



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9  
75 Hawthorne Street  
San Francisco, California**

**EXPLANATION OF SIGNIFICANT DIFFERENCES  
TO THE  
OPERABLE UNIT 1 RECORD OF DECISION (August 26, 1993)  
AT THE  
LORENTZ BARREL AND DRUM SUPERFUND SITE  
IN  
SAN JOSE, CALIFORNIA**

**I. Introduction**

The Lorentz Barrel and Drum ("LB&D") Superfund Site ("Site") is located at the southwest corner of the intersection of South Tenth Street and East Alma Avenue in the City of San Jose, CA ("San Jose" or "City"). The Site was listed on the National Priorities List ("NPL") on October 4, 1989. For management purposes, the United States Environmental Protection Agency, Region IX ("EPA") divided the Site into two operable units: Operable Unit 1 ("OU-1") which includes all sources of contamination remaining after completion of a series of removal actions, and Operable Unit 2 ("OU-2") which includes only shallow groundwater contamination and treatment. EPA issued the Record of Decision ("ROD") for OU-1, the ROD that is the subject of this Explanation of Significant Differences ("ESD"), on August, 26, 1993 ("OU-1 ROD"). EPA is the lead agency for the Site.

This ESD modifies the institutional controls ("ICs;" singular, "IC") component of the remedy selected for OU-1 in the OU-1 ROD. The OU-1 ROD requires that a "deed restriction" be recorded in relation to the sidewalk areas along both East Alma Avenue and South Tenth Street that are adjacent to the former Lorentz Barrel and Drum facility property ("Sidewalk Areas"). The deed restriction must prohibit residential development, and limit industrial development of the Sidewalk Areas to activities that do not breach the integrity of the cap (a paved sidewalk) and do not mobilize the soil contaminants. The deed restriction also must preclude all excavation other than temporary subsurface work beneath the cap and, in the case of such temporary work, must require complete restoration of any disturbed fill and/or the cap resulting from such temporary work.

To replace the deed restriction required by the OU-1 ROD, this ESD selects two mechanisms to serve as ICs for the Sidewalk Areas, and one mechanism to serve as a land use control, a broader category of controls than ICs which includes physical mechanisms such as signage and fences (see the description of the third mechanism below), for the Sidewalk Areas. The first IC mechanism is a Memorandum of Understanding ("MOU") between EPA and the City providing for the development and implementation of procedures and protocols for City review of permit applications for work in the Sidewalk Areas and notification of City departments performing non-permitted work of the requirements related to work in the Sidewalk Areas, and providing for City cooperation in implementing signage (the third mechanism). The

second IC mechanism is the use of a private land use monitoring firm to monitor requests to a regional call center for information about sub-surface utilities in the Sidewalk Areas, and to notify EPA of any planned excavation. The third mechanism is a land use control in the form of signage to provide notice of the presence of, and risks from, hazardous substances beneath the sidewalk in the Sidewalk Areas and to contact EPA before disturbing the sidewalk.

This ESD was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), section 117(c), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Contingency Plan (NCP) sections 300.435(c)(2)(i) and 300.825(a)(2). The ESD will become a part of the Administrative Record file pursuant to §300.825(a)(2) of the NCP, and will be available for review from 8:00 AM to 5:00 PM Monday through Friday, excluding holidays, at the EPA Region IX Superfund Records Center, 95 Hawthorne Street, San Francisco, CA. The Administrative Record File is also available for review at the local repository for the Site, which is located at the Dr. Martin Luther King, Jr. Library, 150 E. San Fernando Street, San Jose, CA. The library hours are 8:00 AM-6 PM Monday through Friday, 9 AM-6 PM Saturday, and 1-5 PM Sunday.

## II. Summary of Site History, Contamination Problems and Selected Remedy

The LB&D facility property originally covered 10.5 acres. The southeastern portion of the facility property, totaling 3.78 acres, was not significantly involved in drum recycling operations, however, and was transferred shortly after drum recycling operations began. Drum recycling operations took place on the remaining 6.72 acres of the LB&D facility property ("LB&D Property"), including a 1.47 acre parcel currently owned by The Newark Group ("Newark Parcel") and a 5.25 acre parcel owned by 10<sup>th</sup> Street Land Management ("10<sup>th</sup> Street Parcel"). The Site includes the LB&D Property where contaminants were released, the Sidewalks Areas, and downgradient properties where contaminants are now located due to the offsite migration of contaminated groundwater.

