

# ATTACHMENT 1C.7

West Cemetery  
La Calavera Assessment Area



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## West Cemetery La Calavera Assessment Area

### Introduction

Response Actions identified in the Response Action Plan (RAP) included removing soil with COCs above their respective commercial/industrial direct contact Protective Concentration Levels (PCLs) ( $C/I^{Tot}Soil_{Comb}$ ) at the La Calavera Assessment Area (AA) as illustrated on Figure 9 of the RAP.

As described on page 13 in Worksheet 1.0 of the RAP, the La Calavera AA has several small surficial soil Protective Concentration Level Exceedance (PCLE) Zones around the cemetery site, with concentrations of arsenic, lead, and mercury above  $C/I^{Tot}Soil_{Comb}$  PCLs. Surface soil was scraped, removing elevated concentrations principally of arsenic and lead from areas identified on Figure 9 of the RAP. Category II material was placed beneath the plant site ET cover, and Category I material was placed in the Cell 4 landfill. Excavations of impacted soil at the La Calavera AA occurred in 2014.

The Texas Custodial Trust submitted the *Closure Report, Parcel 13* (Arcadis 2016d) to document response actions performed on Parcel 13, a portion of TCT property conveyed to TxDOT for construction of Loop 375 highway. The *Closure Report, Parcel 13* is included in Attachment 1C.6.4 of this Soil Response Action Completion Report (Soil RACR). The Texas Commission on Environmental Quality approved the Closure Report, Parcel 13 (Arcadis 2016d) in a letter dated March 28, 2016. The northern portion of Parcel 13 is within the La Calavera AA. The Parcel 13 Closure Report also presents data from within portions of La Calavera AA and the Upper Parker Brothers Arroyo AA that are adjacent to or within the vicinity of the Asarco Cemetery.

The response action for soil removal in the La Calavera AA is described in the following sections of the RAP:

- RAP Worksheet 1.0, page 5 and 13 - Response Action Objectives
- RAP Worksheet 1.0, page 36) - Exposure Pathway
- RAP Worksheet 2.0, page 5 - PCLE Zones
- RAP Attachment 2A-9 - figure showing area referred to as North of Cemetery

### Regulatory Approval

- Letter from TCEQ from dated December 27, 2016 regarding Approval of the following documents: Response to TCEQ comments dated September 19, 2016, dated November 22, 2016; Response to TCEQ e-mail comments dated December 7 and 20, 2016; and Revised Response Action Plan, dated August 16, 2016

### Response Actions

As described on page 5 of Worksheet 1.0 in the RAP, the La Calavera AA had PCLE zones in surface soil based on concentrations of arsenic and lead above their respective  $C/I^{Tot}Soil_{Comb}$  PCLs. Soil excavations were completed and documented for Parcel 13 (including areas to the west of Parcel 13) and north, west, and south of the Asarco cemetery shown on Figure 6 in the Closure Report, Parcel 13 (Arcadis 2016d) included in Attachment 1C.6.4 of this Soil RACR. The excavations consisted of surface soil removals between 0 and 2 feet bgs. Excavation limits were determined using XRF to monitor arsenic and lead concentrations in soil. After XRF results indicated that the  $C/I$  PCLs had been achieved, confirmation samples were collected on a 50-foot sampling grid, as illustrated in RAP Attachment 2A.9, Drawing 2 and Figure 6 in the Parcel 13 Closure Report, included in Attachment 1C.6.4 of this Soil RACR.

In addition to work described in the RAP, TCT removed debris west of the cemetery and scraped a small area of Category II material, subsequently conducting confirmation sampling. The location of these activities is shown on Figure 1 of this attachment, and the analytical results are summarized in Table 1 of this attachment.

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Table 2 of this attachment reports the results of two confirmation samples that are in addition to confirmation sample results reported in the Closure Report, Parcel 13 (Arcadis 2016d) included in Section 1C.6.4. The sample results confirm the removal of Category II material from the vicinity of the Asarco Cemetery and placed on the Fines Pile. The soil samples, D04 and P17, are located slightly west of Parcel 13 in the TxDOT I-10 right-of-way and along the southern side of the Asarco Cemetery, respectively, as shown on Figure 1 of this attachment.

Excavations bring La Calavera AA into compliance with requirements under TRRP.

## Supporting Documentation Included in This Attachment

- Table 1 Summary of Confirmation Analytical Results, Cemetery Area – West Side
- Table 2 Summary of Confirmation Analytical Results, Parcel 13 (Two soil sample results missing from Parcel 13 Closure Report, Table 1)
- Figure 1 Category II Excavation – Cemetery Area