

From: [Soo, Kit, Env. Health](#)
To: "Mark Tussing"
Cc: [Chris Kennedy](#); [Roe, Dilan, Env. Health](#)
Subject: RO0000289 - Owens-Brockway Glass Container Facility, Oakland, CA - Comments to Soil Vapor Investigation Work Plan
Date: Friday, October 07, 2016 11:46:00 AM

Dear Mr. Tussing,

Alameda County Department Environmental Health (ACDEH) staff has reviewed the case files for the above referenced site including the *Work Plan to Complete a Soil Vapor Investigation, Owens-Brockway Glass Container Facility, Oakland California* (the Work Plan), dated September 27, 2016, and the *Subsurface Investigation Report, Former Fuel Storage and Historical Asphalt Refinery Operational Areas, Owens-Brockway Glass Container Facility, 3600 Alameda Avenue, Oakland, California* (the Investigation Report), dated March 4, 2016, both prepared by CKG Environmental, Inc. on your behalf. The subsurface investigation was completed in December 2015 and January 2016 to assess the extent of petroleum hydrocarbon impacts associated with the historical asphalt refinery as well as other operational areas associated with the facility, and in conjunction with potential property transactions/property development. The Work Plan presents a proposed scope of work to perform a soil vapor investigation to: 1) evaluate the site for potential redevelopment; 2) assess the extent of soil impacts; 3) assess the potential for volatile organic compounds (VOCs) with releases associated with sumps, drains, or sewer lines; and 4) assess whether there are any offsite impacts associated with VOCs and petroleum hydrocarbons.

The scope of work proposes to install soil vapor probes to depths of 5 and 10 feet below the existing ground surface at the site to assess soil conditions associated with historic contamination. ACDEH is in general concurrence with the proposed scope of work provided the technical comments below are addressed. Depending on proposed site redevelopment plans (i.e. land use, configuration, foundation depth/type, etc.), additional site assessment including soil gas samples may be required to assess soil and groundwater conditions, and evaluate vapor intrusion to indoor air.

TECHNICAL COMMENTS

1. Scope of Work, Task 1.2 Install Temporary Soil Vapor Probes
 - Describe how the probes will be advanced using (i.e. direct push, hollow stem auger (HSA), hand auger, etc.), and other pertinent information associated with installation.
 - Indicate which proposed locations are indoors and which are outdoors. If the locations are in paved areas, include the thickness of paved locations or foundations.
 - Describe protocols to be used in accordance with the California Department of Toxic Substances Control (DTSC) Advisory *Active Soil Gas Investigations*, dated July 2015.
2. Scope of Work, Task 1.3. Sample and Analyze Temporary Soil Vapor Probes
 - Describe in detail the steps and procedures involved in vapor sample collection (i.e. equilibration time, shut-in test, leak test, purge test, etc.). Also include adjustments or modifications to the investigation due to field conditions (i.e. rainfall, low permeability lithology, etc.).
 - Analyze all soil vapor samples also be analyzed for the following:
 - o TPH-gasoline (TPH-g) at the 34 nested locations, and the two locations at the property boundary.
 - o Carbon dioxide, and oxygen and helium using ASTM D1946 to monitor for biodegradation and indicators for natural attenuation; and helium since this analyte is often used in a shroud in the field to monitor potential leaks in your sampling train.

- Describe in detail sample handling and transport (i.e. what are the samples collected with, any special procedures for certain types of analyses, etc.).

TECHNICAL REPORT REQUEST

Please upload the revised work plan to the ACDEH ftp site (Attention: Kit Soo), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

- **October 24, 2016** – Revised Work Plan for Soil Vapor Investigation File to be named: REV_WP_R_YYYY-mm-dd RO0289

If you have any questions, please let me know. Thanks, Kit

Kit Soo, PG

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