

Topock Soil RFI/RI – Plan to Address Data Gaps Identified During Work Plan Implementation (DGWP-02)

DOCUMENT ID: PGE20160212A
PREPARED FOR: Pacific Gas and Electric Company (PG&E)
PREPARED BY: CH2M
DATE: February 12, 2016

PG&E is implementing the *Soil Resources Conservation and Recovery Act (RCRA) Facilities Investigation (RFI)/Remedial Investigation (RI) Work Plan* (January 2013) associated with the Topock Compressor Station (TCS) in Needles, California (Work Plan). Field data are collected to resolve the project Data Quality Objectives (DQOs), in support of future decisions about cleanup of contaminated soil, if needed. As defined in the Work Plan, PG&E is coordinating with DTSC and DOI (agencies) to review data collected during the field implementation of the Work Plan to assess potential data gaps. As data gap(s) are identified, the agencies will direct PG&E to conduct additional tasks in the field to satisfy the data gaps.

Based on evaluation of data collected to date, the agencies directed PG&E to prepare a plan to describe additional soil sampling activities to fill identified data gaps. In accordance with the *PG&E Topock Compressor Station Soil Investigation Project Final Environmental Impact Report* (Soil Investigation EIR) (August 2015), this plan, DGWP-02, is being provided to Tribes and stakeholders for review and comment.

Overview

This plan provides information for an additional 5 soil sampling locations and activities that will be conducted at the following two investigation areas to address data gaps identified to date:

- AOC 1 – Bat Cave Wash (4 additional locations)
- AOC 10 – East Ravine (1 additional location)

AOC 1/SWMU 1 and AOC 10 are within the bat maternity roosting habitat avoidance areas defined in the *Final Environmental Impact Report (EIR) for the PG&E Topock Compressor Station Soil Investigation Project* (August 2015). The data gaps addressed in this plan are based on review of laboratory analytical results for a subset of the samples collected and analyzed to date, and data collected in Bat Cave Wash subsequent to finalizing the Work Plan (see AOC 1 section below). Review of the analytical results received at AOC 1/SWMU 1 and AOC 10 to date has been expedited such that additional sample locations required to address data gaps can be sampled prior to the beginning of bat maternity roosting season (March 15).

The included tables list the additional soil sampling locations and rationale for each additional location. It is anticipated that as additional data is available from both the originally planned sampling locations and the proposed locations included in this plan, additional data gaps may be identified and require additional field work. As a result, additional plans to address data gaps may be needed in the coming months.

The general sample collection methods and procedures included in the Work Plan will continue to apply to these additional activities. Work Plan figures have been annotated and attached to this plan to show the location of the additional activities. Anticipated collection methods listed on these tables are estimated based on experience and knowledge at the site; actual collection methods may be modified in the field based on field conditions and site access restrictions at the time of work. Additional activities identified in this plan will be implemented following agency approval, as part of the current field work effort.

AOC 1 – Bat Cave Wash

Data collected and reviewed to date at AOC 1 include:

- Laboratory analytical results for opportunistic samples “Old Well-BCW-1” (collected from 4-5 feet below ground surface [bgs]) and “Old Well-BCW-2” (collected 7-8 feet bgs), collected during reconnaissance field work in September 2013 to locate well TCS-4. These data were collected subsequent to the Work Plan being finalized and are being incorporated in the larger AOC 1/SWMU 1 data set to assess the nature and extent of contamination. A complete list of analytical results for these samples is presented in Table 2 of the *Decommissioning Plan for Topock Compressor Station Well Number 4 (TCS-4)* (CH2M, December 4, 2015).
- Laboratory analytical results for a subset of the soil samples collected at AOC 1 to date (as defined in the Work Plan).

Four additional sample locations are included in this plan to address a data gap associated with the review of laboratory analytical results (annotated Work Plan Figure C2-20).

