide a year since 1997, according to LAPD figures. Most of the victims were not affiliated with a gang, police said."

Two weeks after Green was murdered, there was a related murder. A member of the 204th Street gang (Christopher Ash) was killed by fellow gang members because it was believed Ash had told police who was responsible for Green's murder. Shortly after that, a news conference was held in front of the Del Amo market with officials "vowing to eradicate the gang and invest in services

long lacking in the dense, isolated neighborhood."[12] Speakers at the news conference included then-FBI Director Robert Mueller, then-Mayor Antonio Villaraigosa, then-Police Chief William Bratton, then Sheriff Lee Baca, and then City Councilwoman Janice Hahn.

According to the press, a 2008 gang injunction put many of the members of the 204th Street gang in jail. That plus increased policing is credited with easing the gang-related violence in Harbor Gateway. However, nothing has changed the fact that patrolling the Harbor Gateway geography is complex and requires coordination among law enforcement from multiple jurisdictions, i.e., Los Angeles, Torrance, Gardena, and the County Sheriff.

3. Household language

The following table on household language is copied out of the April 2010 CIP (p. 10). Based on the 2000 U.S. Census, Spanish was the primary language in 42% of Gateway Harbor households and English was the primary language in 40%.

Table 3
Household Language in Harbor Gateway

Type of Language	Percent
Spanish	42.0
English	40.0
Asian and Pacific Islander	14.5
Other Indo-European	2.0
Other	1.0

Data Source: April 2010 CIP, based on the U.S. Census, 2000

4. Age Distribution

Mapping L.A provided the following data on the age distribution of Harbor Gateway residents. In sum, the median age is 27, which is considered young for the City of Los Angeles and young for Los Angeles County. In addition, the percentages of residents ages 10 or younger and 19 to 34 are among the highest in Los Angeles County.

Table 4
Age Distribution in Harbor Gateway

Years of Age	Number	Percent of Total
10 or less	8,673	22
11-16	4,596	12
19-34	11,304	28
35-49	8,157	21
50-64	4,058	10
65 and up	2,900	7
Total	39,688	100%

Data Source: L.A. Mapping, U.S. Census 2000

5. Educational Attainment

Table 5 summarizes educational attainment level for adult Harbor County residents (25 and older), based on 2000 U.S. Census data. In sum, the data show that:

- 63% of residents 25 and older have a high school diploma or less than a high school diploma.
- 25% of residents 25 and older have some college; and
- 12% of residents 25 and older have a four-year college degree.

Table 5
Education Attainment of Harbor Gateway Residents 25 and Older

Education Level	Number	Percent of Total
Less than high school	8,941	40
High school	5,076	23
Some college	5,721	25
Bachelor's degree	2,052	9
Master's degree or higher	751	3
Total	22,541	100%

Data Source: L.A. Mapping, U.S. Census 2000

6. Household Income

With respect to household income, the April 2010 CIP (based on the U.S. Census, 2000) reported that, "the median annual income per household for Harbor Gateway was $36,100, which is lower than the county median income of $42,189."

L.A. Mapping reported that the median household income in Harbor Gateway (in 2008 dollars) was $47,849, which is about average for the City of Los Angeles, but low for Los Angeles County. It also reported that the percentages of households that earn $20,000-$40,000 and $20,000 or less are high for Los Angeles County; and that 19.4% of families are headed by single parents, which is about average for the City of Los Angeles, but high for Los Angeles County.

Table 6
Household Income of Harbor Gateway Residents

Household Income ($000's)	Number	Percent of Total
20 or less	3,043	26
20-40	3,566	31
40-60	2,037	17
60-125	2,645	23
125 and up	369	3
Total	11,660	100%

Data Source: L.A. Mapping, U.S. Census 2000

7. Other

Other demographic information reported in the April 2010 CIP or L.A. Mapping included the following factoids, all based on U.S. Census, 2000:

- Approximately 39 percent of housing units in Harbor Gateway were owner-occupied, while 58 percent were rented. (CIP, 2010)
- About 7.6 percent of the Harbor Gateway population consists of military veterans. (L.A. Mapping)
- The percent of married females (51.9%) is among the highest in Los Angeles County. (L.A. Mapping)

B. The Economy of Harbor Gateway

1. General History of Commercial and Industrial Building in Harbor Gateway

The July 2012 CPA report provides a history of the commercial and industrial development in Harbor Gateway. Below are excerpts that highlight the major documented changes.

- The land upon which Harbor Gateway CPA developed was occupied by several ranchos in the earliest period after European settlement. There are no resources remaining from this period in the CPA.
- Even after annexation (1906), the shoestring strip remained sparsely population for the most part. In the 1940s, the area was still mostly rural with homes interspersed.
- Early commercial development . . . the majority of which includes one- to three-story commercial properties buildings dating from the 1910s and 1920s was essentially an extension of the commercial strip that developed in Gardena, a separate city, to the west.
- In the 1930s, Torrance and Gardena (another separate city adjacent to Harbor Gateway) were both stops on the Pacific Electric Railway on lines running to and from Los Angeles, San Pedro, and Redondo Beach.
- Later commercial development (1950s and 1960s) along major thoroughfares included drive-in commercial strips and one- to three-story commercial buildings.
- Industrial development, originally dating from the World War II and post-war eras, is concentrated in the southern portion of the CPA. Much of this earlier development has been replaced by later industrial construction.
- Institutional resources occurring throughout the CPA include religious building and schools . . . these are typically sited within residential neighborhoods or along commercial corridors. [13]

2. History of the Montrose Chemical Corporation and Del Amo Facility

The following brief histories of the two Superfund sites are excerpts from the April 2010 CIP.

> **Montrose Chemical Corporation of California (Montrose**) manufactured the technical grade of the pesticide dichloro-diphenyl-trichloroethane (DDT) from 1947 until 1982 at a plant located at 20201 Normandie Avenue, in Los Angeles County, California (Montrose

Property). The former plant operations included manufacturing, grinding, packaging, and distributing the DDT pesticide. Various locations on the former plant property were used for storing chemical raw materials, DDT, and waste products. The plant was disassembled and removed from the property in 1982. Currently, the Montrose Property is undeveloped and unoccupied.

The Del Amo facility is located immediately east of the former Montrose Property. From 1943 until 1972, the Del Amo facility was a center of large-scale industrial activities. Originally built to produce synthetic rubber during World War II and owned by the U.S. government, the Del Amo facility consisted of a styrene plant operated by Dow Chemical Company; a butadiene plant operated by Shell Oil Company; and a synthetic rubber plant operated by U.S. Rubber Company, Goodyear Tire & Rubber Company, and others.

In 1955, the U.S. government sold all three plants to Shell Oil Company and Shell continued to operate these plants until 1971. Synthetic rubber was produced by manufacturing styrene and butadiene separately, piping them to the rubber plant, and then mixing the two together. Within each facility, wastes from the production processes were directed into separator units. Settled sludge was disposed of either offsite or in a waste disposal area located on the southern portion of the site. Six unlined pits and three unlined evaporation ponds made up the 4-acre onsite disposal area. Upon closure in 1972, the unlined pits and ponds that were still open were covered with soil.

