



April 1, 2021

Merrie Smith
Texas Commission on Environmental Quality
Manager of Voluntary Cleanup and CA Section
Remediation Division

Dear Ms. Smith,

We are writing today about the Union Pacific Railroad (UPRR) site at 4910 Liberty Road in Houston, Texas. Based on review of the available information, the Texas Department of State Health Services (DSHS) does not believe there is enough environmental data to eliminate the vapor intrusion pathway in the residential area north of the UPRR site and above the off-site groundwater contamination plume.

DSHS compared the active soil gas concentrations to the Agency for Toxic Substance and Disease Registry's soil gas-vapor intrusion comparison values. In June 2020, benzene in soil gas sample SG-27 was detected at $12.4 \mu\text{g}/\text{m}^3$, which is above the ATSDR comparison value of $4.3 \mu\text{g}/\text{m}^3$.¹ We note that this sample was reported as an estimate, or a J result, and that the duplicate sample result was below the ATSDR comparison value. However, because this sample was collected near a residential home on Lavender St. and no other soil gas samples were collected near this location, we recommend additional active soil gas and/or indoor, sub-slab sampling be conducted in this location to ensure that vapor intrusion is not a complete pathway in this area.

The Houston Health Department conducted a passive soil gas survey throughout the residential area north of the UPRR site in November 2020 and detected toluene and total petroleum hydrocarbons in various locations.² Based on these results, DSHS recommends that additional active soil gas samples be collected in residential locations where no active soil gas sampling has yet been conducted and in locations close to residential structures. This area is primarily located between Lelia St. and Liberty Road and between Clementine St. and Fortinot St. (Figure 1).

¹ Golden Associates, Inc. Updated Vapor Intrusion Assessment Interim Report, August 2020

² Beacon Environmental. *Map Report*, January 2021

If additional active soil gas results are over health comparison values, we recommended that indoor air, outdoor air and sub-slab air sampling be conducted.

Figure 1. Area Recommended for Active Soil Gas Sampling



Maxar, Microsoft | Esri Community Maps Contributors, City of Houston, HPB, Texas Parks & Wildlife, BuildingFootprintUSA, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Please contact me at Jessica.Kessinger@dshs.texas.gov, if you have any questions.

Sincerely,

Jessica Kessinger, MPH, CHES
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Health Assessment and Toxicology Program