1552122 - R8 SDMS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
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Explanation of Significant Differences
Operable Unit 1

Vasquez Boulevard/Interstate 70
City and County of Denver, Colorado

September 2014

ED_002842_00002498-00001

1.0 INTRODUCTION

1.1 Site Name and Location

Site Name:	Vasquez Boulevard/Interstate 70 (Site), Operable Unit 1 (OU1)
Site Location:	City and County of Denver, Colorado
Site ID:	089R
Lead Agency:	The United States Environmental Protection Agency (EPA)
Support Agency:	The Colorado Department of Public Health and Environment (CDPHE)

1.2 Legal Authority for Explanation of Significant Differences

Under Section 117 (c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA or Superfund), as amended by the Superfund Amendment and Reauthorization Act of 1986 (SARA), the EPA is required to publish an Explanation of Significant Differences (ESD) when significant, but not fundamental, changes are proposed to a previously selected site remedy. Sections 300.435(c)(2)(i) and 300.825(a)(2) of the National Contingency Plan (NCP) set forth the criteria for issuing an ESD and requiring that an ESD be published if the remedy is modified in a way that differs significantly in either scope, performance, or cost from the remedy selected in the Record of Decision (ROD) for the Site.

1.3 Summary of Purpose

A ROD was signed for OU1 on September 25, 2003.

This ESD documents significant changes to a portion of the remedy for OU1. This ESD provides information about this change and includes the site history, selected remedy, the basis for the change and the support agency comments. The change to the remedy described in this ESD is the result of the EPA's findings in the 2009 Five Year Review (FYR) report that the remedy at OU1 is not protective for properties where contamination was or may have been left at levels that will not permit unlimited use and unrestricted exposure (UU/UE) without appropriate institutional controls. The purpose of this ESD is to document the final decision to implement institutional controls for properties where contamination was or may have been left above levels that allow UU/UE.

1.4 Administrative Record

This ESD and its supporting documentation will be incorporated into the Administrative Record as directed in Section 300.825(a)(2) of the NCP. The Administrative Record file is available for public review at the following location:

US EPA, Region 8, Regional Records Center
1595 Wynkoop Street
Denver, CO 80202-1120
303.312.7273 or toll free 800.227.8917, appointment necessary

2.0 SITE HISTORY, CONTAMINATION, AND SELECTED REMEDY

2.1 Site History and Contamination

Historically, the Site and the area around the Site was a major smelting center for the Rocky Mountain West. The Omaha and Grant Smelter, the Argo Smelter, and the Globe Smelter all previously operated in the area refining gold, silver, copper, lead and zinc from the 1870s

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through the present. The Site is comprised of approximately 4.5 square miles, located in the north-central section of the City and County of Denver, Colorado. The Site was placed on the NPL due to metals contamination associated with the historic smelter operations.

For the purposes of investigations and remedy development, the Site was divided into three OUs. OU1 encompasses all or part of five neighborhoods in north-central Denver that are largely residential: Swansea/Elyria, Clayton, Cole, southwest Globeville and northern Curtis Park. The OU1 ROD was signed by the EPA and CDPHE in September 2003. The primary contaminants of concern at OU1 are lead and arsenic in residential soils.

OU2 and OU3 address on-facility soils and groundwater at the Omaha & Grant Smelter and Argo Smelter sites, respectively. The structures associated with both of these smelters have been demolished and the sites have been redeveloped with commercial businesses. Remedies for OU2 and OU3 have not been selected. Remedial investigations to assess groundwater conditions are still in progress for both of these OUs.

2.2 Summary of Selected Remedy

The selected remedy for OU1 consisted of three components to address lead and arsenic contamination in residential soils: soil sampling, soil removal and a community health program. Though not styled as such in the ROD, the EPA considers the community health program to be an informational institutional control. The major portions of the remedy were implemented from 2003 thru 2006 with a few residential properties being remediated in 2008 and, as explained below, a few more residential properties were remediated in 2012/2013. Approximately 4,400 properties were sampled in the period from 1999 to 2006 with approximately 800 properties being remediated.

Soil removals occurred at properties that had arsenic soil concentrations greater than 70 parts per million (ppm) or that had lead soil concentrations greater than 400 ppm. For properties where soil removal was conducted, all accessible soils were removed to a depth of 12 inches. Since the contamination was only found in the top 3-6 inches, the EPA considered excavation to12 inches to be adequate for removing all lead and arsenic contamination in the soils. The excavated areas were backfilled with clean soil, and pre-remediation yard features were restored to the extent practicable, in consultation with the property owner. During the 2003 through 2008 period, all excavated soils were transported to the ASARCO Globe Plant where they were used as capping and fill material in implementing the remedy at the ASARCO Globe Plant Superfund Site. The EPA considered the construction phase of the remedy complete in 2008.