Most of the 280-acre facility has since been developed as an industrial park. In 1984, contamination was discovered in the waste disposal area and underlying soils. Currently, the 4-acre waste pit disposal area is sealed and the property is undeveloped.

3. Types of Occupations in Harbor Gateway

The April 2010 CIP reported that the predominant occupations in Harbor Gateway "are in the fields of manufacturing, management/professional, service, and sales." Table 7 contains data from the CIP about the types of occupations in Gateway Harbor.

Table 7
Types of Occupations in Harbor Gateway

Type of Occupation	Percent
Sales and Office	26
Service	22
Management, Professional, & Related	21
Manufacturing & Transportation	21
Mining and Construction	9
Farming, Fishing, & Forest	0.4
Total	99.4

Data Source: April 2010 CIP, U.S. Census, 2000; numbers do not sum to 100% due to rounding.

4. Businesses Currently Located in Harbor Gateway.

Marci: I was unable to locate a current business directory that identifies the names, types, and size of the commercial and industrial businesses located in Harbor Gateway. The information below provides a sense of the current business activity in Harbor Gateway, but I can keep on looking for something more definitive if you want.

A list containing the names and business affiliation of the Officers, Committee Chairs, Board Members, and Lifetime Board Members of the Harbor Gateway Chamber of Commerce is attached as Appendix-2. The list is copied from the Chamber's website, which indicates it was most recently updated in March 2011, so this list may not be current.

Table 8 overviews the Harbor Gateway's Chamber's leadership from the private sector, grouped by the city of their business address. The list is heavily weighted towards the service industry (e.g., accounting, banking, consulting, hospitality), with one health care (Kaiser) and one private educational organization (Westwood College). There is one oil company (Plains Oil American Pipeline), one maritime shipping company (Trico Maritime), one cemetery, and one florist.

Table 8
Harbor Gateway's Chamber of Commerce Leadership
Private Sector Members

City	Businesses Represented	Number of Members
Torrance	CPA Accounting Offices Sir Speedy Bon Acupuncture & Moxa Westwood College – South Bay Campus Alpine Village Holiday Inn, Torrance	6
Harbor City	Trico Maritime International, USA Simplicity Bank Kaiser Permanente	4
San Pedro	Butterfield Communications, Inc. Svorinch & Associates, Inc. Managed Career Solution, Inc. Ek & Ek	4
Long Beach	Plains All American Pipeline USB Financial Services, Inc.	2
Lomita	Massey's House of Flowers	1
Rancho Palos Verdes	Green Hill Memorial Park	1
None listed	AT & T Ashland Securities	2

Data Source: Harbor Gateway Chamber of Commerce

The Chamber's leadership also includes three public sector members, one each from the Harbor Gateway South Neighborhood Council; Los Angeles Department of Water and Power; and Los Angeles Harbor College.

For what it's worth, the Wikipedia page for Harbor Gateway describes the businesses located in the area as follows:

> Many trucking, shipping and logistics companies are based in Harbor Gateway. The headquarters of National Stores (Fallas Paredes) is in Harbor Gateway, near Gardena. Yoshinoya America's headquarters are in Harbor Gateway, near Torrance. Roosevelt Memorial Park is a cemetery between Vermont and Normandie north of 184th Street.[2]

C. Public Sector Facilities/Activities in Harbor Gateway

In 1992, the LA Times published an article headlined: *Stretched Thin: Public Services: Harbor Gateway, an eight-mile ribbon of Los Angeles is long on need and short on government support. Some residents seek annexation to Gardena*. The article went on to discuss that (in 1992), Harbor Gateway had "no post office, no police station, no library, no welfare office and no community center to pull neighborhoods together."[14] At that time, some Harbor Gateway residents in a "neighborhood of tidy, older homes just north of Alondra Blvd" were actively working to be annexed by Gardena, where they said they would be better served. (The annexation effort did not succeed)

The 1992 *LA Times* article reported that "the shortages of social services, health care, and police and fire protection are so acute that United Way designated the strip an 'underserved geographic area' in 1987." Since that time, the United Way reportedly provided the few private charities serving the area with $100K to support a small, free medical clinic (the South Bay Medical Clinic) and the Harbor Gateway Center. This Center was founded by a Methodist Church located in Harbor Gateway with services described in the LA Times article as follows:

> In addition to giving out food and clothing, the Center runs a job referral program and advises illegal immigrants on their rights. Each Saturday, the Center opens its soup kitchen and feeds the homeless, as many as 1,000 a month. Every Thursday, as many as 25 families stand in line for boxes of free groceries.[15]

According to an EPA site describing the Montrose Chemical Corporation Superfund site, a health clinic for community members was operated for three years in Harbor Gateway. Specifically, the clinic (established with a grant from the Agency for Toxic Substances and Disease Registry) provided residents with free health examinations, including testing for exposure to chemicals such as benzene and DDT. It also assisted residents with identifying and eliminating possible chemical exposures in the home. The clinic operated from January 1995 to January 1998.[16]

Marci: The rest of this section contains what I was able to cull together about the current public sector facilities/services located in Harbor Gateway. With more time, I am sure there is more info I could track down if you need it.

1. Neighborhood Councils

According to the website for the City of Los Angeles' Department of Neighborhood Empowerment**:**

> Since its establishment in 1999, the Los Angeles Department of Neighborhood Empowerment has grown into the nation's largest and most innovative initiative in civic engagement and citizen-based government. Through a network of 95 Neighborhood Councils, the City promotes public participation in government and works to improve government responsiveness to local concerns. (http://empowerla.org/about-us/)

The Harbor Gateway community is served by two Neighborhood Councils: Harbor Gateway North Neighborhood Council (http://empowerla.org/hgnnc/) and Harbor Gateway South Neighborhood Council (http://empowerla.org/hgsnc/). [17]

Harbor Gateway North Neighborhood Council in the news: February 2014. A Los Angeles Times article, published February 25, 2014, identified the Harbor Gateway North Neighborhood Council as one of the organizations that support a fracking ban in Los Angeles. The quote from Llewyn Fowlkes (on behalf of the Neighborhood Council) was, "Our walls are crumbling. Our sidewalks are pulling apart and cracking."

2. Public Transit Center

The Harbor Gateway Transit Center is a Metro Silver Line station and a large bus station at southern end of the Harbor Transitway. It is located in the southwest corner of Interstate 110 and State Route 91 in Harbor Gateway close to Carson.

