



PRESENTATION TO DTSC INDEPENDENT REVIEW PANEL
VERNON RECYCLING FACILITY

FEBRUARY 10, 2016

AGENDA

- Welcome & Introductions
- Regional & Facility Overview
- Recent Facility Operations
- Facility Closure
- Historic Operations
- Corrective Action
- Residential Update
- Summary Of Soil Lead Study
- Exide Performance

Regional & Facility Overview



Facility Closure

- Closure Plan - Currently Under DTSC Review
- Public Review – December 8, 2015 to March 28, 2016
- DTSC Notice to Proceed - May 2016 (est.)
- Begin Implementation - June 2016 (est.)
 - Phase 1 - 26 months
 - Phase 2 - 24 to 30 months

Facility Closure

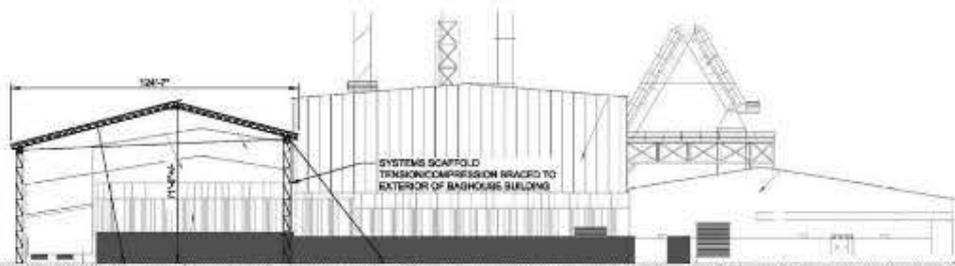
- Financial Assurance Commitment Pursuant to November 2014 Stipulation and Order
 - \$38.7 M for facility closure
 - \$14.0 M for off-site residential sampling and cleanup
- In addition, Exide continues to do the following:
 - Fund a blood-lead testing program administered by the California Department of Public Health (cost for the past two years=\$856,000)
 - Pay the costs of DTSC oversight (\$2.4M)
 - Pay the costs of SCAQMD 3rd party consultant dust mitigation monitoring (\$1.4M)
 - Engage engineering and other experts at significant cost to design the Facility's closure and corrective action plans

Closure Plan

- Decontamination of Regulated Units
- Removal of Lead from Kettles
- Building Demolition

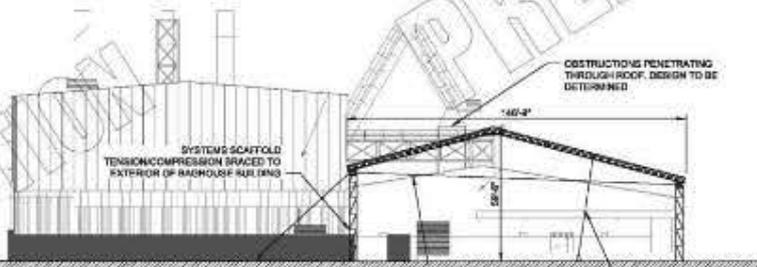
Phase 1 Closure

- Decon of Regulated Units
 - Perform Activities Under Supervision of Third Party QA/Dust Mitigation Oversight Consultant and Pursuant to AQMD-Approved Protocols
 - Maintain Negative Pressure at Interior Units
 - Erect Temporary Enclosure Over/Around Exterior Units
 - Remove Residuals/HEPA Vacuum/Pressure Wash
 - Recycle Lead Bearing Solids
 - Characterize and Dispose of Waste Solids
 - Treat Wash Waters and Stormwater in On-Site WWTP
 - Confirmatory Sampling Units Not Slated for Disposal



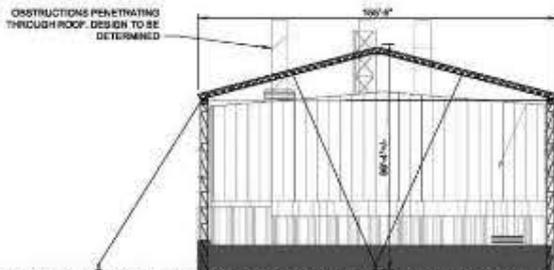
PHASE 1 - RUMPS AND HOPPER BUILDING CONTAINMENT

SECTION A
SCALE: 1/8" = 1'-0"
(DO NOT SCALE)



PHASE 2 - SHELTER BUILDING CONTAINMENT

SECTION A
SCALE: 1/8" = 1'-0"
(DO NOT SCALE)



