Automotive Repair Parcels in City of Industry, CA

Beacon Sampler - Thermal Desorbed

A.1.2 Summary

Media:	Soil gas (for this investigation)
Study Type:	Subsurface investigation
Technology:	Accumulation
Peer Reviewed:	Yes
Publication Date:	January 9, 2023

Site Description

The site covers three parcels in City of Industry, CA. All three parcels are used for automotive/autobody repair. Between 1971 and 2007, the site was used by a plating company that used hazardous materials. Since 1990, several subsurface investigations have been performed at the site to delineate the extent of soil, soil vapor, and groundwater contamination related to the previous plating operations.

Compounds): volatile organic compounds (VOCs), including tetrachloroethylene (PCE) and trichloroethene (TCE), metals, including hexavalent chromium (CrVI), and 1,4-dioxane

Although a cleanup order has been issued by a state regulatory agency, no routine monitoring for any media has begun. The collection of passive soil gas samples presented in this report was part of an ongoing effort to delineate the vertical and horizontal impacts of COCs.

Samples collected with Beacon's passive soil gas samplers were analyzed by a laboratory using USEPA Test Method TO-17.

Remedial Phase

Based on investigations conducted between 1990 and 2018, it was determined that on-site media (soil, soil gas, groundwater, and indoor air) was impacted with various COCs. By 2020, the impacts remained not fully characterized. To address this, the responsible party (RP), under the oversight of both the state's Department of Toxic Substances Control (DTSC) and State Water Resources Control Board, which formed a Joint Execution Team (JET), proposed a multiphased investigation to delineate impacts beneath the site. The proposed strategy included the collection of shallow passive soil gas samples, two rounds of concurrent indoor air and sub-slab gas sampling, a membrane interface probe (MIP) investigation, collection of soil and grab groundwater samples, the installation and routine monitoring of groundwater monitoring wells, and the installation and routine sampling of permanent soil gas probes.

As part of the first phase of the investigation, a total of 54 shallow (3 feet below ground surface [bgs]) passive soil gas samples were collected in a rough grid pattern to assess lateral delineation.

Outcome

During the first mobilization for this phase, 36 passive soil gas samplers were installed in a rough grid pattern both on- and off-site. The samplers were submitted for laboratory analysis of VOCs. As shown in Figure A.1.2-1 below, passive soil gas sampling identified the lateral extent of PCE and TCE impacts in most directions.