The link below is to a March 8, 2013 Report on Improvements by the Los Angeles County Metropolitan Transit Authority to the South Bay Improvements Council. It is slides associated with a presentation on improvements made on the Harbor Transitway and Harbor Gateway Transit Center, e.g., lighting upgrades, signage, landscaping, public toilets, and public art.
Link: http://media.metro.net/board/Items/2013/03_march/20130308OtherSectorSBAItem8.pdf

3. Library

In 2007, a branch of the City of Los Angeles Public Library system opened in the Harbor Gateway area (24000 S. Western, Harbor City, CA 90710). An old posting in the City's library online newsletter announced the opening as follows:

> On Thursday, February 1, 2007, the new Harbor Gateway - City Library of the Los Angeles Public Library was officially opened. The new 14,621 square foot library is located in a community that is more racially diverse (51.84%) than California and US averages. The new library includes access to computers, homework assistance and a homework center. Teens will have a variety of programs, services and materials that focus on current interests and leisure activities while adults will have easy access to services and programs that help them find, evaluate, and use information effectively. [18]

A scan of the library's activity calendar suggests the Gateway Harbor library offers a daily activity. For example, the offerings for the week beginning Monday, March 17 are: two computer classes for adults; a knitting club; a teen digital literacy class; an SAT prep class; and homework help sessions for students in in grades 1-12 four afternoon a week after school.[19]

4. Cheryl Green Community Center

In July 1, 2009, the Boys and Girls Club Clubs of the South Bay opened a site in Harbor Gateway named the Cheryl Green Community Youth Center, in memory of the 14-year old girl who was gunned down by a local gang in December 2006. While managed by a non-profit organization, the Youth Center appears to receive a fair amount of its funding from the public sector.

The current website for the Cheryl Green Center describes its services as follows:

> The Cheryl Green Community Youth Center is located at 1435 Del Amo Blvd. in the City of Torrance. The new Boys & Girls Club services kids ages 6-17 and will give them a place to go during the summer and after school in the fall. The community center is two long years in the making. Through a generous land donation from LA DWP. Limited programs were held in the summer of 2007 and 2008. The summer of 2009, another generous donation from L.A.P.D. Harbor Division and Cornerstone Construction, the Cheryl Green Community Youth Center now has a bungalow for programming.
>
> Currently the hours of operation are Monday - Friday 2 - 6pm. The Boys & Girls Club offers tutoring, game room activities, arts & crafts, athletics, and character & leadership development programs. Along with youth programs the site also offers gang intervention programs from Toberman Settlement House, and programs from LAPD PAL program. The club currently serves approximately 40 kids on a daily basis.[20]

5. Parks

In 2012, the Mayor of Los Angeles launched the City's "50 Parks Initiatives." A news article report this is "an ambitious effort to create 50 new parks across the city, with an emphasis on areas that are considered park poor, was launched by the city on Thursday in an $80.9 million program to provide more green space."[21]

According to the article, "The program to identify the parkland began in 2009 when the Recreation and Parks Department started a citywide assessment of community needs. It found that some of the densest areas of the city had the least amount of park space. The 2009 Report identified Harbor Gateway as one of the underserved areas.

A search for "Harbor Gateway" on the City of Los Angeles' Department of Parks and Recreation produced links to a new park facility named the Rosecrans Recreation Center/CVS Playground, located at 840 W. 149th St., Gardena, CA 90247. The following note appeared on the site for this facility: "This playground's Official Dedication Ceremony date is being scheduled. Please check this page for information updates. This playground was developed by Boundless Playgrounds® the first national nonprofit dedicated to helping communities create extraordinary barrier-free

playgrounds where children, with and without disabilities, can develop essential skills for life as they learn together through play."[22]

Construction of Pocket Park in Harbor Gateway in the news "as weapon against sex offenders" (February 2013)

A Los Angeles Times article published in February 2013 reported that the City of Los Angeles is "beginning construction on what officials believe will be the smallest park in Los Angeles. At one-fifth of an acre, the pocket park will barely have room for two jungle gyms, some benches, and a brick wall." This park, along with two other pocket parts, is being located in Harbor Gateway.

The article goes on to explain that this section of Harbor Gateway (address not provided) "has one of the city's highest concentrations of sex offenders: 86 live in a 13-block area. Los Angeles plans to build a total of three pocket parks with the intent of driving out registered sex offenders."

The construction of parks as a strategy to "drive out sex offenders" is based on the State law that prohibits sex offenders from living within 2,000 feet of a park or school. The restrictions ban offenders from living in many parts of Los Angeles, pushing them "into industrial districts and remote towns and neighborhoods like Harbor Gateway that lack schools and parks." Further, the article reports that, "The restrictions on where offenders can live has resulted in a proliferation of group homes in acceptable areas that house large numbers of them. In Harbor Gateway, up to five offenders share one room, according to the National Sex Registry website."

According to the article, members of the Harbor Gateway community raised almost $6,000 (through activities at the 186th Street Elementary School) to contribute towards park construction.

6. Schools

Appendix-3 contains a list of public and private schools (includes grade and enrollment data) in Harbor Gateway. The list comes from California Department of Education, as posted online by the Los Angeles Times L.A. Mapping Project.

186th Street Elementary in the News (October 2011)

A *Los Angeles Times* article titled "Many factors contribute to success at LAUSD's 186th Street Elementary" was published on October 23, 2011. The article reports that:

> More than 80% of students at 186th Street are low-income, 36% are learning English, and 8% are homeless. But the school has steadily improved its standardized test scores with a recent Academic Performance Index of 852. The statewide target score is 800. Administrators attribute much of the success to after-school programs.

The after-school programs include homework tutoring, dance and arts classes, and other enrichment programs. The school serves what is described as two distinct communities: 40% of

the students comes from a middle-income Gardena neighborhood, and 60% from "Harbor Gateway, a densely populated, high-poverty area that gained some notoriety in 2006 when black teenager Cheryl Green was killed in a hate crime by a member of a Latino gang."

The 186th Street School is one of only seven schools in LAUSD for which transportation is provided for safety reasons, including a late bus that transports students home at 4:15 PM. The article reports that, "Students living in Harbor Gateway would otherwise have to cross railroad tracks and major freeway onramps and off-ramps to get to and from campus. The community is also home to dozens of paroled sex offenders." (See section on Parks, p.)

When funding for the after school bus was cut in 2011, "more than 450 parents signed petitions and the school sought private donations to pay the $150-a-day expenses."

7. The Harbor Gateway Communities is a SEZ (State Enterprise Zone)

Information about what it means to be a State Enterprise Zone information can be found on the website for the Los Angeles Community Development Department.
http://cdd.lacity.org/bus_sez.html

An excerpt from that website is copied below:

> The City of Los Angeles has three State Enterprise Zones (SEZs). Within these areas, businesses can take advantage of State tax credits and deductions not available to businesses elsewhere. The goal of the incentives is to stimulate business attraction, growth, and increased employment opportunities within economically challenged areas of the City by lowering operating costs.
>
> The SEZs offer incentives such as: hiring credits, sales & use tax credits, business property expense deductions and tax free loan interest for qualifying lenders. Los Angeles City also offers local incentives such as, LADWP rate discounts, sewer facility hookup payment plans, Work Opportunity Tax Credits, and reduced parking requirements. Businesses located in an Enterprise Zone and the Empowerment Zone can take advantage of both State and Federal incentives.

Endnotes

[1] April 2010 CIP. The interviews that informed the CIP were conducted in March 2008. The CIP notes that. "Community involvement activities associated with OU-5, which is a project involving contaminated sediments on the Palos Verdes Shelf off the coast of the Palos Verdes Peninsula, are discussed in a separate CIP, and are not included in this CIP."

[2] Sheryl Stolberg, "In search of an Identity: Area Lacks a Sense of Community," *LA Times*, January 1, 1989.

[3] Ibid.