The LB&D Property is located at 1515 South 10<sup>th</sup> Street at the southwest corner of the intersection of South Tenth Street and East Alma Avenue in San Jose in an area generally zoned for industrial and commercial use. It is bounded to the north/northwest by East Alma Avenue and, on the other side of East Alma Avenue, by athletic fields and Spartan Stadium which are owned by San Jose State University; to the north/northeast by an ice-skating facility; to the west by a concrete plant; and to the south by an auto service facility. Farther to the north, and downgradient of the LB&D Property, the area is zoned as residential. Currently, the Newark Parcel is a newspaper and cardboard recycling facility, and the 10<sup>th</sup> Street Parcel is used to store cars for a local dealership.

From 1947 through 1987, the LB&D Property<sup>1</sup> was the location of a drum recycling facility. Drums arrived containing a variety of aqueous wastes, including solvents, acids, oxidizers, and oil; were cleaned using heat, caustics, acids, steam, and/or mechanical methods; and were repainted, resealed, and shipped offsite. Liquid waste and cleaning water were discharged to on-Site sumps and basins; some of the

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<sup>1</sup> Only until 1981 for the Newark Parcel.

material subsequently drained into Site soils or into the storm sewer, where it reportedly was conveyed to the nearby Coyote Creek.<sup>2</sup>

As noted in the Introduction, EPA divided the Site into two operable units for management purposes and issued the OU-1 ROD on August 26, 1993. OU-1 is defined as "all remaining sources of contamination not already addressed" by a series of removal actions, except for the shallow groundwater aquifer addressed as OU-2 (OU-1 ROD, page 7, Section 4.0). The remedy selected in the OU-1 ROD therefore is considered the final remedy. The specific components of the remedy selected in the OU-1 ROD (see OU-1 ROD, Section 8.4.2, pages 65 - 68) are:

1. Treatment by soil vapor extraction ("SVE") of principal threat soil containing volatile organic compounds ("VOCs") at concentrations that total more than 1 ppm;
2. Containment by a cap (single layer asphaltic-concrete pavement without leachate collection or monitoring systems) using long-term maintenance to ensure elimination of the exposure pathway to building pads and soil contaminated with non-mobile chemicals (e.g., polychlorinated biphenyls ("PCBs"), pesticides, and metals);
3. Removal and off-site disposal of the contaminated septic system and sewer line following their excavation to reduce potential exposure to, or migration of, contaminated residues;
4. Removal and off-site disposal of contaminated incinerator ash, stockpiled soil containing greater than 50 parts-per-million PCBs, nonessential wells acting as potential conduits, miscellaneous debris, and the uncontaminated warehouse;
5. Monitoring for VOCs in deeper aquifers and in soil gas near selected residences to provide advance warning in the unlikely event that significant migration of shallow groundwater contaminants begins;
6. Reviews of the protectiveness of the selected remedy to occur at least once every five years in accordance with Section 121(c) of CERCLA; and,
7. "Land use restriction to prevent well construction (for water supply purposes) in source areas that remain contaminated and deed restrictions . . . for those properties (LB&D, Recycled Fibers, Inc. [RFI] and adjacent sidewalk area belonging to the City of San Jose) that contain contaminated soil exceeding cap action levels." The restrictions will "prohibit residential development and will limit industrial development to activities that do not breach the integrity of the cap and do not mobilize the soil contaminants." The restrictions will also "preclude excavation, other than temporary subsurface work beneath the cap, and will require complete restoration of any disturbed fill or cap once any such temporary work is completed." (OU-1 ROD, Section 10.2, pages 83 and 85.)