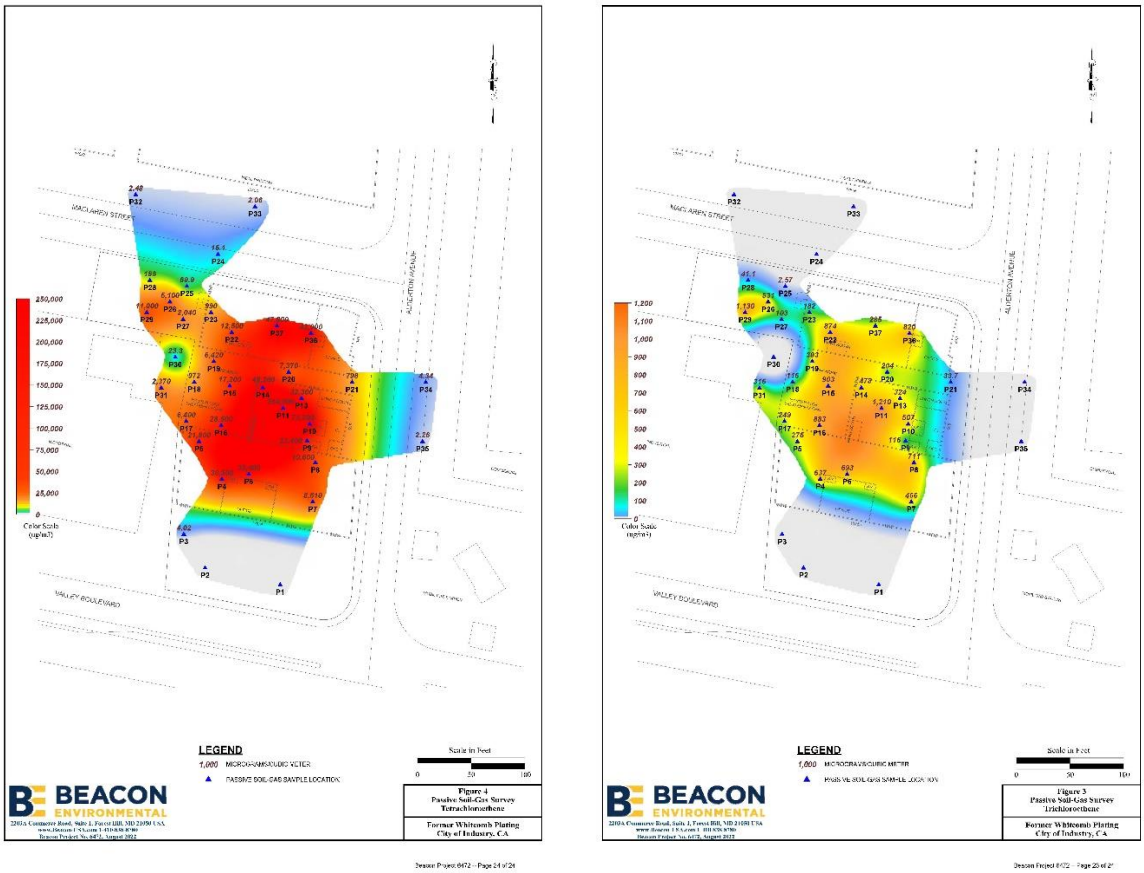

Figure A.1.2-1. Thirty-six Beacon passive soil gas samplers were used to determine the lateral extent of PCE (left) and TCE (right) impacts in most directions at the case study site in City of Industry, CA.

Based on the data gaps that remained, 18 additional Beacon passive soil gas samplers were deployed during a second mobilization. As shown in figure below, impacts were mostly (PCE) and fully delineated (TCE) laterally in the shallow subsurface in only two mobilizations with a combined 54 passive soil gas sampling locations.

