Reclamation of Former ASARCO Smelter Site
El Paso, Texas

An innovative and enduring solution that enhances the built and natural environment

Presented to:
SURPLUS PROPERTY ROUNDTABLE

Presented by:
ARCADIS

February 16, 2017
The Site Was Placed Into An Environmental Trust As A Result Of 2009 ASARCO Bankruptcy Settlement.

Trust Purpose

• Address contamination on and in structures, soils, surface water and groundwater
• Remediate the Site to standards that are protective of human health and the environment
• Sell or otherwise dispose of the property

Objectives

• Implement a technically rigorous remedy
• Ensure a viable and beneficial final site end use
• Facilitate community participation
• Effective management of site assets to increase remediation fund
• Efficient and objective procurement of project resources
Our project team has worked nearly 446,149 hours with no recordable incidents or lost time. We are committed to project safety and success.

<table>
<thead>
<tr>
<th>Company</th>
<th>Hours to Date</th>
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<tr>
<td>ERM (and subs)</td>
<td>~193,150 hours</td>
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<tr>
<td>Arcadis (and subs)</td>
<td>~241,700 hours</td>
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<tr>
<td>AKJV</td>
<td>~4,841 hours</td>
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<tr>
<td>UPRR</td>
<td>~6,458 hours</td>
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Community Outreach

The Community Outreach effort has been higher than anticipated due to diverse stakeholders, a high level of community involvement, local government involvement and various community activist groups.

Avenues for Community Input

- **Website:** ([www.RecastingTheSmelter.com](http://www.RecastingTheSmelter.com))
  - The website is aimed at providing the public with current site information and activities. The homepage includes the Arroyo webcam and the Main Site webcam.
- **Blog:**
  - Gives the community a forum to post their opinions and input.
- **Access to media:**
- **Ex-ASARCO Employee Group:**
  - Intensive One-on-one interaction (site tours, meetings, written communications, incorporation of concerns into work plan)
- **Elected Officials:**
  - Frequent briefings to federal, state, and local officials

**El Paso Based Contractors**

- We Have Utilized Local Labor & Resources As Much As Possible
Proactive Outreach Helped Mitigate Public Concerns/Questions

- Trust formation
- Decision to Drop Stacks
- Successful stack demolition

List of Trust Actions to Address Public Concern

- Website
- Media interaction
- Office holder briefs
- Public meetings
- Outreach to civic groups
- Outreach to grassroots environmental groups
Regulatory Framework

**Initial Work:**
Texas Risk Reduction Rules (RRR)
- Remedial Investigations I-IV (by ASARCO)
- Supplemental RI (by Trust)

**Now In:**
Texas Risk Reduction Program (TRRP)
- CSM, Pathway PCL Report (satisfy remaining APAR requirements)
- Response Action Plan (includes OM&M plan)
- Response Action Completion Report (RACR)
- Post-Response Action Care Report (PRACR)

Entering 50-year Post Closure Care Period
Asset Realization

How do you realize value of assets?
Think of the property as an asset

Available assets for remedial action:

Trust initial funding: $52MM
Additional funding from asset sales: $30MM
Total Remediation Funding: $82MM

Real Estate Sale: $16.9MM, to be used for long-term OM&M

Reduced remediation costs?
What can be recycled?
How to market property?

- Matte and Ore
- Scrap Real Estate

- Commodity broker
- ERM-brokered
- Local recycling
- China
- India
- El Paso, Texas
- Namibia

Purchased by Australian firm, and then sold to a company in Namibia

Equipment
Misc.
Recycled domestically

Available assets for remedial action:

- Rail ties
- Equipment
- Misc.
Stack Demolition – Extraordinary Steps to Mitigate Real and Perceived Dust Issues

Protections in Place during Stack Demo

Cushioning Layers
- Prevents dust from rising from existing ground surface
- Minimizes dust from stack impact with ground

Earthen Berms
- Intercepts lateral migration of dust and fallout
- Pushes dust upwards into mist systems, use multiple