AOC 10 – List of Additional Soil Sampling Locations

Additional Location ID	Depths (ft bgs)	Description/Rationale	Analytes	Anticipated Collection Method
AOC1-T2g	9, 14, 20, 30, 40, 50, 60, 70 and 80	<p>This location will be located adjacent the TCS-4 well casing and is added based on the laboratory analytical results for exceedance of the screening level for multiple analytes in samples adjacent TCS-4, and most notably, hexavalent chromium, total chromium, and dioxins/furans.</p> <p>Data collected at this location will be used to resolve Data Gap #1 – Define lateral and vertical extent of contamination in Bat Cave Wash. Specifically, the results will be used to evaluate the vertical extent of contamination adjacent TCS-4.</p>	<p>Hexavalent chromium, Title 22 metals, PAHs, PCBs and pesticides.</p> <p>Dioxins/furans (9, 14 and 20 foot samples to be analyzed initially and all deeper samples will be held for analysis pending shallower results)</p>	Rotosonic Drill Rig
AOC1-T2h	0, 2, 5, 9, 14, 20	<p>This location will be located approximately 20-25 feet from the TCS-4 well casing (evenly spaced with AOC1-T2i and –T2j) and is added based on the laboratory analytical results for exceedance of the screening level for multiple analytes in samples adjacent TCS-4, and most notably, hexavalent chromium, total chromium, and dioxins/furans.</p> <p>Data collected at this location will be used to resolve Data Gap #1 – Define lateral and vertical extent of contamination in Bat Cave Wash. Specifically, the results will be used to evaluate the vertical extent of contamination adjacent TCS-4.</p>	<p>Hexavalent chromium, Title 22 metals, PAHs, PCBs and pesticides.</p> <p>Dioxins/furans (0, 2, 5, and 9 foot samples to be analyzed initially and all deeper samples will be held for analysis pending shallower results)</p>	Rotosonic Drill Rig
AOC1-T2i	0, 2, 5, 9, 14, 20	See AOC1-T2h.	Same as AOC1-T2h.	Rotosonic Drill Rig
AOC1-T2j	0, 2, 5, 9, 14, 20	See AOC1-T2h.	Same as AOC1-T2h.	Rotosonic Drill Rig