[4] July 2012, CPA

[5] LA Times Opinion Staff, L.A. Opinion, Council District 15: Harbor Gateway, the city on a shoestring

[6] An earlier dramatic increase in population had occurred during and after WW II, when factories moved into the area, and workers (who needed housing) followed. (July 2012 CPA)

[7] Sam Quinones, "How a community imploded," *LA Times,* March 4, 2007.

[8] Mapping L.A. is an online project of the *LA Times*. The data come from a combination of the U.S. Census, 2000, Southern California Association of Governments (SCAG), and the Los Angeles Department of City Planning.

[9] *Marci: I do not know how much noise there is in these data, but as my statistics professor used to say, "If a data collection method is warped, chances are it is consistently warped, which makes them a decent source for trend."*

[10] Sam Quinones, "How a community imploded," *LA Times,* March 4, 2007

[11] LA Times Opinion Staff, L.A. Opinion, "Council District 15: Harbor Gateway, the city on a shoestring," *LA Times*, December 23, 2011.

[12] Ibid.

[13] July 2012, CPA Report

[14] Ronald Taylor, "Stretched Thin: Public Services: Harbor Gateway, an eight-mile ribbon of Los Angeles, is long on need and short on government support. Some residents seek annexation to Gardena," *LA Times,* April 30, 1992.

[15] Ibid.

[16] Information posted by EPA on Montrose Superfund Site

[17] Representatives from each of these Neighborhood Councils are included on CCP's interview list.

[18] City of Los Angeles Public Library website
www.library.ca.gov/newsletter/2007/2007spring/newlibrary.html

[19] Harbor Gateway Library website http://www.lapl.org/whats-on/calendar?field_event_branch_nid=967

[20] Boys and Girls Clubs of the South Bay website
http://www.southbayclubs.org/main_sublinks.asp?id=62&sid=139

[21] Los Angles Daily News, August 23, 2012.

[22] City of Los Angeles, Department of Parks and Recreation
http://www.laparks.org/DOS/playground/facility/rosecransUAPk.htm

Appendix-1

Resource List for Information about the Harbor Gateway Community

U.S. Environmental Protection Agency, *Montrose Superfund Site and Del Amo Superfund Site, Community Improvement Plan*, April 2010 (abbreviation: April 2010 CIP)

U.S. Environmental Protection Agency - info posted about Montrose Superfund Site
http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dec8ba3252368428825742600743733/b7db9903773ec74188257007005e93ed!OpenDocument

California State Department of Public Health, Del Amo Superfund Site, Health Assessment 2004
http://www.ehib.org/papers/FinalDelAmoPHA.pdf

City of Los Angeles, Department of City Planning, Office of Historic Resources, *Gateway Harbor Community Plan Area Report*, July 2012 (abbreviation: July 2012 CPA)
http://www.preservation.lacity.org/files/HAR_ReportFinal_07-12.pdf

City of Los Angeles, Department of City Planning (http://cityplanning.lacity.org/)

City of Los Angeles, Department of Neighborhood Empowerment (http://empowerla.org/about-us/; sites for Harbor Gateway North Neighborhood Council (http://empowerla.org/hgnnc/) and Harbor Gateway South Neighborhood Council (http://empowerla.org/hgsnc/)

City of Los Angeles Public Library, 2007 newsletter
(http://www.library.ca.gov/newsletter/2007/2007spring/newlibrary.html)

Harbor Gateway Library website (http://www.lapl.org/whats-on/calendar?field_event_branch_nid=967

City of Los Angeles' Department of Parks and Recreation
(http://www.laparks.org/DOS/playground/facility/rosecransUAPk.htm and
http://www.laparks.org/planning/pdf/finalReport.pdf -link to Park Assessment report)

Los Angeles County Metropolitan Transit Authority, presentation to the South Bay Improvements Council
(http://media.metro.net/board/Items/2013/03_march/20130308OtherSectorSBAItem8.pdf)

Los Angeles Almanac, Neighborhoods of the City of Los Angeles
http://www.laalmanac.com/population/po24la.htm

Mapping L.A., Harbor Gateway Profile. Mapping L.A. is an online source of information sponsored by the *Los Angeles Times*. The data compiled in Mapping L.A. comes from a combination of the U.S. Census, 2000, Southern California Association of Governments (SCAG), and the Los Angeles Department of City Planning. (abbreviation: Mapping L.A.)
http://maps.latimes.com/neighborhoods/neighborhood/harbor-gateway/

Harbor Gateway Chamber of Commerce website (http://hchgchamber.com/)
Boys and Girls Clubs of the South Bay website
(http://www.southbayclubs.org/main_sublinks.asp?id=62&sid=139)

Wikipedia, Entry for "Harbor Gateway, Los Angeles"
http://en.wikipedia.org/wiki/Harbor_Gateway,_Los_Angeles

Newspaper Articles

Sheryl Stolberg, "In search of an Identity: Area Lacks a Sense of Community," *LA Times*, January 1, 1989.

Ronald Taylor, "Stretched Thin: Public Servcies: Harbor Gateway, an eight-mile ribbon of Los Angeles, is long on need and short on government support. Some residents seek annexation to Gardena," *LA Times,* April 30, 1992.

Randal Archibold, "Racial Hate Feeds a Gang War's Senseless Killing," *New York Times*, January 17, 2007.

Sam Quinones, "How a community imploded," *LA Times*, March 4, 2007.

Ari Bloomekatz, "Youth Center opens as racial tension ease in Harbor Gateway," *LA Times*, June 18, 2009.

Carla Rivera, Many factors contribute to success at LAUSD's 186th Street Elementary, *LA Times*, October 23, 2011.

LA Times Opinion Staff, L.A. Opinion, "Council District 15: Harbor Gateway, the city on a shoestring," *LA Times*, December 23, 2011.

Sam Quinones, "Man gets 238 years in L.A. hate-crime slaying of teenage girl," *LA Times*, June 22, 2012.

Los Angeles Daily News, "Los Angeles launches 50 parks initiative," August 23, 2012

Angel Jennings, "L.A. sees parks as weapon against sex offenders," *LA Times*, February 28, 2013.

Emily Alpert Reyes, "First step toward fracking ban in L.A. taken by land use panel," *LA Times*, February 25, 2014.