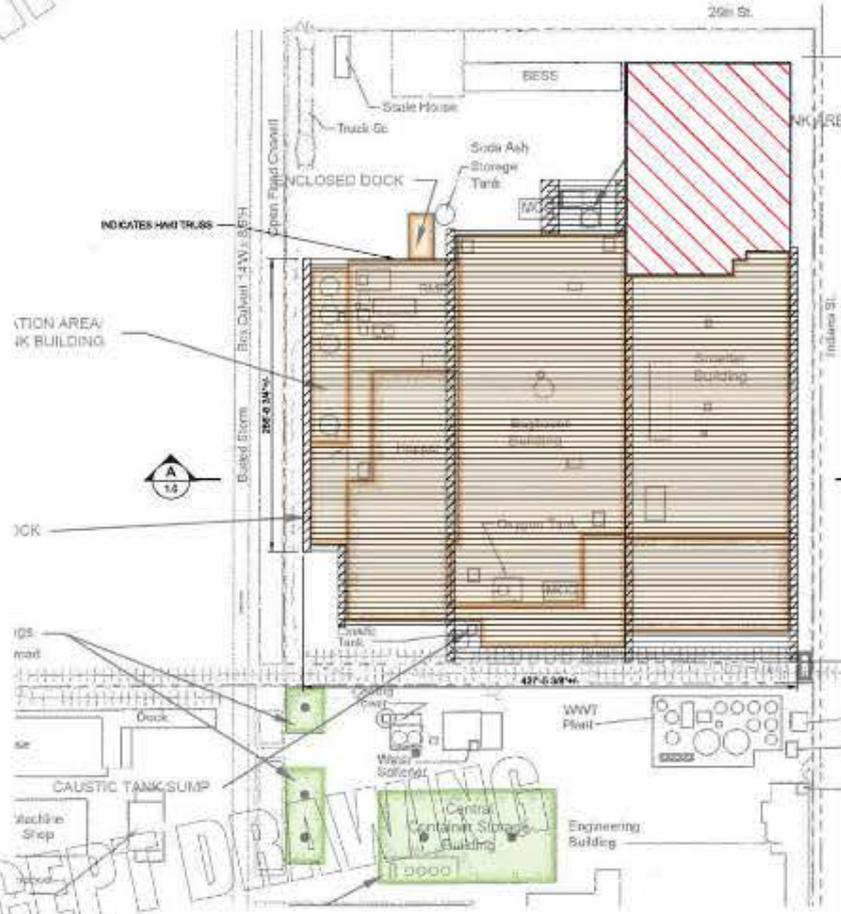
PHASE 3 - BAGHOUSE BUILDING CONTAINMENT

SECTION A
SCALE: 1/8" = 1'-0"
(DO NOT SCALE)

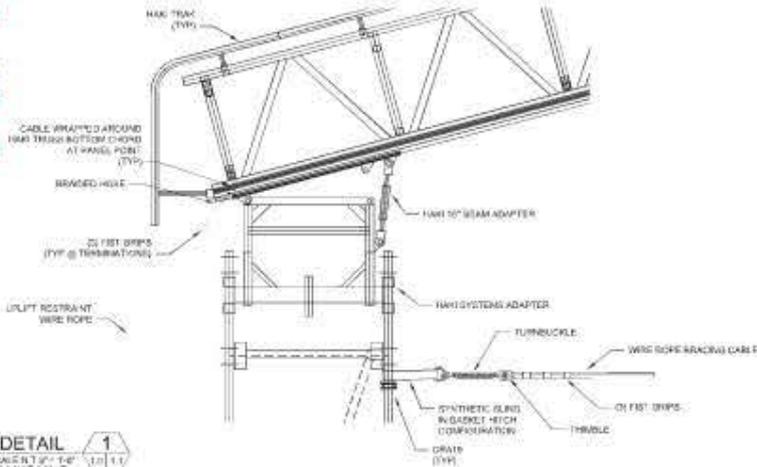
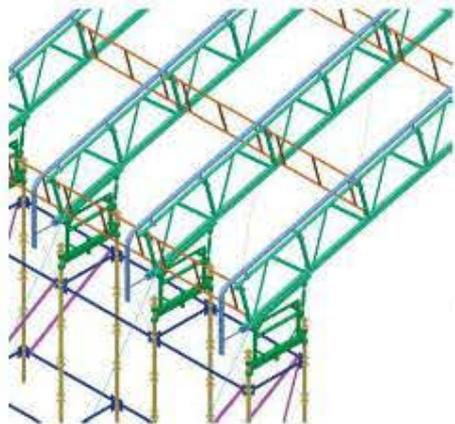
WIND LOADING CRITERIA

THIS SCAFFOLDING IS ESTIMATED TO BE DESIGNED FOR 100% CONTAINMENT AT A MAXIMUM WIND VELOCITY OF 75 MPH.