AOC 10 – East Ravine

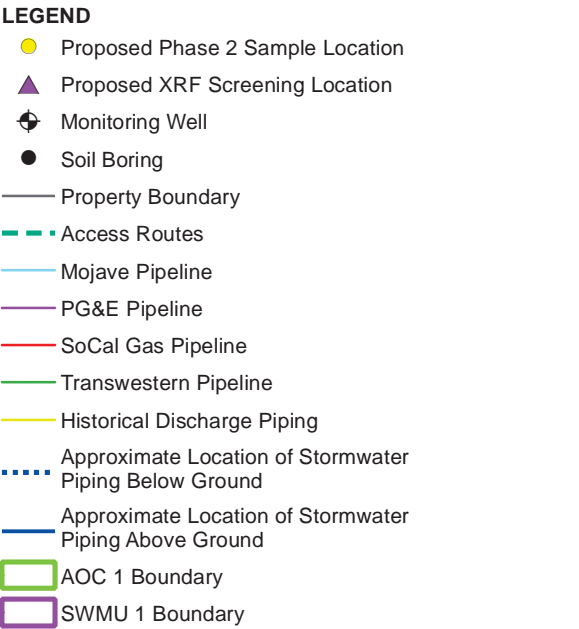
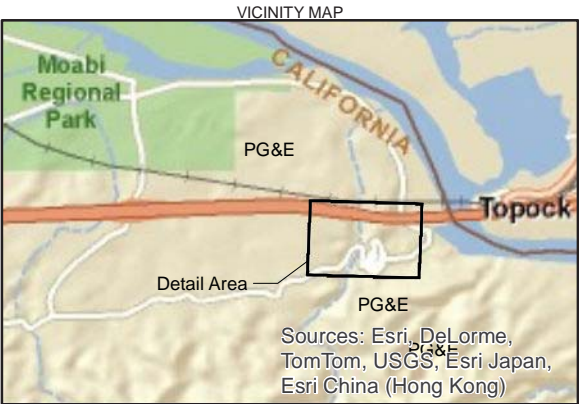
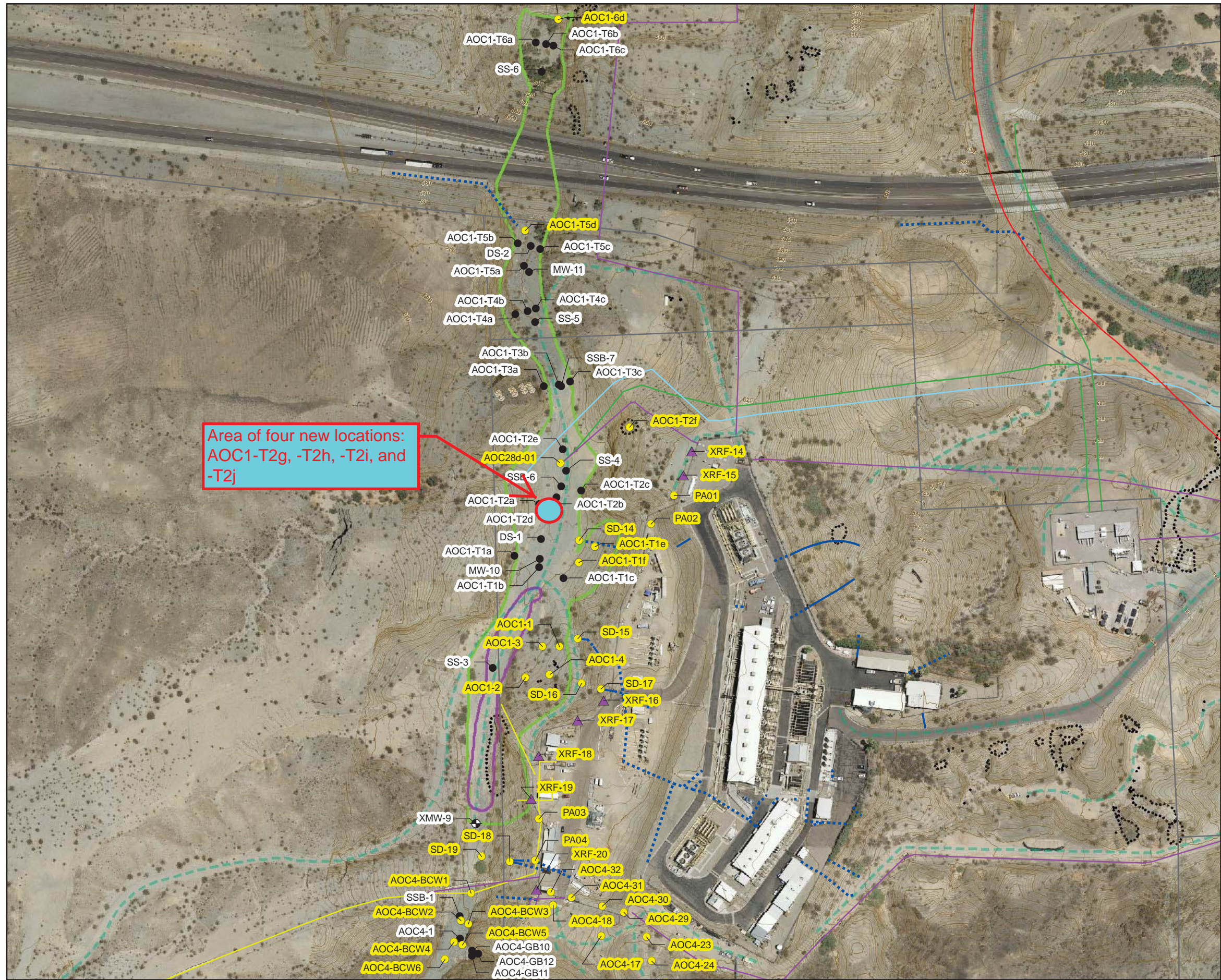
Data collected and reviewed to date at AOC 10 include:

- Results of x-ray fluorescence (XRF) analysis of surface soil samples collected at 12 locations (AOC10-XRF-01 through AOC10-XRF-12). Data gaps associated with these results are addressed in DGWP-01.
- Recent field observation of an additional area of debris that was not identified in the Work Plan. Data gaps associated with this observation are addressed in DGWP-01.
- Laboratory analytical results for a subset of the soil samples collected at AOC 10 to date (as defined in the Work Plan).

One additional sample location is included in this plan to address a data gap associated with the review of laboratory analytical results (annotated Work Plan Figure C4-11).

