Vasquez Boulevard & Interstate 70
Superfund Site (VB/I-70)
Overview

Community Advisory Group
Meeting March 13, 2017
<table>
<thead>
<tr>
<th>AGENDA</th>
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<tr>
<td><strong>Introductions</strong></td>
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<tr>
<td>• CAG Members</td>
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<tr>
<td>• Agency Representatives</td>
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<td>• City Officials</td>
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<tr>
<td><strong>CAG Members Input Review</strong></td>
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<tr>
<td>• Identify the main issues (based on input received to date from CAG members)</td>
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<td>• Did we miss any?</td>
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<td><strong>Objectives &amp; Engagement Guidelines</strong></td>
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<tr>
<td>• CAG Objectives</td>
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<td>• Review Rules of Engagement Guidelines</td>
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<tr>
<td><strong>Follow Up</strong></td>
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<tr>
<td>• Discussion how information will be disseminated back and forth</td>
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<td>• Action items and preparation for next meetings</td>
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**VB/I70 Superfund Site Quick Overview**
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Nancy-Grandys Jones</td>
<td>President</td>
<td>Globeville Civic Partners</td>
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<tr>
<td>Candi CdeBaca</td>
<td>Executive Director</td>
<td>Cross Community Coalition</td>
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<tr>
<td>Ron Rohr</td>
<td>VP of Administration</td>
<td>National Western</td>
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<tr>
<td>Kim Morse</td>
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<td>Group of interested residents</td>
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<tr>
<td>Mike Dugan</td>
<td></td>
<td>Cole Neighborhood Association</td>
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<tr>
<td>Roberto J. Eaton</td>
<td>Facilities Maintenance Manager</td>
<td>Pepsi Co.</td>
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<tr>
<td>Lloyd Burton</td>
<td>Member,</td>
<td>Transportation Committee, Sierra Club, Rocky Mountain Chapter</td>
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<tr>
<td>Tad Bowman</td>
<td>Venue Director</td>
<td>Denver Coliseum</td>
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<td>Drew Dutcher</td>
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<tr>
<td>Jim Garcia</td>
<td>CEO</td>
<td>Clinica Tepeyac</td>
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<tr>
<td>Cliff Lind</td>
<td>President</td>
<td>E S G B A</td>
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<tr>
<td>Kenia Abeyta</td>
<td></td>
<td>Swansea Elementary</td>
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<td>Ann Elizabeth</td>
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<td>GlobevilleKares</td>
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<tr>
<td>Kristen Cardenas</td>
<td></td>
<td>Garden Place PTO</td>
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<tr>
<td>Rodolfo Rodriguez</td>
<td>Council Aide</td>
<td>City Councilor Robin Kneich</td>
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<td>Jack Paterson</td>
<td>Council Aide</td>
<td>City Councilor Debbie Ortega</td>
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<tr>
<td>Tricia Stevens</td>
<td>Colorado Aide</td>
<td>Congresswoman DeGette</td>
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<tr>
<td>Chy Montoya</td>
<td>Council Aide</td>
<td>City Councilor Albus Brooks</td>
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A Brief History

The Omaha & Grant Smelter (1878-1903)

The ARGO Smelter (1897-1909)

Communities sprung up around the smelters & other industries

**Globeville:** Established in the late 1800s, Annexed by Denver in 1902.

**Swansea/Elyria:** Established separately in the late 1800s, Elyria was Annexed by Denver in 1890 and Swansea in 1902.

**Cole:** Annexed to Denver in 1883 and 1889.

**Clayton:** Annexed to Denver in 1883 and 1889.
Smelters left behind heavy metal contamination in some area soils, groundwater, and sediments.

At VB/I-70, the primary contaminants of concern are lead and arsenic.
A Mining Legacy

1974 - The State of Colorado collects water and sediment samples at the Industrial Drainage Ditch at the Asarco Globe Plant.

1983 - The State of Colorado files suit under the Superfund law seeking cleanup of the Asarco Globe site.

1992 - The State of Colorado began assessing for environmental contamination at the former Omaha & Grant and former Argo smelter locations.
A Mining Legacy


1993 & 1997 – Two citizen lawsuits result in additional soil cleanup and payment of damages to residents of Globeville.

1997- The State of Colorado asked EPA to investigate yards in Swansea/Elyria, adjacent to Globeville and the Globe smelter.

1998- EPA expanded its investigation to include Swansea/Elyria, Cole, Clayton, and southwest Globeville (and eventually the very northern corner of Curtis Park).
A Mining Legacy

1999- EPA added VB/I-70 to the National Priorities List of Superfund Sites due to heavy metal contamination of area soils and groundwater.

EPA divided VB/I-70 into three operable units:

OU1 – residential soils in Cole, Clayton, Swansea/Elyria, and small sections of southwest Globeville and northern Curtis Park.

OU2 - the former Omaha & Grant smelter location

OU3 – the former ARGO smelter location
OU1 Residential Soils

**Contaminants of concern** – lead and arsenic in soils

**Area** - 4.5 square miles

**Number of homes requiring sampling** - 4,470
(4,425 sampled / 45 no access)

**Number of homes requiring cleaned up** – 794
(784 cleaned up / 10 no access)

**Status** – complete
Operable Unit 1 – Residential Soils
1999 – NPL Listing
2001 - Remedial Investigation Report
2001- Baseline Human Health Risk Assessment
2001 - Feasibility Study Report
2003 - Proposed Cleanup Plan
2003 - Record of Decision
2003 – 2008 Remedial Design/Remedial Action
2008 - Construction Complete
2012-2014 – Remedial Action
2016-2017 – Remedial Action Completion
OU2 – Former Omaha & Grant Smelter

**Contaminants of Concern** – heavy metals in soils and groundwater, primarily lead and arsenic

**Area** – Industrial/commercial - includes the Denver Coliseum and parking lot, Globeville Landing Park, surrounding businesses such as Pepsi Co. and the Forney Transportation Museum.