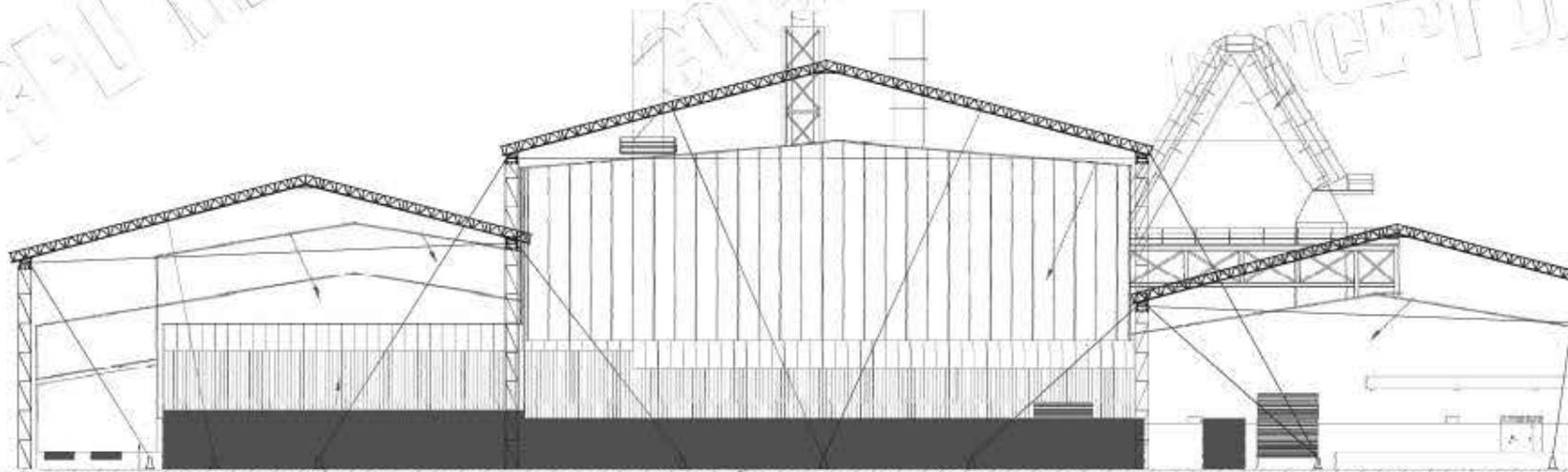
IF WIND VELOCITY EXCEEDS 75 MPH, CONTAINMENT MUST BE REMOVED AND ALL PERSONNEL MUST EVACUATE THIS SCAFFOLDING.



PLAN VIEW - EL. 100'
SCALE: 1/8" = 1'-0"
(DO NOT SCALE)



DETAIL 1
SCALE 1/4\"/>



ENLARGED SECTION VIEW SHOWING ALL PHASES. REFER TO DRAWING FOR DETAILS

Phase 1 – Removal of Lead from Kettles

- Total of 13 kettles
- 6 have less than 12 tons of lead and can be lifted by building crane – no heating required
- 7 have over 12 tons and cannot be lifted by crane
- Reviewed 3 methods for removing lead
 - Water cutting – experimental, high employee safety risk and exposure, water containment of major concern
 - Manual demolition – generates significant lead dust, high employee safety risk and exposure and slow removal rate (est. 63 weeks)
 - Re-melting – fastest (approx. 3 weeks), safest, most environmentally sound and protective of workers and public when considering health and safety risks, waste management, air emissions and other relevant EH&S factors.

