

Executive Summary

ID No. SWR No. 31235

Report Date:
March 2017

Check the reports/forms submitted:

Remedy Standard A

___ Self-Implementation Notice Submittal date: _____

___ Response Action Plan - Approval date: _____

Remedy Standard B

Response Action Plan - Approval date: December 27, 2016

List all media (surface soil, subsurface soil, groundwater, sediment, surface water, air) that contained or contains a PCLE zone and specify the response action taken for each media. Indicate the type of removal, decontamination, physical control, or institutional control action that was used in the response action. If a media with a PCLE zone was not addressed in the response action, provide an explanation below.

Media	COCs ¹	Removal	Decontamination	Physical Control	Institutional Control	Modified Response Objective ²		
						PMZ	WCU	TI
Soil	Metals (Sb, As, Cd, Cu, Pb, Hg, and Se) and PCBs	East Property Assessment Area (AA), Plant Entrance AA, Plant Site AAs, Parker Brothers Arroyo (PBA) AA, La Calavera (LC) AA and Floodplain AA		East Property AA, Plant Site AAs, and PBA AA		Over majority of Site	Plant Site AAs and PBA AA: Landfill Cells 1, 2, 3, and 4	
Groundwater	Metals (Sb, As, Cd, Cr, Cu, Pb, Hg, Mb, Ni, Se, Tl, and Zn) and Cl-, F-, NO3, and SO4	East Property AA	PBA AA	East Property AA and PBA AA		Over majority of Site	Plant Site AAs and PBA AA: Landfill Cells 1, 2, 3, and 4	
Surface Water	Metals (As, Pb, Se) and Cl- and SO4			East Property AA, Plant Site AAs, PBA AA, and Floodplain AA				

¹ Specify either a specific COC or, if the response action is the same for all COCs in one type, specify the type of COC (for example, VOCs, SVOCs, metals).

² If a modified groundwater response objective was used, check the type(s) of modifications.

Is there a media that contains a PCLE zone that was not addressed in the response action? yes no
If yes, provide justification for not addressing the PCLE zone in the response action.

A substantial portion of the activities described in the RAP have been implemented and are documented in this 2016 Soil RACR. Remaining activities to comply with the approved response action are scheduled to be completed in 2017. A 2017 Soils RACR will be submitted by December 31, 2017 that documents these activities. A summary of the 2017 activities is provided in **Attachment 1C.10**.

Current land use of the on-site affected property: Residential Commercial/Industrial
Projected future land use of the on-site property (if known): Residential Commercial/Industrial

Explain why you believe the response action to be complete.

The Site is located in El Paso, Texas, on the north side of downtown adjacent to the Rio Grande as illustrated on **Figure 1A-1**. The Affected Property Area was shown on RAP Attachment 1A Figure 1. The Site has ten assessment areas (AAs) that are largely defined by the arroyo drainages that dictate both surface water and groundwater flow across the Site (**Figure 1A-1**). Some response actions pertain to the plant site, which includes four entire AAs (South Terrace Arroyo AA, Pond 1 Arroyo AA, Pond 5/6 Arroyo AA, Acid Plant Arroyo AA), and a portion of the Parker Brothers Arroyo (PBA) AA including the Boneyard.

The *Conceptual Site Model, Pathway Evaluation, and Protective Concentration Level Report* (Arcadis 2016a) identified complete exposure pathways (Section 3.0) and corresponding PCLs (Section 4.0). These pathways are summarized in **Worksheet 1.0** of this 2016 Soil RACR. Information on complete exposure pathways was used to identify protective concentration level (PCL) exceedance zones (PCLE Zones) for each of the ten AAs. The PCLE zone for chemicals of concern (COCs) in soil at the Site, which is largely driven by the distribution of arsenic, is shown on **Figure 1A-2**.

The response action objectives (RAOs) for Site soil are to eliminate direct exposure to COCs in soil at concentrations above $T^{ot}Soil_{Comb}$ PCLs and to prevent migration of COCs from soil to groundwater and from soil to surface water via stormwater runoff.

As described above, a substantial portion of the response action is complete. The remainder of the soils and surface water response actions will be completed in 2017. The groundwater response action is being implemented in accordance with the RAP.

TCT has implemented, or has scheduled the implementation of, the response actions for soil in accordance with the RAP. Response actions for soil included:

- Removal of impacted soils (**Figure 1A-3**),
- Placement of soil covers (**Figure 1A-4** and **Figure 1A-5**),
- Installation of liners (**Figure 1A-4** and **Figure 1A-5**),
- Application of slope stabilization measures (**Figure 1A-4** and **Figure 1A-5**),
- Implementation of stormwater and sediment control best management practices, and
- Establishment of institutional controls (RAP Figure 8, Arcadis 2016e); regulatory controls, including a Plume Management Zone (PMZ) (**Attachment 2A**); and restrictions on future development.

Descriptions of each of the components of the response action are presented, by AA, in **Worksheet 1.0**. This RACR is focused on soil, and no graphs showing concentration versus time for groundwater are included; therefore, TCT is not submitting Attachment 1B Graphs with this 2016 Soil RACR. Further details on the components of the response actions are presented in **Attachment 1C**, which is also organized by AA. A 2017 Soil RACR will be submitted to TCEQ documenting response actions completed in 2017.

The site is underlain by a Class 2 groundwater. **Worksheet 2.0** summarizes the soil response action implemented to minimize cross-media transport of COCs from soil to groundwater. In addition, a Plume Management Zone (PMZ) will be established to prohibit use of groundwater within the PMZ, as described in RAP Worksheet 2 and shown on the figure in RAP Attachment 2D. The figure in RAP Attachment 2D is reprinted as **Attachment 2A** of this 2016 Soil RACR.

Technical impracticability was not used as part of the response action; therefore, TCT is not submitting Worksheet 3.0 as part of this 2016 Soil RACR.

Institutional controls will be used to assure that land use restrictions are observed, groundwater is not used for potable purposes, and future construction/activities on protective covers (asphalt, ET, and FML covers) do not compromise the physical barrier to direct contact or cover integrity protecting groundwater. RAP Figure 8 (Arcadis 2016e) shows the proposed institutional controls for the affected property. Draft institutional controls were presented in RAP Appendix 4 (Arcadis 2016e). Institutional controls are summarized in **Worksheet 1.0** and tabulated in **Worksheet 4.0**. **Appendix 3.0** provides an update on the status of implementing institutional controls and receiving landowner concurrence.

Performance measures are described in **Worksheet 5.0**.

TCT will conduct operation and maintenance as described in RAP Worksheet 3.2; therefore, TCT is not submitting Worksheet 6.0 as part of this 2016 Soil RACR.

TCT will implement post-response action care as described in RAP Worksheet 5.0; therefore, TCT is not submitting Worksheet 7.0 as part of this 2016 Soil RACR.