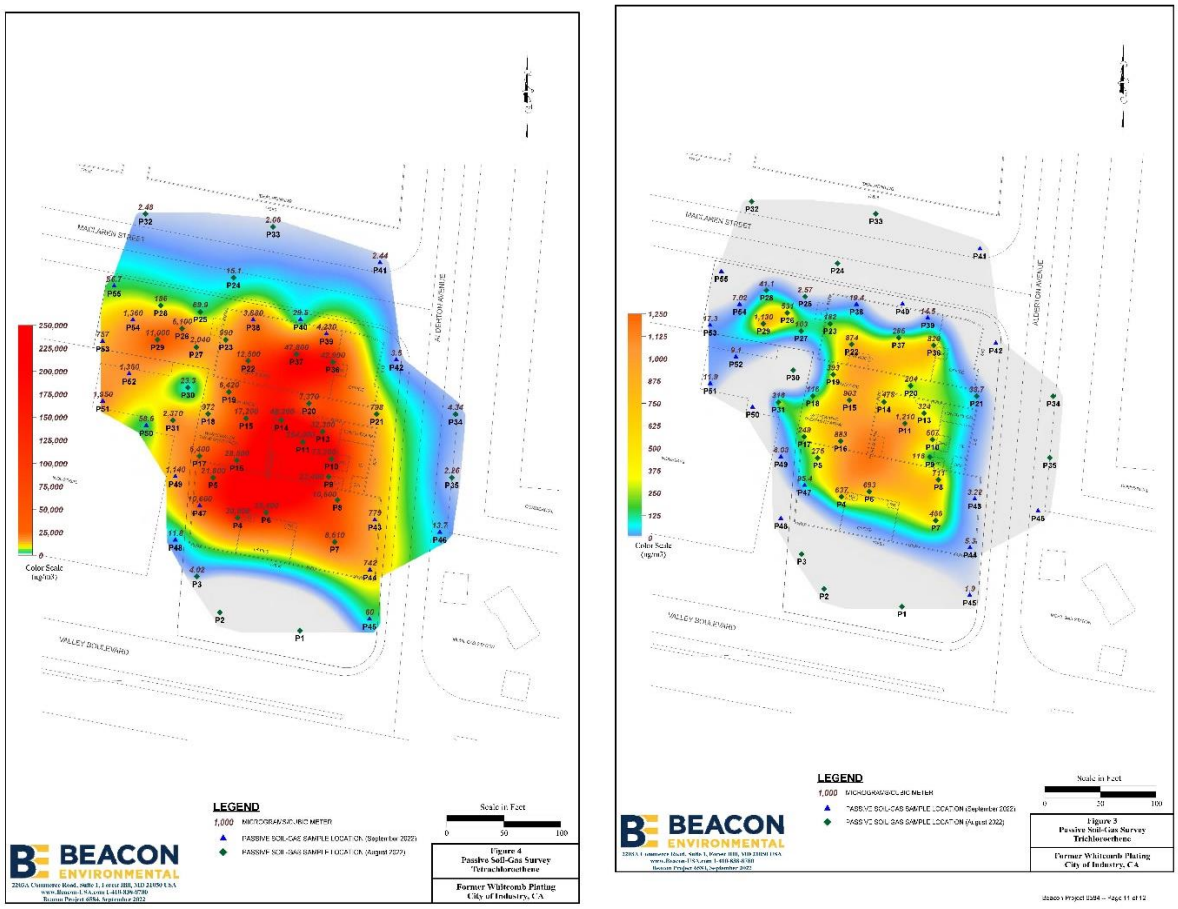

Figure A.1.2-2. Eighteen additional Beacon passive soil gas samplers were deployed to more fully determine the lateral extent of PCE (left) and TCE (right) impacts at the case study site.

The only minor remaining data gaps are a result of not having access to the western adjacent property. As such, the RP and JET collectively concluded that passive soil gas sampling successfully identified the lateral extent of PCE and TCE impacts to the shallow subsurface. Consultant Pristine Earth, Inc., and JET used these data to select sampling locations for the subsequent MIP investigation, which would ultimately be used to complete the vertical delineation.

Case Study Source

Indoor Air and Sub-slab Vapor Sampling, Former Whitcomb Plating, City of Industry, California, SCAP Grant Agreement Number D201008400, Project Number SC084 – Technical Memorandum No. 2 (revised).

Resources

DTSC. 2022. Comments on the Technical Memorandum No. 2, Indoor Air and Sub-slab Vapor Sampling; Former Whitcomb Plating Facility, 17855 East Valley Boulevard, 649 South Alderton Avenue, and 655 South Alderton Avenue, City of Industry, Los Angeles County, California (Site Code 550307). November 14.

Pristine Earth, Inc. (PEI). "Indoor Air and Sub-Slab Vapor Sampling, Former Whitcomb Plating, City of Industry, California, SCAP Grant Agreement Number D201008400, Project Number SC084 – Technical Memorandum No. 2 -

Revised," January 9, 2023. https://envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F5839129388%2F2023%201%209%20IA-SS%20Sampling%20-%20Tech%20Memo2Rev%2001-09-23.pdf.

PEI. 2022. Indoor Air and Sub-slab Vapor Sampling. Former Whitcomb Plating, City of Industry, California. October 19 (Revised and Resubmitted on January 9, 2023).

PEI. 2022. Passive Soil Vapor Sampling, Former Whitcomb Plating, City of Industry, California. August 15.