Appendix-2

Harbor Gateway Chamber of Commerce
Board of Directors

Source: http://hchgchamber.com/our-members/board-of-directors/; last updated March 8, 2011

Officers

Bob Dworkin, Chamber President
CPA Accounting Offices
3528 Torrance Blvd. # 101
Torrance, CA 90503
(310) 543-5557

Lupe Massey, President Elect
Massey's House of Flowers
25929 Western Avenue
Lomita, CA 90717
(310) 325-8222

Committee Chairs

Lou Baglietto, Government Affairs Chair
Butterfield Communications, Inc.
Ports O'Call -Berth 77 P7-A
San Pedro, CA 90731
(310) 748-9023

David Britton, Membership Committee Co-Chair
Holiday Inn Torrance
19800 South Vermont Avenue
Torrance, CA 90502
(310) 781-9100

Karen Marvin, Membership Committee Co-Chair
Plains All American Pipeline
5900 Cherry Avenue
Long Beach, CA 90805-4408
(562)-728-2816

Robert (Bob) Gomez, Gateway to Resources Chair
UBS Financial Services Inc.
301 East Ocean Blvd., #1600
Long Beach, CA 90802-4833
562-495-5506

Anthony J. Maxey, Economic Development Committee Chair
DWP
Senior Account Manager
111 N. Hope Street, Room 1009
Los Angeles, CA 90012
213- 367-0662

Rohan Sourjah, Export and Intl. Trade Committee Chair
Trico Maritime International USA
24328 S. Vermont Ave. Ste #231
Harbor City, CA 90710
(310) 567-8894
www.tricomaritimeusa.com

Board Members

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Harbor Gateway South Neighborhood Council
(916) 302-6226

Esther Dailey
Green Hill Memorial Park
27501 S Western Ave
Rancho Palos Verdes, Ca 90275
310-521-4463

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Sir Speedy
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Torrance, CA 90502
www.sirspeedysouthbay.net

Creasie James
Director, External Affairs
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1891 N Gaffey street # 221
San Pedro, CA 90731
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Los Angeles Harbor College
1111 Figueroa Place
Wilmington, CA 90744-2397
(310) 233-4446

Evelyn Salinas
Simplicity Bank
26640 Western Ave.
Harbor City, CA 90710
(800) 524-2274 ext. 1800

Philip Starr, Psy.D.
Executive Director
Managed Career Solutions, Inc.
Los Angeles Business Source Center, Harbor
455 West 6th Street
San Pedro, CA 90731
(213) 355-5312

Won Joung, Jo L.Ac.
Bon Acupuncture & Moxa
1730 Sepulveda Blvd. #2
Torrance, Ca 90501
310-517-9028

Monica Shakin
Director, Career Services
Westwood College – South Bay Campus
19700 S Vermont Ave #100
Torrance, CA 90505
(310) 525-2404

Otto Laradke
General Manager
Alpine Village
833 W Torrance Blvd #104
Torrance, CA 90502

Lifetime Board Members

John Kirk
Ashland Securities, Inc.
(310) 538-8228

Mark Waronek
Ek & Ek
461 W 6th Street #233
San Pedro, CA 90731
310-732-7900

Tara Obrien
Tara O'Brien
Kaiser Permanente
25825 S. Vermont Ave
Harbor City, 90710
(310) 517-4267

Joeann Valle, Executive Director
Harbor City/Harbor Gateway
Chamber of Commerce
1400 W 240th Street
Harbor City, CA 90710
310-534-3143

Appendix-3

Schools in Harbor Gateway

Public schools

Name	Grades	Enrollment	API Rank
Ambler Avenue Elementary	K-5	448	5/10
Amestoy Elementary	K-5	811	6/10
Arlington Elementary	K-5	597	9/10
Avalon Gardens Elementary	K-6	221	6/10
Benjamin Banneker Special Education Center	P-12	309	10/10
Denker Avenue Elementary	K-5	786	7/10
Figueroa Street Elementary	K-5	474	2/10
Gardena Elementary	K-5	590	5/10
Gardena Senior High	9-12	1690	4/10
Halldale Elementary	K-5	605	7/10
Howard Wood Elementary	K-5	371	7/10
J. H. Hull Middle	6-8	737	6/10
Magnolia Science Academy Santa Clara	6-12	525	9/10
Meyler Street Elementary	K-5	771	2/10
Moneta Continuation	9-12	72	4/10
Nathaniel Narbonne Senior High	9-12	3304	5/10
One Hundred Eighteenth Street	K-5	565	4/10
One Hundred Eighty-Sixth Street Elementary	K-5	820	7/10
One Hundred Fifty-Third Street	K-5	350	2/10
One Hundred Thirty-Fifth Street Elementary	K-5	794	3/10
President Avenue Elementary	K-5	464	5/10
Robert E. Peary Middle	6-8	1652	2/10
Samuel Gompers Middle	6-8	872	1/10

Stephen M. White Middle	6-8	1814	3/10
Torrance Elementary	K-5	486	6/10
Torrance High	9-12	2076	9/10
Van Deene Avenue Elementary	K-6	427	5/10
Vanguard Learning Center	6-8	356	2/10
West Athens Elementary	K-5	749	2/10

Private schools

Name	Grades	Enrollment
Ascension Elementary Catholic	K-8	228
Castle Elementary School	K-4	21
Gardena Valley Christian	K-8	306
Pacific Lutheran High School	9-12	70
St. Anthony of Padua	1-8	172
St. Anthony's Day Nursery	K-K	–
St. Frances X. Cabrini	K-8	151
Switzer Learning Center	3-12	93
Vermont Christian School	K-12	37
Zion Lutheran	K-8	–

Source: California Department of Education, as posted online by the Los Angeles Times L.A. Mapping Project: maps.latimes.com/neighborhoods/neighborhood/harbor-gateway/schools/

APPENDIX C
Interview Questions

1. For agency or organizational representatives: Can you tell me your title, and what your role in your organization entails?
2. Have you been involved with any activities related to the Del Amo and/or Montrose Superfund sites to date?
3. What are your (or your organization's) interests with respect to the site clean-up? (What is important to you about this clean-up?)
4. How do you feel clean-up has been going?
    a. *Are there aspects that are working well?*
    b. *Aspects you'd like to change?*
    c. *How would you describe the community's relationship with EPA and the state (if applicable) during the Superfund clean-up process?*
5. Do you have any suggestions for EPA about how best to interact with the community to keep residents and businesses informed about site clean-up activities? For example:
    a. *Do you feel you get enough information about what is going on? (Too much? Too little? What would be ideal amount?)*
    b. *Do you feel you know how to get information about the clean-up if you need to (e.g., who to talk to, how to get in touch with that person)?*
    c. *How do you typically obtain information about the clean-up? Does this approach work for you, or would you prefer to get it in some other way (e.g., flyer, newsletter, email, phone-call, meeting)?*
    d. *What kind of information (topics) do you want to receive about the clean-up? In what language? In how much detail?*
    e. *Are there communication/information opportunities that should be used - for example, community meetings, festivals, Sunday services, etc.?*
    f. *Is there additional assistance that might help you more effectively engage in the clean-up? If so, what is it?*
6. Do you have any feedback on communications strategies or community involvement approaches that EPA has tried in the past that worked particularly well or not so well?
7. Given this neighborhood is predominately Latino, are there any specific ways EPA can help engage the Latino community at this site?
8. Do any barriers come to mind that impede effective communication?
9. Do you have any suggestions for EPA about how best to minimize impact on the community while carrying out site clean-up activities?
10. What are the existing organizations in the community that are involved in site issues or which tend to be the "go-to" groups for community members interested in the site issues?
    a. *Do these groups reach all parts of the affected community?*
    b. *Can you suggest anyone else with whom we should talk?*
11. Is there anything else you think I should know that I haven't asked?
12. Is there anything you've told me that you'd like me to keep confidential and out of our report?