Vernon Facility Kettle Area



Phase 1 Closure

- Building Demolition (to grade)
 - Interior Gutting (negative pressure)
 - De-skin (within temporary enclosures)
 - Structural Steel (sheers or cold cuts)
 - Concrete Walls (wind breaks and wet suppression)

Phase 2 Closure

- Scope Depends On Phase 1 Sample Results and Integration With Site-wide Corrective Action
- Scenario For DTSC Cost Estimate Assumes
 - Concrete Floor Removal and Disposal
 - Soil Excavation and Disposal
 - Confirmatory Soil Sampling
 - In-place Closure And Capping
 - Restoration
 - Certification Report By Prof. Engineer

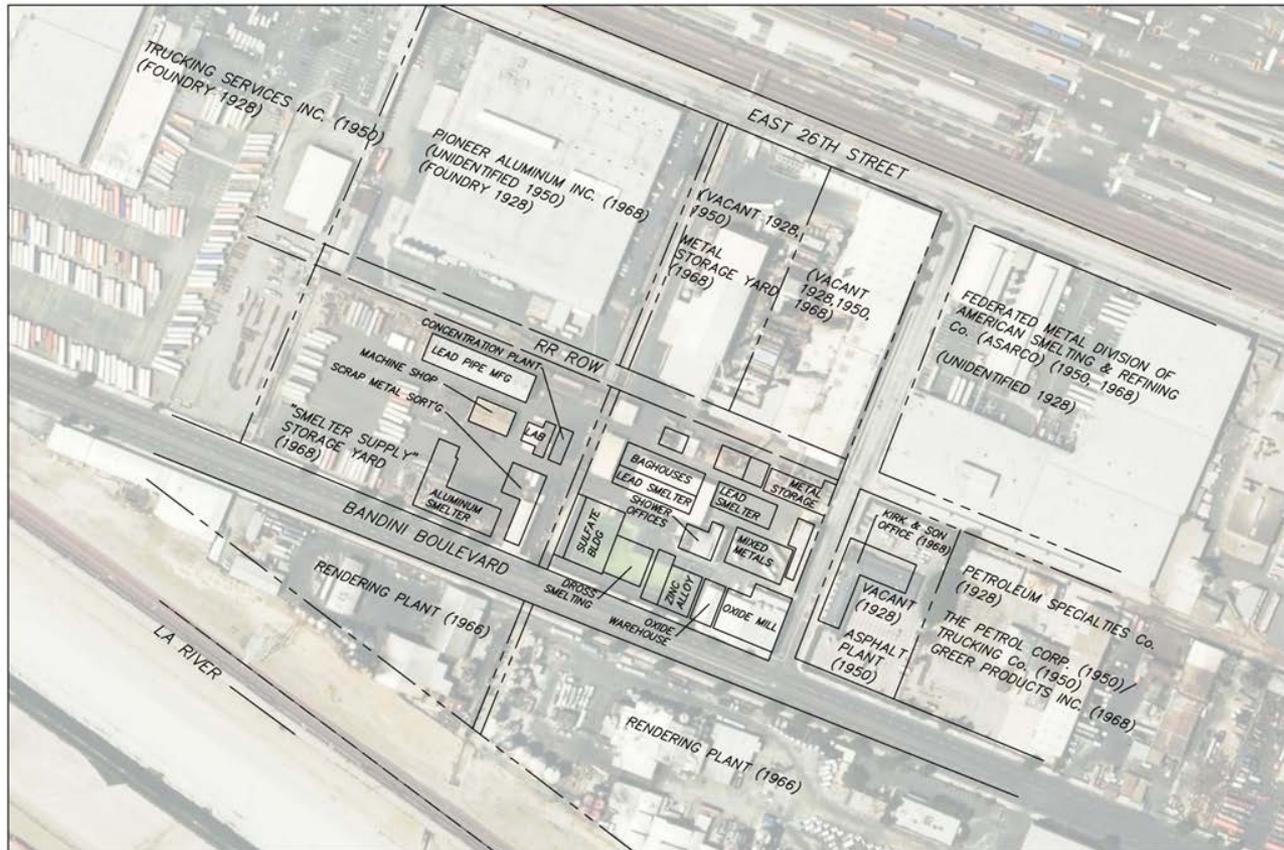
POST-CLOSURE

- Deed Notice (for non-residential standards and capping)
- Monitoring (for capping remedy if utilized)
 - Groundwater
 - Soil Pore Water (If Necessary)
 - Soil Vapor (If Necessary)
 - Surface Water
- Cap Maintenance (for capping remedy if utilized)

Corrective Action

- Addresses Historic Impacts (first 60 years/Pre-RCRA)
- Required by Corrective Action Consent Order (2002 CACO)
- CACO Covers
 - On-Site
 - Off-Site (Residential and Non-Residential)
 - Groundwater

Historic (Pre-RCRA) Operations (1922 – 1981)