The remedy selected in the OU-1 ROD has been fully implemented with the exception of the required deed restrictions for the Sidewalk Areas. An SVE system was in operation from 1998 to 2004, and it was successful in decreasing VOCs in the vadose zone to the 1 mg/kg total VOC cleanup level. As described

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<sup>2</sup> The description of the drum recycling operations in this paragraph is drawn from the Third Five-Year Review (USEPA, 2010).

in this ESD, subsequent to the OU-1 ROD, EPA determined that deed restrictions would not be effective in achieving the ROD's goals because they may not provide sufficient notice to persons performing work in the Sidewalk Areas of the presence of hazardous substances beneath the sidewalks. EPA therefore is selecting alternative land use control mechanisms in this ESD.

On September 25, 1988, EPA issued the OU-2 ROD which defines OU-2 as the shallow aquifer, commonly referred to as the B-Zone. All contaminated groundwater is restricted to the B-Zone which lies approximately 25 feet to 45 feet below ground surface ("bgs"). The selected remedy for OU-2 must prevent: further migration of the plume, plume discharge into Coyote Creek, and contamination of the drinking water supply which is drawn from the D Zone some 230 to 1000 bgs. To achieve these remedial action objectives, the selected remedy consists of a groundwater extraction network designed to fully capture the plume. Extracted groundwater is treated by an onsite granular activated carbon ("GAC") system before being discharged to Coyote Creek. Cleanup levels for the groundwater are Maximum Contaminant Levels.

A Focused Feasibility Study ("FFS") currently is underway to evaluate the current remedies for both OU-1 and OU-2. The purpose of the FFS is to perform a holistic evaluation of existing soil and groundwater remedies and other remedial options in order to determine the best technical approach to effectively and efficiently achieve all cleanup goals within a reasonable restoration time frame. This FFS will make recommendations for both OUs. Once the FFS is completed in December of 2015, EPA anticipates that the existing remedies will be modified or new remedies selected for both OU-1 and OU-2.

### III. Description of Significant Differences and the Basis for these Differences

#### **Institutional and Land Use Controls**

The OU-1 ROD requires that a deed restriction be recorded in relation to the Sidewalk Areas, and states that the Sidewalk Areas are owned by San Jose (OU-1 ROD, pages 83 and 85). In the course of implementing this requirement, EPA reviewed property ownership research in order to confirm ownership of the Sidewalk Areas. Based on its review, EPA concluded that 10<sup>th</sup> Street Land Management, the current owner of the adjacent 10<sup>th</sup> Street Parcel of the LB&D Property, likely owns the Sidewalk Areas in fee, and that the City holds an easement dedicated to the public use that gives it control over the Sidewalk Areas for use as a sidewalk or road. Given the likely disjunction between fee ownership of the Sidewalk Areas and the right to control activities there, it is likely that a deed restriction would be less effective in providing notice than where ownership and control reside in a single entity (e.g., utility contractors would not think to check property records or know to contact 10<sup>th</sup> Street Land Management before doing work in the Sidewalk Areas). In consideration of these factors, EPA has determined that it would be more efficient and effective to select a different institutional control mechanism through an ESD to ensure the long-term protectiveness of the remedy.

As noted in the introduction, EPA in this ESD is selecting three complimentary mechanisms to ensure long-term protectiveness in relation to the Sidewalk Areas: 1) an MOU between EPA and the City providing for the development and implementation of procedures and protocols for City review of permit

applications for work in the Sidewalk Areas and notification of City departments performing non-permitted work of the requirements related to work in the Sidewalk Areas, and providing for City cooperation in implementing signage; 2) retention of a private land use monitoring firm to track, and notify EPA about, requests for information about sub-surface utilities in the Sidewalk Area; and 3) installation of signage indicating the presence of, and risks from, hazardous substances beneath the sidewalks in the Sidewalk Areas, and the need to contact EPA before disturbing the sidewalk.

With regard to the first mechanism, EPA will enter into an MOU with the City. Pursuant to the MOU, the City will incorporate in its existing review and approval protocols for construction permits new procedures applicable to the review and approval of permit applications for work in the Sidewalk Areas that may disturb the sidewalk. The procedures will include methods to monitor and flag such permit applications for special handling and requirements that their approval is subject to special conditions. The special conditions include submission to EPA of a health and safety plan ("HSP") and a soil management plan ("SMP"), and EPA approval of the SMP prior to permit approval. The MOU also will provide for the City to incorporate into its procedures and protocols methods designed to ensure that City departments not subject to the City's permit requirements do not perform sidewalk-disturbing work in the Sidewalk Areas without first notifying EPA of the proposed work, submitting an HSP and SMP to EPA, and receiving approval of the SMP from EPA. Finally, the MOU will provide for City cooperation in implementing a land use control in the form of signage, the third control mechanism selected in this ESD.