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APPENDIX D
List of Those Who Provided Input

INTERVIEWED

1. Resident #1 204th Street
2. Resident #2 204th Street
3. Resident #3 South of Torrance Blvd.
4. Resident #4 South of Torrance Blvd.
5. Gateway South Neighborhood Council
6. Small Business
7. City of Carson
8. City of Torrance
9. Boys and Girls Club
10. Coca Cola
11. California Department of Toxic Substances Control
12. Van Deene Elementary School
13. Skeo Solutions
14. U.S. Environmental Protection Agency (site team and management)
15. Del Amo Action Committee
16. The "de maximus" consulting firm (on behalf of the Montrose Team)

INFORMAL CONVERSATIONS

1. Harbor Gateway Chamber of Commerce
2. Hands on Fun Childcare Center
3. Los Angeles County Department of Public Health
4. Los Angeles County Fire Department
5. Los Angeles County Department of Public Works

FOCUS GROUPS

1. Gateway South Neighborhood Council
2. Del Amo Action Committee

Appendix E: Summary of Recommendations

RECOMMENDATIONS
Recommendation A1: Establish Over-Arching Technical Lead.
Recommendation A2: Establish Mechanism for Producing, Summarizing, & Disseminating Monthly Operable Unit (OU) Updates.
Recommendation A3. Provide Greater Transparency for Community Regarding EPA/Responsible Party Interactions.
Recommendation B1. Expand Existing Capacity Building Programs.
Recommendation B2. Reframe Community Engagement Approach As A Partnership.
Recommendation B3. Engage in Dialogue With Community About Their Technical Requests.
Recommendation C1. Strengthen and Preserve Institutional Memory.
Recommendation C2. Conduct Targeted and Personalized Outreach.
Recommendation C3. Offer Monthly Updates in Writing and in Person.

	FINDINGS				
	Project Management	Working with The Community	Information Dissemination and Communication		
			Content	Frequency	Modes of communication
	X				
	X				
	X				
		X			
		X			
		X			
			X		
				X	X
				X	X

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Appendix F
Letter from Del Amo Action Committee
(Permission to include this letter was provided via email of 4.30.14)

April 30, 2014

Ana Cortez Facilitator/Mediator
Center for Collaborative Policy
California State University, Sacramento
815 S Street,
Sacramento, California 95811

Dear Ms. Cortez:

This letter reiterates and clarifies comments made by members of the Del Amo Action Committee during our meeting with you on April 11, 2014.

In this letter I will refer to the Del Amo/Montrose Superfund Site. I identify the site as one site. The USEPA has organized the investigation and clean-up of the site into several operating units with separate steps for each unit. This inhibits the ability of the public to understand the work underway and comment on important decision making. It also minimizes the public health and environmental damage caused by the co-mingled waste. In some measure this is the result of working with several responsible parties and continuing negotiation of costs and decisions regarding steps for mitigation. The administrative and legal barriers seriously impede clean-up of the site.

The major points made by community members during the Friday meeting are summarized below:

Information sharing for the site is inadequate, ineffective and unpredictable. Basic, understandable information about the site must be readily available. This means, in words community

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members can understand and in the languages they speak. Putting out a flyer every once in a while is not enough. Having a public meeting sporadically and unpredictably is not enough. EPA needs to work with community members to design a communication program that is effective and predictable.

The work at the Del Amo/Montrose site has as a 30 year history. It is time to re-evaluate 1) The impact the Del Amo/Montrose site is having on the health of community residents. 2) The information on the extent of contamination from the site. 3) Evaluate the organization of the work and the decisions being made. The disconnected, piece meal approach EPA is using to tackle the site isn't working. This approach results in a failure to understand the full extent of the problem and do the right thing to solve it and it is wasting a lot of time and money.

The Montrose DDT manufacturing facility closed in 1982. I am one of the people who visited the community at that time. I met with a community member who lived in a house with a backyard that bordering a dirt alley between the Del Amo site and the community. I went there because the community was fighting the construction of a trash transfer station on the Del Amo site. They were afraid that the construction would cause a release of toxic fumes to the community. The trash transfer facility was proposed on the Del Amo property. It was proposed when Governor Deukmejian had just taken office in 1982. The political controversy with this proposal resulted in the program director for the California Hazardous Waste Program to be forced to resign.

What I saw there in 1982 caused me to be gravely concerned. DDT dust was everywhere. I don't think people working on the site now even believe me when I say that but it is true. The fumes from the Del Amo site were an everyday reality. On April 16, 2014, I went back to the community. The alley behind the homes is now a small paved street. The Del Amo waste pits are covered, the Montrose Plant property is now a place where the groundwater treatment system is being installed. I met a man who has lived in a house across the street from Montrose all of his life. He showed me a picture of two small boys on with their tricycles. He was one of the boys. He played on the empty lot across from Montrose. It was clear that he is in bad health. His skin is covered with warts. He needs oxygen to breath. One of the Del Amo Action Committee members has three children who grew up on Kenwood where the DDT was released when it rained. All of them have serious health problems. Her 38 year old son suffers from diabetes and is blind from the illness. She has twin daughters. One of them has rheumatoid arthritis. One has a rare blood disease. Her granddaughter suffers from asthma and skin rashes. She has several neighbors with similar problems. More is needed to evaluate the health impacts of the site on the 3,000 people who live within a quarter mile of the site.

Isn't it sad? I'm sure you know of the Rachel Carson's book Silent Spring. This book is recognized as the catalyst for the environmental movement in this country. As you know, DDT was one of Rachel Carson's major concerns due to the impact its use was having on the Bald Engle, Pelican and Peregrine Falcon populations. The Montrose Chemical Plant caused massive environmental damage both in the neighboring community and at the outfall of the polluted waste water on the Palos Verde's shelf. The cleanup of the Montrose Chemical plant should be a model for environmental cleanups. But it isn't. It's been thirty years. Only now is any definitive effort being made to clean-up the groundwater.

One of the handicaps this site suffers from is assumptions based on work done years ago. What are some of the assumptions: 1) a health study was done in the community in the early 90's and no pervasive health problems were discovered. 2) EPA has worked on the Del Amo/Montrose site for years. Exhaustive studies have been done and the problem is well on the way to being solved. 3) The air in the homes was tested and there wasn't any problem. ***The decision that no technically feasible alternative is available to clean-up the contamination in the groundwater, the best that can be done is controlling it and that is going to take thousands of years is the worst assumption/decision.***

It is time to re-evaluate 1) The impact the Del Amo/Montrose site is having on the health of community residents. 2) The information on the extent of contamination from the site. 3) A better way to organize the work and the decisions being made. The disconnected, piece meal approach EPA is using to tackle the site isn't working. This approach results in a failure to really understand the full extent of the problem and do the right thing to solve it and it is wasting a lot of money.

Please, why is EPA hiring contractors to evaluate the community? It is my opinion that this is an effort to neutralize the Del Amo Action Committee because they are getting in the way. It isn't needed and it isn't being done the right way. I recommend that EPA use that money instead to convene a group of highly skilled and experience environmental experts to evaluate the work at the site and make recommendations. But please don't stop putting in the wastewater treatment system. At least this is a tangible effort to clean something up.