Corrective Action

- Corrective Action Process
 - RCRA Facility Investigation (RFI)
 - Corrective Measures Study & Risk Assessment
 - Remedy Selection w/ Public Review
 - Corrective Action Design and Implementation
 - Long Term Care and Maintenance

Corrective Action

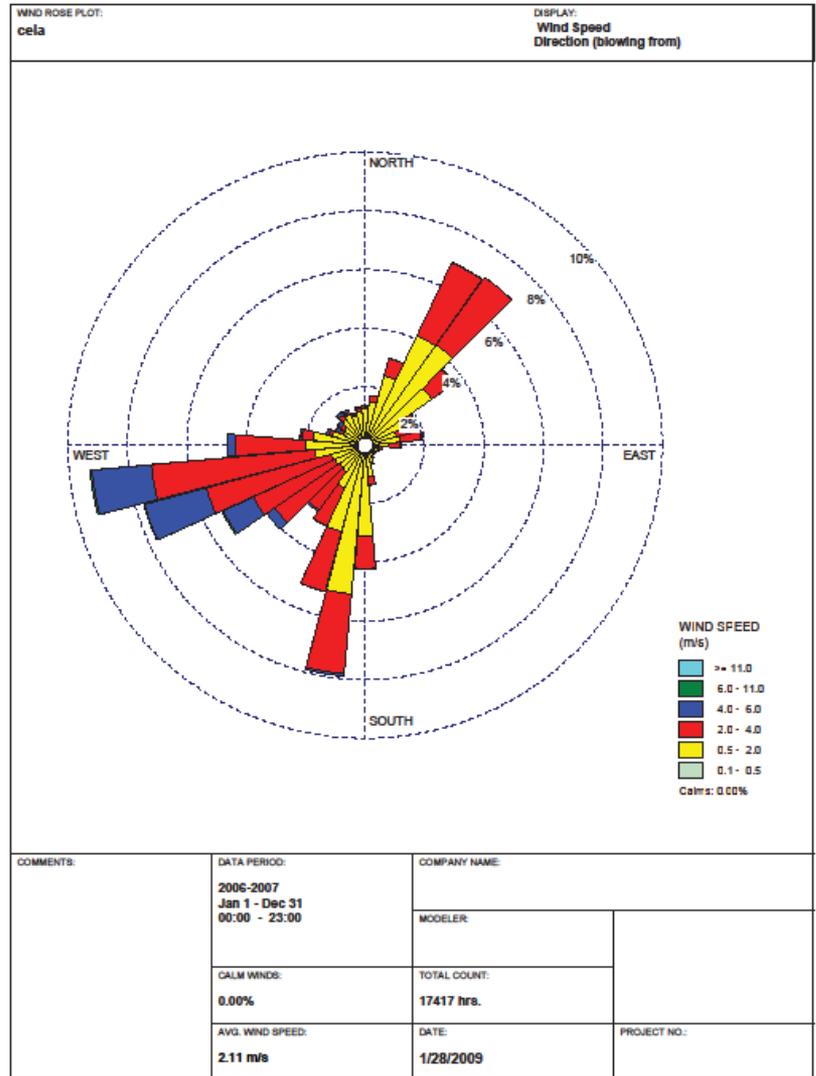
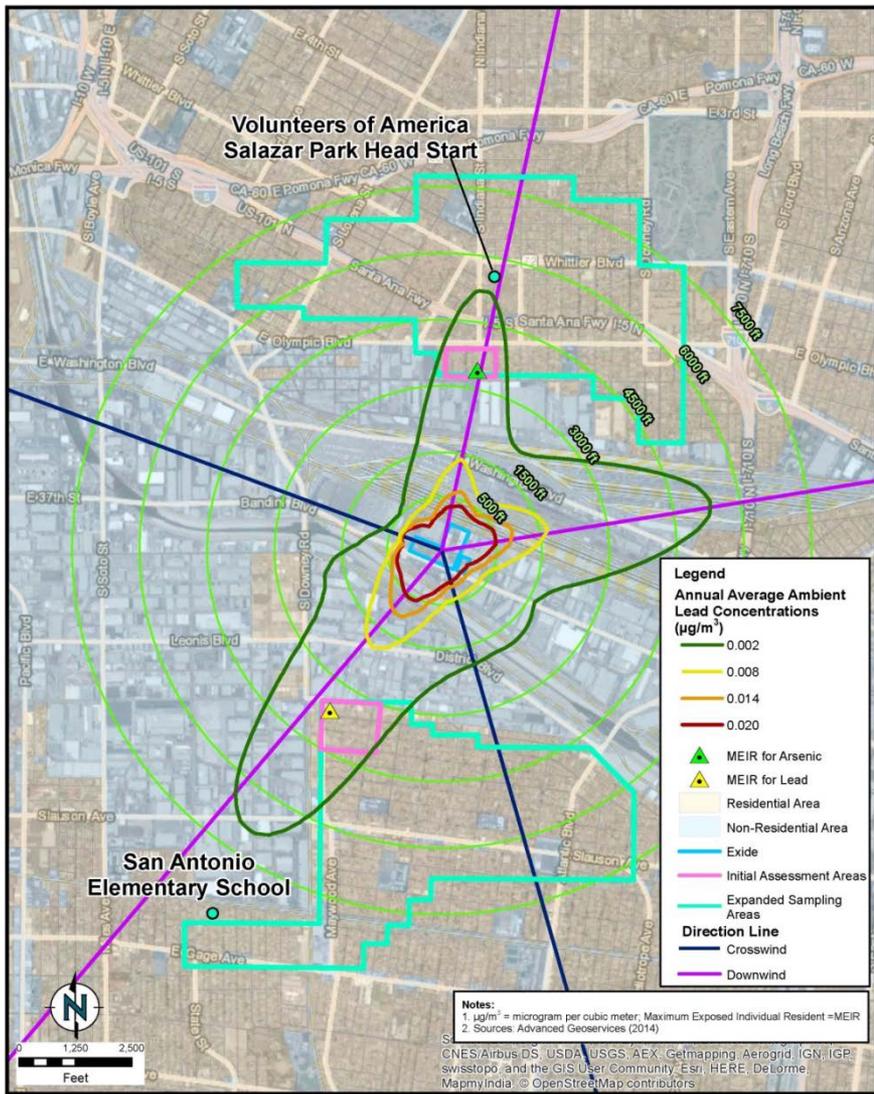
- Corrective Action Focus:
 - On-Site Soil (Merge with Phase 2 Closure)
 - Groundwater
 - Off-Site Non-Residential
 - Residential