**Status** – Not complete. Currently, groundwater studies are ongoing as part of the remedial investigation.
Operable Unit 2 – former Omaha & Grant Smelter

1999 - NPL listing

2009 – Baseline Human Health and Screening Level of Ecological Risk Assessment

2010 - Remedial Investigation Report

2012-2014 – EPA groundwater studies

2015 – Removal Action Memo/Settlement Agreement with the City and County of Denver.
OU3 – Former ARGO Smelter

**Contaminants of Concern:** Heavy metals in soils and groundwater

**Area** - Industrial Commercial Area at the northwest corner of the “mousetrap” – I/70 and I/25 confluence.

**Status** – Not complete. Currently, groundwater investigations are ongoing as part of the remedial investigation.
Operable Unit 3 – former ARGO Smelter

1999 - NPL listing

2006 - Baseline Human Health and Ecological Screening Risk Assessments

2007 - Initial Remedial Investigation Report

2007 - Initial Feasibility Study

2007 - Initial Proposed Cleanup Plan

2010 – Evaluation of Alternative Remedies for an Inorganic Contaminant Plume in the Argo Offsite Plume Study Area

2012-present – Additional Groundwater Studies (Phase 2 Sampling)
VB/I-70 in Summary:
Lead and Arsenic in some area soils and groundwater primarily from historic smelter deposition

**OU1** Residential Soils is *complete*.

**OU2** the former Omaha & Grant Smelter location continues to undergo remedial investigation and is *not complete*.

**OU3** the former ARGO Smelter location continues to undergo remedial investigation and is *not complete*. 
OU2 Removal Action

• CCOD is the landowner and responsible party at OU2.

• CCOD approached EPA with plans to construct the Globeville Landing Outfall Project across a portion of OU2.

• EPA’s role is to oversee that CCOD develops and implements the environmental components of the removal action to protect human health and the environment.

• In July 2015, EPA issued a settlement agreement and order on consent to CCOD which describes environmental components which CCOD must implement:
  • Management and handling of waste material encountered
  • Management and, if necessary, treatment and/or disposal, of dewatering liquid during construction
  • Design and construction of an impermeable barrier
GLO is divided into 5 unique parts. This map shows 3 of those parts, parts of which are located within the OU2 Boundary.

**LEGEND**

- Approximate OU2 Boundary
- GLO Phases Approaching Construction (Phases 1 and 2)
- GLO Phasesh Design (Phase 1s)
- GLO Phase A (Drainage Improvements)
- GLO Phase B (Park Improvements)
- GLO Phase II (Pipe Installation)
OPERABLE UNIT 2 SAMPLING SUMMARY 2012-2015

WHAT HAS BEEN SAMPLED:

- Surface soils (0 to 1 foot)
- Subsurface soils and waste material (1 to 20 feet)
- Groundwater (water found under ground in the cracks and spaces in soil)
- Surface water and sediment (South Platte River, no concerns related to the site were found)

CONTAMINANTS OF CONCERN

- Surface soils - arsenic and lead
- Subsurface soils - arsenic and lead
- Groundwater - arsenic
- Groundwater - Volatile Organic Compounds (VOCs are compounds that easily become vapors or gases)
<table>
<thead>
<tr>
<th>WHAT?</th>
<th>SAFETY MEASURES</th>
<th>MONITORING</th>
<th>RESULT</th>
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<tbody>
<tr>
<td><strong>DUST CONTROL</strong></td>
<td>Vegetating soil storage piles Minimizing excavation areas Modifying construction activities if visible dust migrating Stopping work during high winds Covering exposed dirt with special foam or other covers</td>
<td>Air monitors at site perimeter Observations at site perimeter Project hotline</td>
<td>Prevent dust from leaving site</td>
</tr>
<tr>
<td><strong>ODORS</strong></td>
<td>Covering truckloads and exposed soil Minimizing excavation areas Foam or other covers of exposed soil Dewatering to dry out buried trash</td>
<td>Qualitative odor assessment at site perimeter Odor measurements at site perimeter with Nasal Ranger Project hotline</td>
<td>Minimize odors from leaving site</td>
</tr>
<tr>
<td><strong>WASTE MATERIALS</strong> (Primarily buried trash and smelter-contaminated soils)</td>
<td>Visual observations for materials of concern during excavation Prompt hauling off-site</td>
<td>Certified Asbestos Building Inspector observes all excavation Waste loads tracked at site and disposal facility</td>
<td>Waste materials safely managed and disposed</td>
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## Contacts

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<thead>
<tr>
<th></th>
<th>EPA</th>
<th>CCOD</th>
<th>CDPHE</th>
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<td>Elizabeth Suarez, VB/I-70 CAG Facilitator 720-635-5535 / <a href="mailto:elizabeth@elizabethsuarez.com">elizabeth@elizabethsuarez.com</a></td>
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EPA Web site:
https://www.epa.gov/superfund/vb-170

CCOD Web site:
https://www.denvergov.org/EnvironmentalLandUse

Information Repositories:

Valdez-Perry Library, 4690 Vine Street, Denver CO - update coming soon!

City and County of Denver, Dept. of Environmental Health
Environmental Quality Division
200 W. 14th Avenue, Suite 310
Denver, CO 80204
For CORA Requests, email Kerra Jones at Kerra.jones@denvergov.org

EPA Superfund Records Center
1595 Wynkoop St., Denver, CO 80202
Records may be viewed by appointment only – call 303-312-6601