Water Mist Dust Capture
- 30 locations, applying 3,000 gallons per minute of water
- Water atomizes airborne dust

Stack Sampling

Stack Demo

Perimeter Dust Monitoring Network

#5 Twitter feed in the world on the day of the demolition
Former ASARCO Smelter Stacks Demolition
Remedy Re-imagining: Soils – Old Remedy

- Excavation of Category 1
- Construction of 1 additional onsite landfill
- Asphalt pavement across the majority of the site once demolition is complete
- Provides limited opportunity for site development
- Does not address Parker Brothers Arroyo, Ephemeral Pond
- End Vision: Commercial/Industrial
Excavation of Category 1 (arsenic source) material including the:
- Ephemeral Pond
- Boneyard

Restoration of Parker Brothers Arroyo

Evaluating option to install an engineered cap. (Example: Installing five feet of soil cover over the entire plant site for redevelopment purposes)

Supplemental soil investigation is still ongoing. Results will be factored into the evaluation.

Evaluating potential to develop east side as residential land use

End Vision: Redevelopment as part of City of El Paso Master Plan

New remedy is pending approval of TCEQ/EPA
Parker Brothers Arroyo: Time-Lapse Video
Remedy Re-imagining: Groundwater – Old Remedy

- Cut-off Slurry Wall in Floodplain
- Containment with Pump and Treat
- Requires continual treatment of groundwater in onsite water treatment plant
- Original End Vision: Commercial/Industrial
Remedy Re-imagining: Groundwater – New Remedy

- Groundwater to Surface Water Diversion (keeping clean water clean)
- Point Source Removal and Treatment (additionally address Boneyard and Ephemeral Pond)
- In-situ groundwater treatment, no requirement for onsite treatment plant
- Remediation of Old Smeltertown area
Purpose is to stop infiltration and mitigate groundwater impacts.
Completed Plant Site Covers
Redevelopment Potential: Location & Size of Parcels

ASARCO El Paso Parcels:
- East I-10 Parcel: 248 acres
- Main Plant Site: 153.71 acres
- "La Calavera" Parcel: 39.39 acres
- "Smeltown" Parcels: 16.80 acres
- TOTAL: 457.94 acres
UT System Deal Structure

1. **SALE COMPONENT**
   - **The Land**
     - ~450 acres
     - Includes old plant site and Smeltertown
   - **DISPOSITION**
     - UT pays the Trust
     - Trust transfers title to UT

2. **SALE COMPONENT**
   - **Deed Restrictions**
     - The property comes with:
       - Deed restrictions
       - OM&M obligations
   - **DISPOSITION**
     - UT agrees to comply with deed restrictions
     - UT agrees to perform OM&M obligations after Trust funds are depleted
     - TCEQ/EPA to enforce

3. **SALE COMPONENT**
   - **Legacy Environmental Liability Resolution**
   - **DISPOSITION**
     - UT is released by TCEQ/EPA for prior contamination
     - Net Proceeds of Sale are used to fund first 50 years of OM&M
       - Trust continues to implement OM&M
Sustainable Energy Concept: Solar Array

Total 3MW Solar Array
PVN to begin discussions with UTEP next month
Post-Closure O&M Obligations
Institutional Controls Plan
Lessons Learned to Date

- **Formulate a Project End Vision at the Beginning of the Project**
  - Focuses Remediation, Early Stakeholder Buy-In and Assistance, Set Expectations for Selling the Property Early

- **Proactive Outreach to Stakeholders**
  - Don’t Assume You Can Do Work Quietly
  - Ongoing and Consistent Effort
  - Bi-National Regulatory Agency Coordination, Media, Website, Grass-root Groups, Elected Officials
  - Use Project as an Educational Tool (UTEP)

- **Realize Importance of Monetizing Site Assets**
  - Aggressive Outlook for the Marketing & Pricing of Site Assets

- **Strategic Procurement of the Right Resources**
  - Be Flexible in Scoping the Work Elements
  - Utilize as Many Local Resources as possible
Questions?