AOC 10 – List of Additional Soil Sampling Locations

Additional Location ID	Depths (ft bgs)	Description/Rationale	Analytes	Anticipated Collection Method
AOC10-24	0 and 2	<p>Added based on the laboratory analytical results for dioxins/furans at AOC10-15 where the toxicity equivalent quotient (TEQ) for samples from this location were 1 to over 100 times the most conservative TEQ screening level (1.6 ng/kg, mammal ecological comparison value).</p> <p>Data collected at this location will be used to resolve Data Gap #4 – Assess potential impacts from debris on south slope. Specifically, the results will be used to evaluate the potential accumulation of dioxins/furans in the ravine channel downslope of AOC10-15.</p>	Dioxins and furans	Hand tools



Note:
Topographic contours shown are in 2 foot intervals

Area of New Soil Sample Locations (Approximate) Being Added in this Plan (DG-WP-02)

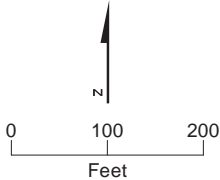


FIGURE C2- 20
Proposed Phase 2
Soil Sample Locations
AOC1
Soil Investigation Part A
Phase 1 Data Gaps Evaluation Report
Pacific Gas and Electric Company Topock Compressor Station
Needles, California

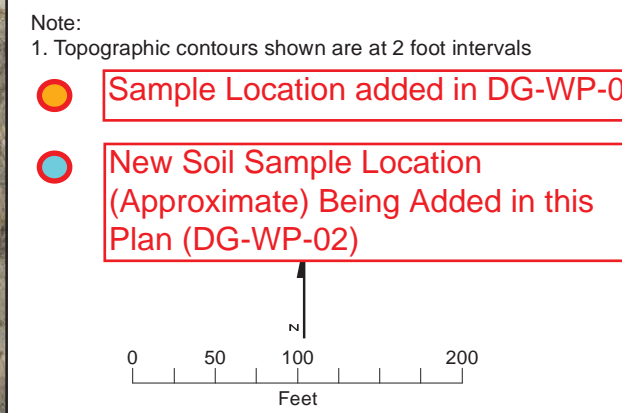
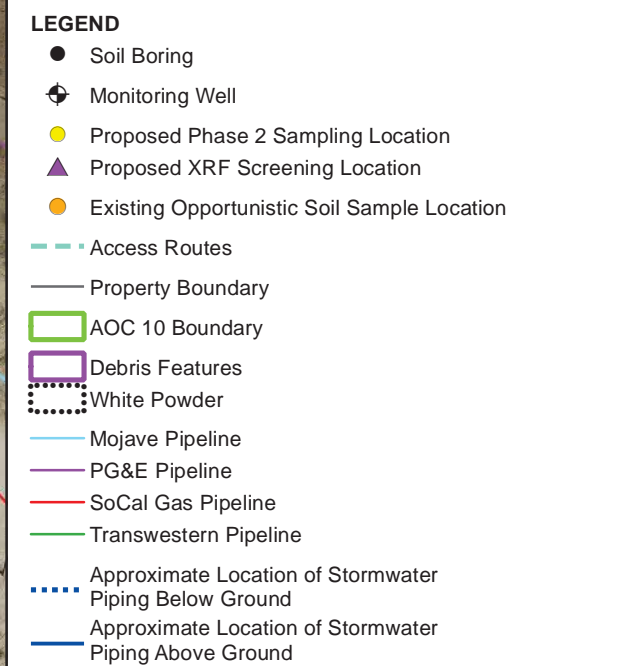
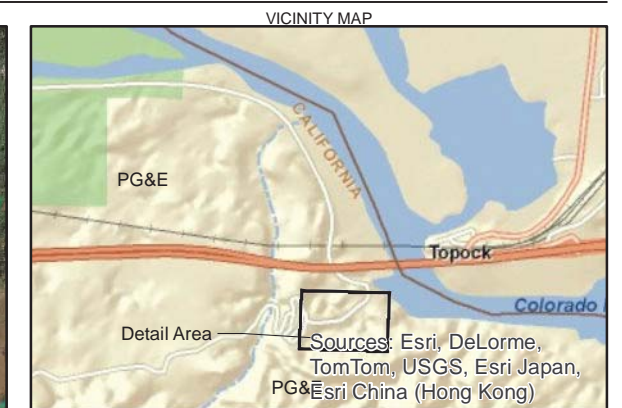
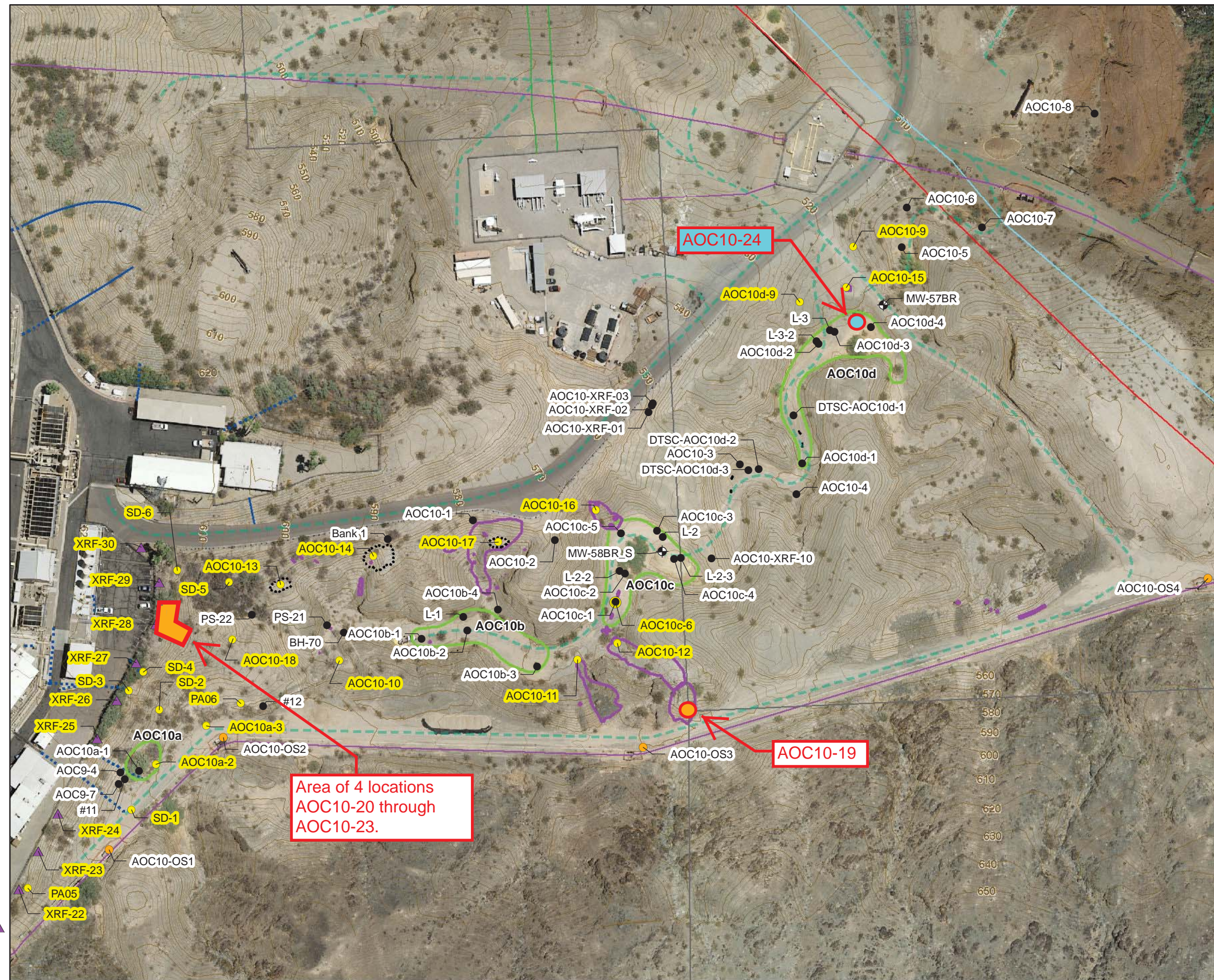


FIGURE C4-11
Proposed Phase 2
Soil Sample Locations
AOC 10 - East Ravine
 Soil Investigation Part A
 Phase 1 Data Gaps Evaluation Report
 Pacific Gas and Electric Company Topock Compressor Station
 Needles, California