

## A.1 Technology Name

Beacon Sampler (Thermal Desorbed)

### A.1.1 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 (the Report). Written by Pristine Earth, Inc. (PEI).

[https://envirostor.dtsc.ca.gov/public/final\\_documents2?global\\_id=71002476&doc\\_id=60487490](https://envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002476&doc_id=60487490)

### A.1.2 Summary

<b>Media:</b>	Soil gas (for this investigation)
<b>Study Type:</b>	Subsurface Investigation
<b>Technology:</b>	Beacon Passive Soil Gas Sampler
<b>Peer Reviewed:</b>	Yes
<b>Publication Date:</b>	January 9, 2023

### A.1.3 Site Description

- The Site covers three parcels in the City of Industry, CA. All three parcels are used for automotive/autobody repair. Between 1971 and 2007, the Site was utilized 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.
- Contaminants of concern (COCs): volatile organic compounds (VOCs), including tetrachloroethylene (PCE) and trichloroethene (TCE), metals, including hexavalent chromium (CrVI), and 1,4-dioxane.
- While 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.
- Beacon's passive soil gas samplers. Samples were analyzed by a laboratory using USEPA Test Method TO-17.

### A.1.4 Remedial Phase

Based 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 Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) that formed a Joint Execution Team (JET), proposed a multi-phased 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.

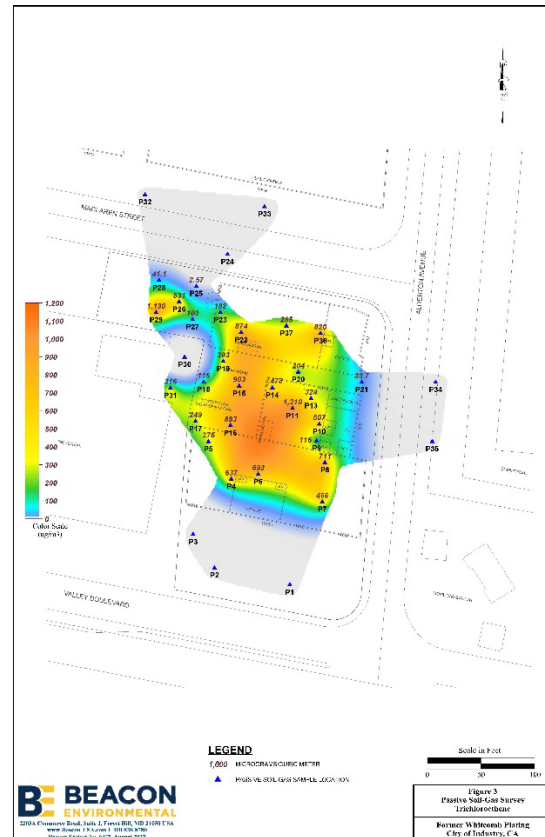
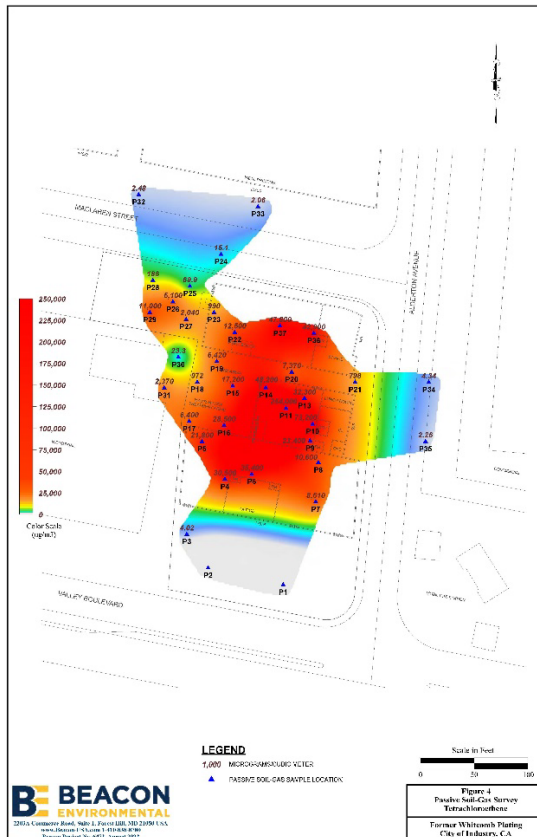
As part of the first phase of the investigation, a total of 54 shallow (3 feet below ground surface [bgs]) passive soil gas samples were collected a rough grid pattern to assess lateral delineation.

### A.1.5 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 the figure below, passive soil gas sampling was able to identify the lateral extent of PCE and TCE impacts in most directions.

PCE

TCE



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