Corrective Action

- Current Status On-Site Soil RFI Field Work Completed. Report Submission – February 2016
 - Groundwater RFI Nearing Completion. Report Submission - March/April 2016
 - Off-Site Non-Residential RFI Field Activities (NRDD Sampling) - Started September 2015.
 - Residential Sampling and Remediation - November 2013 through November 2015

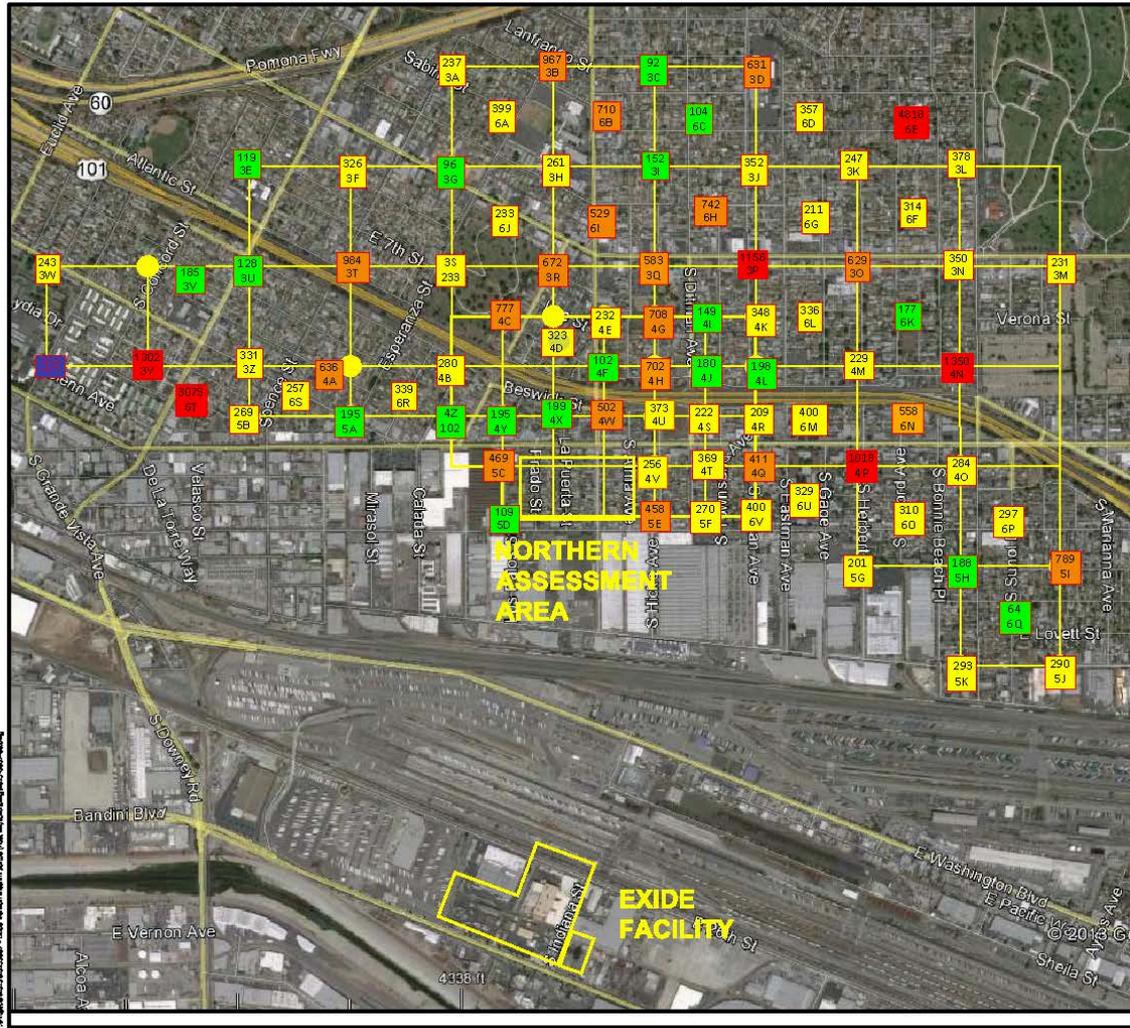
Residential Corrective Action

- Two Residential Assessment Areas
 - Northern and Southern Assessment Areas
- Residential Remediation in Assessment Areas
- Expanded Sampling
- Soil Lead Study



	Northern and Southern Assessment Areas	Exide Technologies Facility 2700 South Indiana Street Vernon, California	PROJECT: 07-32583A
	DRAFTED BY: MMG		