There are two levels of concern with the Del Amo/Montrose site. The first is the potential impact on the health of the people who live near the site. This is a threshold question that must be answered. The Del Amo Action Committee members are working hard to have vapor intrusion testing in the homes near the Del Amo/Montrose site. This is an important step in insuring that the site does not continue to cause health problems in the residential area near the site. The technical advisor working on behalf of the community agrees this

testing should be done. Also, there are areas close to the Montrose site that were never completely investigated. For example, there is a large vacant property behind the homes across the street from Montrose. I saw a mobile home with a person sweeping the dust in front of it on that vacant property. It is a dumping ground. There is a property on Normandie that was previously a gasoline station. I understand the underground tanks are still there.

The second threshold question affects thousands of people. Does the groundwater contamination caused by the Del Amo/Montrose site threaten Los Angeles groundwater resources used for drinking water? The answer to this question is an important one. Over the years I have participated in work at a number of major sites in the Los Angeles area, the Stringfellow site, The Santa Susanna Field Laboratory and many other seriously contaminated sites. Time and time again I've heard regulators assure community members that their drinking water is fine. "The contamination at the site does not reach the deeper aquifer where you get your drinking water." We know that the Del Amo/Montrose contaminants have reached three levels of the groundwater. We know the contamination will continue to migrate. I understand that there is a drinking water recharge basin close to the edge of the plume. I also know that measuring the spread of groundwater contamination is difficult. In a recent meeting with staff from the Department of Toxic Substances Control working on the site they discussed this difficulty. It is a real issue. Water is precious in Los Angeles. We can't afford to lose a resource we need.

In closing this letter I offer the following quote by Rachel Carson: "Mankind has gone very far into an artificial world of his own creation. He has sought to insulate himself, in his cities of steel and concrete, from the realities of earth and water and the growing seed. Intoxicated with a sense of his own power, he seems to be going farther and farther into more experiments for the destruction of himself and his world. There is certainly no single remedy for this condition and I am offering no panacea. But it seems reasonable to believe — and I do believe — that the more clearly we can focus our attention on the wonders and realities of the universe about us the less taste we shall have for the destruction of our race."

Thanks for listening,

Florence Gharibian

Board Chair
Del Amo Action Committee

APPENDIX G

The Promotor Model- The California Wellness Foundation

(attached as a separate file)

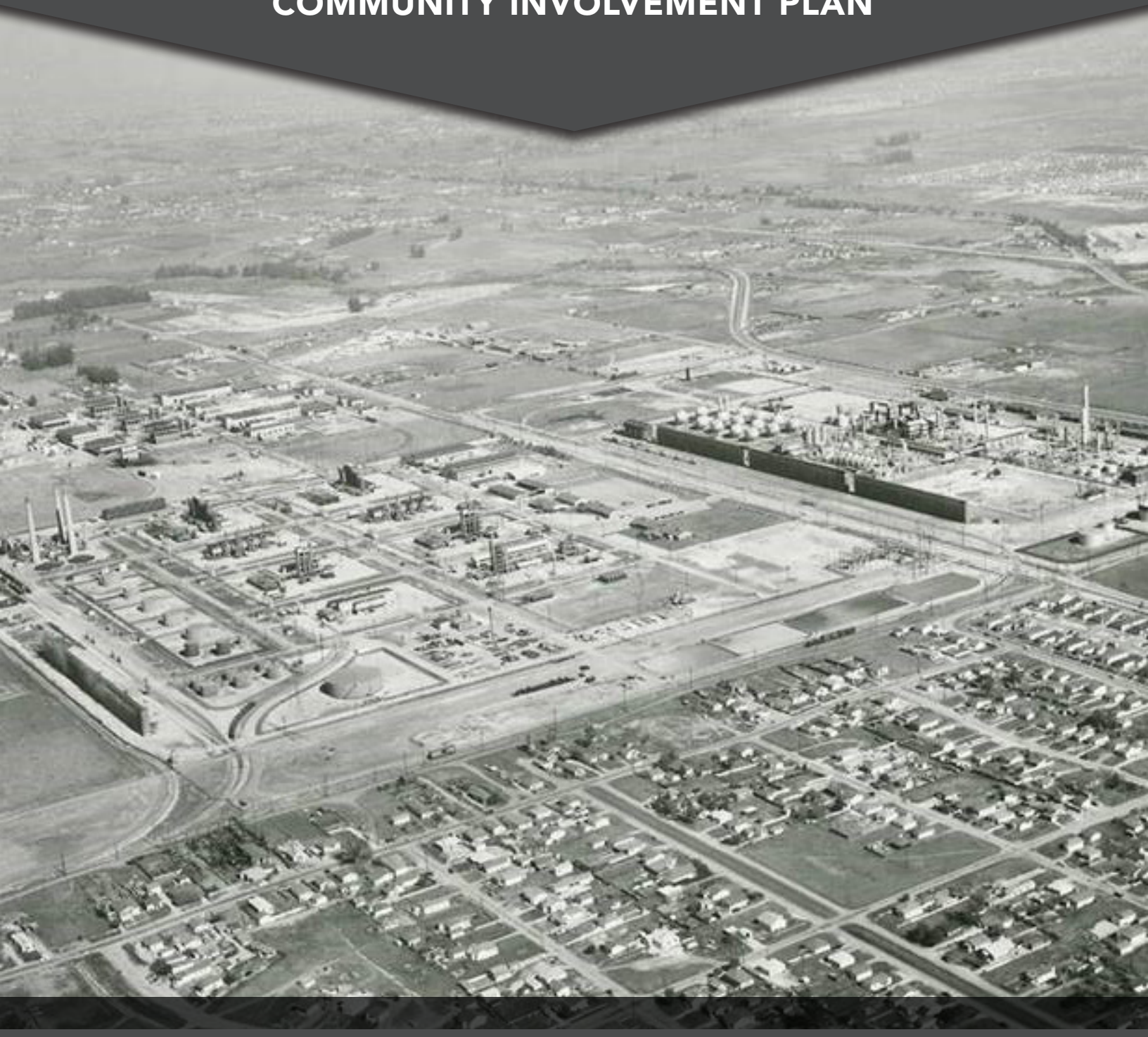
EPA Region 9's Superfund site team was never provided the information in Appendix G.

Prepared by:
U.S. Environmental Protection Agency
June 2020

APPENDIX 7

Del Amo and Montrose Sites Major Milestones Timeline

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN



1980s

1990s

Del Amo

- CalEPA led site investigations.
- Interim cleanup actions addressed the Waste Pits Area.
- CalEPA started a series of newsletters, public meetings and office hours in the community.

1997 Record of Decision: Del Amo OU2 Waste Pits Area

- EPA performed an ongoing evaluation of many sites in south-central Los Angeles and discovered possible groundwater contamination from Del Amo.
- RI/FS for part of the footprint of the former facility underway, including the Waste Pits Area.
- Remedy construction for the Waste Pits Area underway.
- EPA listed the site on the NPL, then removed it after a lawsuit.
- CalEPA turned over regulatory responsibility to EPA (1992).
- EPA announced the Proposed Plan for the Waste Pits Area (1996).
- EPA started institutional controls pilot program for businesses on the footprint of the former facility.

Montrose

1992-1997 Sanitary Sewers Removal Action

1993-1998 204th Street Removal Action

- EPA issued Administrative Order for Montrose to cease all discharges of DDT (1983).
- EPA led or provided oversight for site investigations.
- Interim cleanup actions addressed stormwater drainage and put covers in place.
- EPA started a series of letters to the community, hosted community meetings and established information repositories.
- EPA listed the Site on the NPL (1989).