The second IC mechanism provides another type of land use monitoring. Any person or company planning to engage in excavation work is required by law before beginning such work to contact the appropriate regional call center operated by USA North, a Non-Profit Mutual Benefit Corporation, whose mission is to ensure that all excavation work is performed with knowledge of the location of sub-surface utilities. The regional call centers notify all utility companies so that they may mark the location of their subsurface utility structures at the ground surface level before excavation work begins. To receive information about requests for information concerning sub-surface utilities related to excavation work, private land use monitoring firms contract with the regional call centers. EPA has identified a private land use monitoring firm currently under contract with the California Department of Toxic Substances Control ("DTSC") which can include information about contaminated areas in its database and cross-reference the location of planned excavation activities reported to it by a regional call center against the location of the contaminated areas. If the land use monitoring firm matches the location of planned excavation work with the location of the Sidewalk Areas, it will notify EPA. EPA will then contact the person planning the excavation to notify them of the restrictions on work in the Sidewalk Areas and to request submission of an HSP and SMP. In the event that DTSC discontinues its contract with the land use monitoring firm, EPA will arrange to contract directly with the firm or another firm with similar capabilities.

The third mechanism selected by EPA is a land use control which relies on an engineered measure, in this case, signage. Signage serves as an extra layer of notification to persons planning to disturb the sidewalks in the Sidewalk Areas that contamination is present beneath the sidewalks in case both of the ICs described above fail for any reason. The signage will be clearly displayed and provide notification that hazardous substances are present in the soil beneath the sidewalks in the Sidewalk Areas, that there are health risks from unprotected contact with the soil and restrictions on performing work in the area, and that persons should contact EPA before beginning work. This signage will be present along the full length of the Sidewalk Areas.

## **Applicable or Relevant and Appropriate Requirements**

The changes to the remedy that are discussed in this ESD continue to meet all ARARs. The ARARs determined to be pertinent to the selected remedy in the ROD are also pertinent to the remedy in the ESD.

## **IV. Comparative Summary of Significant Differences in the Remedy and 2013 ESD**

### **1993 Remedy from OU-1 ROD**

- Deed restriction on the Sidewalk Areas prohibiting residential development and limiting industrial development to activities that do not breach the integrity of the cap and do not mobilize the soil contaminants.

### **2013 ESD Remedy**

- Memorandum of Understanding with the City establishing review and approval protocols to prevent any work that could disturb the Sidewalk Areas without an HSP and an EPA-approved SMP.
- Retention of a private land use monitoring firm to provide notification of planned excavation activities in the Sidewalk Areas.
- Use of signage along entirety of Sidewalk Areas indicating the presence of hazardous substances, restrictions on performing work in those areas, health hazards from unprotected contact, and notification to call EPA.

## **V. Support Agency Comments**

DTSC is the state regulatory agency serving as a support agency at the Site. U.S.EPA provided DTSC an opportunity to review and comment on the ESD. DTSC responded to EPA on September 10, 2013, and had no major comments.

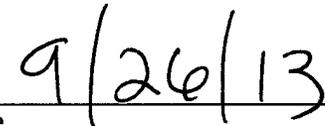
## **VI. Affirmation of Statutory Determinations**

Based on the MOU to be negotiated with the City of San Jose, the notification mechanism to be implemented by the land use monitoring firm, and the signage to be put in place, U.S. EPA believes that the remedy remains protective of human health and the environment, continues to meet ARARs as specified in the NCP, section 300.430(f)(1)(ii)(B)(1) and (2), and complies with CERCLA §121.

VII. Public Notice

An ESD notice will be published in a local newspaper as required by the NCP, section 300.435(c)(2)(i)(B).

  
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Kathleen Salyer, Chief  
Superfund Site Cleanup Branch  
U.S. Environmental Protection Agency  
Region IX

  
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Date