NORTHERN EXPANDED AREA



LEGEND

- SOIL SAMPLING LOCATION
NORTHERN 63 TOTAL
- DTSC PROPOSED LOCATIONS 21 TOTAL
- VOLUNTEERED PROPERTIES PER DTSC 3

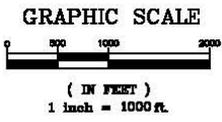
84 of 85

Concentration is 95th UCL of all 0-1" samples

Property 3X declined access. No other residential properties in proximity

Updated 2/27/15

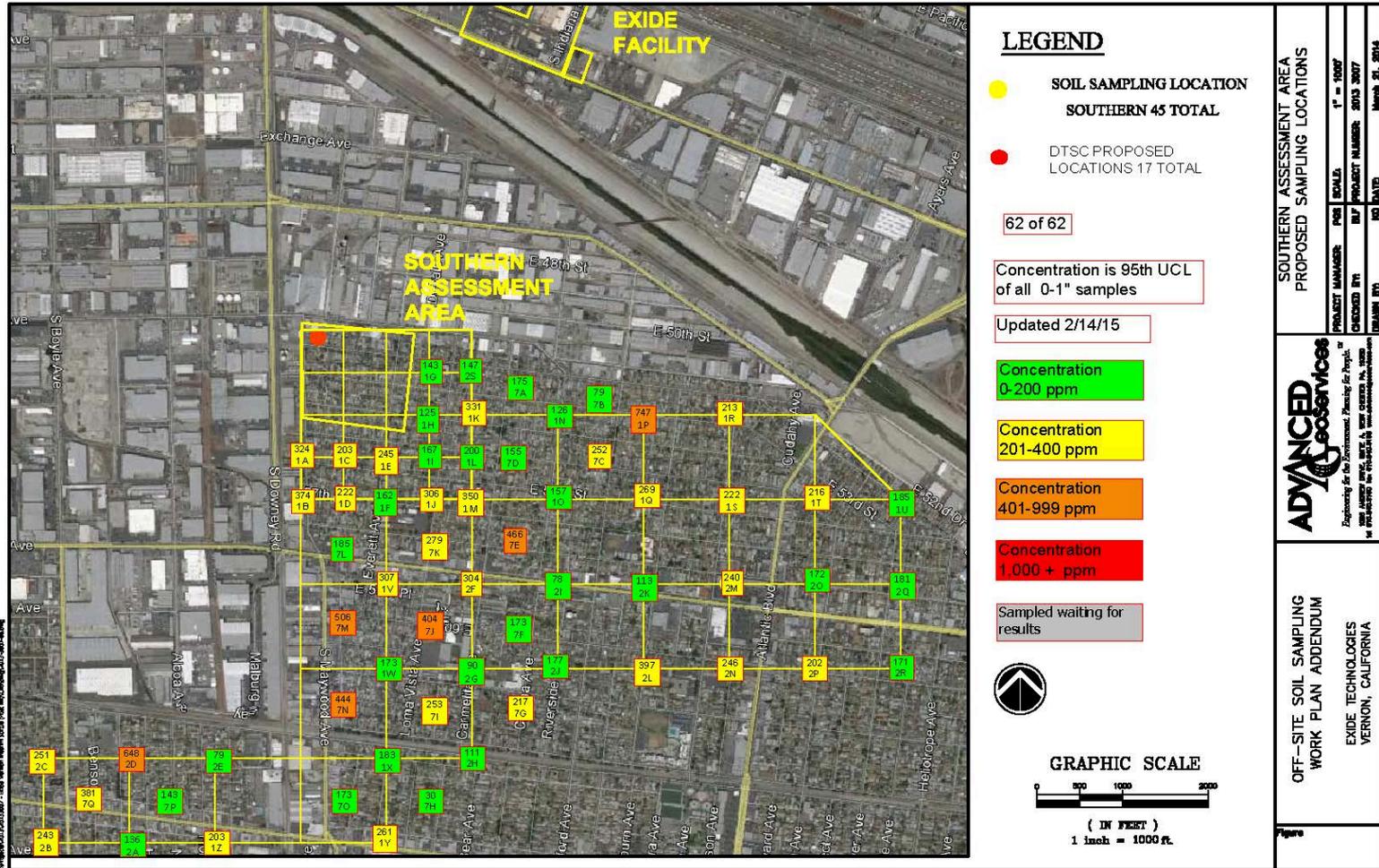
- Concentration 0-200 ppm
- Concentration 201-400 ppm
- Concentration 401-999 ppm
- Concentration 1,000 + ppm



NORTHERN ASSESSMENT AREA PROPOSED SAMPLING LOCATIONS	
PROJECT MANAGER: PBR	SCALE: 1" = 1000'
CHECKED BY: MJP	PROJECT NUMBER: 2013 3007
DATE: 02/27/15	NO DATE:
ADVANCED Geoservices <small>Engineering for the Environment. Planning for People.™ 1000 West 10th Street, Suite 200, Santa Ana, CA 92701 or visit us at www.advancedgeoservices.com</small>	
OFF-SITE SOIL SAMPLING WORK PLAN ADDENDUM EXIDE TECHNOLOGIES VERNON, CALIFORNIA	

Privileged & Confidential Settlement Communication

SOUTHERN EXPANDED AREA



Privileged & Confidential Settlement Communication

Residential Remediation

- Agreed to Remediate Properties > 80 mg/kg in Northern and Southern Assessment Areas.
 - 219 Properties/195 Sampled (89% of Property Owners Elected to Participate)
 - 186 Properties Remediated Since Late November 2014 at a cost of \$9.0 MM +
- Sampling Completed in Expanded Sampling Area

Soil Lead Study

- Carnegie Mellon Professor Mitchell Small, Ph.D.
- Uses all available soil data to test influence of various lead sources:
 - Vernon air lead deposition
 - Legacy lead-based paint/Building drip zones
 - Traffic/Proximity to high density transportation corridors/freeways/arterial roads
 - Historic metal and manufacturing industries
- Establishes area of impact and background soil lead concentrations

Findings of Soil Lead Study

- Exide Facility's potential impact above background confined to industrial area.
- Beyond industrial area, no decreasing trend with distance.
- Threshold distance at which results become indistinguishable from Urban Background ranged from <1,000 feet in cross wind direction to approximately 3,900 feet in downwind direction. Closest residential property – 4,200 feet away from Vernon Facility.
- Average calculated background is 218 mg/kg.

Exide Performance

- Exide is in compliance with all of its closure, remedial and financial obligations
- Exide fully intends to continue to meet those obligations
- Exide will continue to work with DTSC, SCAQMD, LA County and RWQCB and other interested parties as the Company completes the closure and corrective action process



Questions and Answers