

ATTACHMENT 1C.4

Introduction
Plant Site Assessment Areas



ARCADIS

Introduction Plant Site AAs

The Plant Site AAs include four AAs: South Terrace Arroyo AA, Pond 1 Arroyo AA, Pond 5/6 Arroyo AA, Acid Plant Arroyo AA.

As described on page 3 of Worksheet 1.0 in Response Action Plan (RAP, Arcadis 2016e), the plant site is characterized as an extensively disturbed industrial property that has been leveled by filling in the plant-site arroyos with slag, soil, and demolition debris. Some of the materials used to fill the arroyos are sources of COCs to groundwater. All structures associated with the former smelter site have been demolished and removed from the plant site including the two stacks. The future land use for the plant site will be restricted to Commercial/Industrial (C/I). The presence of subsurface sources of COCs results in the soil-to-groundwater migration pathway influencing risk management decisions for the plant site. Groundwater within the plant site generally originates on-site.

The response action for the plant site includes localized excavations to meet chemical-specific PCLs for inhalation (PCBs), regulatory requirements (Toxic Substance Control Act [TSCA]), and site drainage requirements, as illustrated on Figure 9 of the RAP. The plant site is proposed to be covered with either Category II material asphalt cover, asphalt drive/parking area, flexible membrane liner (FML) cover, ET soil cover, and low permeability cover as illustrated on Figure 10 of the RAP.

South Terrace and Pond 1 Arroyo AAs - Metal-Impacted Soil Removal and Sweeping. Soils containing antimony, arsenic, cadmium, and lead were identified at concentrations above the protective concentration levels for commercial/industrial soil ($T^{ot}Soil_{comb}$) in material sloughed off onto asphalt surfaces and the surrounding open area near the former Antimony Processing Building as illustrated on Figure 9 of the RAP. Rather than subsurface excavation of this area due to the surface concrete and asphalt, stockpiles in the area were removed and the area was swept to remove remaining soil. The stockpiled and swept soil was disposed of in the Cell 4 WCU.

Acid Plant AA - Site Drainage Excavation. An additional excavation was performed in the Acid Plant Arroyo AA, where high concentrations of arsenic in Site surface soil were reported (see North Pond on Figure C-7 of the Plant Site Cover). This excavation was performed to remove outcroppings of soil to meet Site drainage requirements for installation of the cover system. Excavated soil was disposed of in the Cell 4 WCU. This Removal Action is complete.

Plant Site AAs - West Plant Site Slopes. Characterization samples were collected in July 2015 and discussed in the RAP, Appendix 2.1. Reported concentrations of arsenic, lead, and mercury exceeded their respective PCLs for C/I soils, direct contact ($T^{ot}Soil_{comb}$). Therefore, a response action is necessary on the West Plant Slope. As described in Worksheet 2.0, page 1 of the RAP, entrainment of soil as sediment in stormwater runoff from the West Plant Site Slopes will be controlled by placement of stabilization media over slopes following limited spot removal of surface soil, where practical. This work will be performed in 2017. See Section 1C.9 for the schedule.

The following sections discuss the status of Plant Site AA Response Actions:

- PCB Removal
- Removal and reconstruction of the Cell 3 cover
- Construction of the Plant Site low permeability cover including the following components:
 - Placement of structural fill in basements
 - Placement of Cat II and III material for form a subgrade
 - Construction of an ET cover, and
- Disposition of Solid Waste Units