- EPA completed a major soil and produce investigation in a 30-block residential area to look for DDT and other Montrose-related contaminants.
- EPA issued the removal action memorandum and began work for the cleanups of two yards on 204th Street, which included temporary relocations of residents (1994-1995).
- EPA helped facilitate conversations regarding buyouts between Shell Oil Company and community members in the 204th Street removal area. Some community members were permanently relocated after property buyouts by Shell (1998).

Community Involvement and Dual-Site Groundwater

- Formation of community organizations such as the South Bay Chemical Alert Network (SBCAN).
- Residents filed suit against Montrose Chemical Company and PRPs at the Del Amo site.
- EPA conducted community interviews and issued the first Community Relations Plan (1985).
- The State of California completed a health study of people living near the Sites.

1999 Record of Decision: OU3 Dual-Site Groundwater

- Major expansion of EPA community involvement efforts for both Sites, including public meetings, community workshops, factsheets and a new EPA Community Involvement Plan (1996).
- ATSDR and EPA began to support the Montrose and Del Amo Neighborhood Partners, a group set up to share information and coordinate activities for both Sites.
- ATSDR established the Del Amo/Montrose Neighborhood Clinic, which provided health services to nearly 600 residents.
- EPA issued the Proposed Plan for the Dual-Site Groundwater OU (1998).

Acronyms

ATSDR	Agency for Toxic Substances Disease Registry
CalEPA	California Environmental Protection Agency
DDT	dichlorodiphenyltrichloroethane
DNAPL	dense non-aqueous phase liquid
ECI	Ecology Control Industries
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences

2000s

- EPA worked with Montrose and Del Amo Neighborhood Partners to update the remedy for the Waste Pits Area (2002 ESD).
- Final cap placed over the Waste Pits Area (2002).
- EPA finalized Site's listing on the NPL (2002).
- SVE/IBT system operation underway.
- EPA completed first five-year review for the Waste Pits Area OU remedy (2005).
- Recorded covenants restricted property use.
- Waste Pits Area OU remedy updated based on pilot testing of new technology (2006 ESD).

2001-2002 Kenwood Stormwater Drainage Pathway Removal Action

2005-2006 Former ECI Property Soil Removal Action

- Treatability tests looked at cleanup options for contaminated Montrose soils and DNAPL (2003).
- Soil sampling activities and a human health risk assessment completed at the former ECI property.
- EPA provided oversight on RI work at JCI Jones Chemical Inc. property and other properties near the former Montrose property.

- Groundwater monitoring well network expanded and groundwater modeling underway.
- EPA participated in the Harbor City/Harbor Gateway Chamber of Commerce Business Exposition (2006).
- EPA and other agencies provided continued support for the Montrose and Del Amo Neighborhood Partners.
- EPA conducted community interviews and issued an updated Community Involvement Plan (2010).

2010s

2011 Record of Decision: Del Amo Site Soils and NAPL

- EPA issued Proposed Plan for soils and NAPL (2010).
- Ongoing re-design study and cleanup planning for site soils and NAPL.
- EPA completed third five-year review for the Del Amo site (2015).
- Ongoing pre-design investigations and cleanup planning for site soils and NAPL, including targeted vapor intrusion investigations at specific properties on the footprint of the former facility.
- Ongoing vapor intrusion investigations at properties on the footprint of the former facility, in response to the five-year review recommendations.

2016-2017 Former ECI Property Soil Removal Action

- EPA issued a Proposed Plan for DNAPL following major community involvement efforts, including community workshops and third-party technical assistance (2015).
- EPA completed the supplemental RI reports and began the FS for surface soils on and off Montrose property.
- CalEPA issued their Removal Action Workplan for the vacant 204th street.
- EPA entered into a bona fide prospective purchaser agreement with Bridge Point South Bay II, LLC for their purchase of the ECI property (2018).

- EPA completed extensive vapor intrusion investigation in the community and found no threats to human health (2012-2018)
- EPA completed the first five-year review for the Dual-Site Groundwater OU (2015).
- EPA started providing comprehensive site update fact sheets, email updates, and community open house meetings and pop-up tent events for all site activities (2016-present).
- Construction and functional testing of the groundwater treatment system underway.
- EPA conducted community interviews and revised the Community Involvement Plan (2018).

FS	feasibility study				
IBT	in-situ bioventing				
NAPL	non-aqueous phase liquid				
NPL	National Priorities List	PRP	potentially responsible party	SBCAN	South Bay Chemical Alert Network
OU	operable unit	RI	remedial investigation	SVE	soil vapor extraction

Si necesita una traducción inmediata o una aclaración en español, llame a
Yarissa Martinez al (213) 244-1806 o Romie Duarte al (213) 244-1801 para información adicional.

If you require translation or clarification in Spanish, call
Yarissa Martinez at (213) 244-1806 or Romie Duarte at (213) 244-1801 for additional information.

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APPENDIX 8

Potentially Responsible Parties

DEL AMO AND MONTROSE SUPERFUND SITES COMMUNITY INVOLVEMENT PLAN

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Potentially Responsible Parties and Other Parties

The Superfund law requires that potentially responsible parties (PRPs), or those responsible for the contamination, do or fund the cleanup of Superfund sites. PRPs generally include parties who owned or operated the site, or generated waste disposed of at the site, or arranged for the disposal of waste at the site. If PRPs cannot be located or cannot or refuse to participate, EPA may do the necessary cleanup actions and recover its costs after site cleanup.

Montrose Superfund Site

EPA and Montrose Chemical Corporation of California (Montrose) have legal agreements that require Montrose to perform a remedial investigation and feasibility study, as well as other actions.

EPA has also issued notice of potential liability (or a notice that EPA may pursue liability in the future) to the following parties:

- Montrose Chemical Corporation of California (Montrose) and its parent corporations
- JCI Jones Chemicals, Inc. (Jones)

Del Amo Superfund Site

EPA and Shell Oil Company, Inc. (Shell) have had previous legal agreements that required Shell to perform a remedial investigation and feasibility study. Currently, EPA and Shell have legal agreements that require Shell to perform actions to cleanup or manage contamination under the record of decisions (RODs).

In 2016, the U.S. District Court approved a Consent Decree (a settlement agreement) between the United States and Shell. This consent decree requires the United States, on behalf of the General Services Administration, to reimburse Shell for a portion of its costs.

Montrose and Del Amo Dual Site Groundwater Operable Unit

Montrose and Shell have performed parts of the remedial design for the dual-site groundwater treatment system pursuant to unilateral enforcement orders issued by EPA. EPA has entered into a legal agreement with, or is in negotiations with, the following parties with respect to the groundwater contamination at the Montrose and Del Amo Superfund sites:

- Montrose and its parent corporations
- Shell
- General Services Administration
- The Boeing Company
- PACCAR, Inc.
- BP Amoco Chemical Company

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Del Amo & Montrose Superfund Sites
Community Involvement Plan
www.epa.gov/superfund/delamo
www.epa.gov/superfund/montrose