The community health program was intended to raise awareness in the community about lead and arsenic hazards and was designed to complement the soil cleanups. The community health program was a unique program designed by local, federal and State government representatives and committed community leaders. Funded by the EPA and the State, the City and County of Denver administered the program, which included door-to-door visits from community members trained to provide education to area residents on the hazards of lead, arsenic and a range of other environmentally-related topics. The program provided opportunities for parents to have their children tested for lead or arsenic exposure. The community health program concluded in 2008 with completion of the soil sampling and soil removal components of the OU1 remedy.

In 2009, the EPA conducted a FYR of the remedy at VB/I-70. Based on the results of its review, the EPA determined that the remedy at OU1 was not protective of human health because of the

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approximately 181 properties where the EPA was not granted access from the property owner to either sample or clean up. The FYR report recommended implementing institutional controls at these remaining properties to ensure the remedy was protective for every property.

In 2012 and 2013, the EPA initiated an outreach effort to the owners of the remaining unaddressed properties. Earlier in 2012, the EPA had determined that as many as 50 percent of these properties had changed owners since the previous sampling and cleanup effort had ended. The EPA offered these property owners a final chance to have their property either sampled and/or cleaned up. These outreach efforts resulted in 94 additional properties being sampled and 20 properties being cleaned in 2013. Three additional properties are scheduled for cleanup in October 2014 bringing the total number of properties cleaned up in 2013-2014 to 23.

The excavated soils from these 20 properties could no longer be placed at the ASARCO Globe Plant, so they were transported to a local solid waste landfill based on soil analysis as will the excavated soils from the 3 additional properties to be cleaned up in October 2014. Despite the EPA's efforts, 69 properties remain with potential or known contamination because the property owners have failed to respond to or have denied the EPA requests for access. Based on the findings of the 2009 FYR, these properties will need to have institutional controls for the remedy to be protective since the EPA does not intend to offer additional sampling or cleanup at OU1 and the community health program is no longer being implemented.

3.0 BASIS FOR AND DESCRIPTION OF SIGNIFICANT DIFFERENCES

There are presently 69 residential properties within OU1 where contaminated soils exist or may exist above levels that allow for unlimited use and unrestricted exposure to the soil. It is not cost effective for the EPA to keep open the option for sampling and cleanup for these properties into the indefinite future. Thus, the EPA will not be providing sampling or cleanup under the ROD after the date of this ESD. However, for the remedy to be protective an institutional control is needed for these properties.

The ROD provided an informational institutional control through the community health program. The community health program ended in 2008 when the EPA intended to end the soil sampling and removal components of the remedy. The EPA explored a range of options with the State of Colorado and the City and County of Denver regarding the best approach for implementing institutional controls at the unaddressed properties. Re-establishing the community health program was considered, as was use of the State Environmental Covenant and Notice of Environmental Use Restrictions law. Since the number of properties involved is small, it was recommended that informational institutional controls directed at these specific properties in the form of a letter to property owners and a notice tied to the property address be implemented rather than more restrictive or broader institutional controls.

As a result, this ESD adds informational institutional controls in the form of a notice of environmental conditions (Notice) and an annual informational letter (Letter) for each unaddressed property as part of the OU1 remedy for the Site. The Notice would be filed with the City and County of Denver Clerk and Recorder's office on each unaddressed property and the Letter would be sent annually to each owner of record, as well as to the property address to ensure that any tenants would be aware of the potential for soil contamination and to provide information on how to minimize the potential for exposure to potentially contaminated soil.

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The objectives of the informational institutional controls for OU1 are as follows:

Reduce or control human exposure to potentially contaminated soil on these properties by providing information regarding the potentially contaminated soils to current and future property owners or tenant.

4.0 SUPPORT AGENCY COMMENTS

CDPHE supports the EPA's decision to modify the remedy for OU1 as described in this ESD.

5.0 STATUTORY DETERMINATIONS

The EPA has determined that these significant changes comply with the statutory requirements of Section 121 of CERCLA such that the remedy remains protective of human health and the environment and complies with federal and State requirements that are applicable or relevant and appropriate to this remedial action, are cost-effective, and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

Because this remedy will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted no less often than each five years after the initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

6.0 PUBLIC PARTICIPATION

All of the public participation requirements set forth in Sections 117(c) and (d) of CERCLA, as well as Section 300.435(c)(2)(i) of the NCP will be met. Although a formal public comment period is not required when issuing an ESD, this ESD and all documents that serve as the basis of this ESD are contained in the Administrative Record for the Vasquez Boulevard/Interstate 70 Site.

The EPA will also publish a notice of availability and a brief description of this ESD in the Denver Post.

Martin Hestmark
Assistant Regional Administrator
Office of Ecosystems Protection and Remediation
U.S. EPA, Region 8

9/30/14
Date

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