SUNOCO PIPELINE LP

VAPOR INTRUSION PROGRESS REPORT

Upper Makefield Response

Washington Crossing, Pennsylvania

PROJ-051861

Submitted April 2, 2025

1.0 INTRODUCTION

This Vapor Intrusion Progress Report (Report) was prepared by CTEH, LLC (CTEH) on behalf of Sunoco Pipeline LP (Sunoco Pipeline) in relation to the Upper Makefield Response in Washington Crossing, Pennsylvania. This Report has been prepared to address item 1-i (page 9) of the Administrative Order issued to Sunoco Pipeline by the Commonwealth of Pennsylvania Department of Environmental Protection (PA DEP) on March 6, 2025.

A release from a pipeline that transports refined petroleum products, including jet fuel, was identified in January 2025. The GPS coordinates for the approximate location of the release site (Site) are: 40.271184, -74.875953. A map of the incident location is provided in Attachment A. Environmental consultants, including personnel from CTEH and Groundwater & Environmental Services, Inc. (GES), on behalf of Sunoco Pipeline, have conducted several activities to investigate the nature and extent of potential impacts to residences near the incident location, including impacts to potable well water supplies and impacts to residences via vapor intrusion.

This Report summarizes the investigation activities conducted to date, the preliminary (i.e., unvalidated) results of those investigation activities, plans for further investigation and evaluation, and the projected schedule for future planned investigation and evaluation activities.

2.0 SUMMARY OF INVESTIGATION ACTIVITIES

Vapor intrusion investigation activities (including those conducted to date and those currently underway and/or planned) have been designed and conducted based on technical guidance for assessing vapor intrusion published by the PA DEP[1].

As of the date of this Report, an investigation into the potential for vapor intrusion related to the incident has been conducted and/or is underway. To date, these investigation activities have included:

1. Indoor air sampling at six (6) residences on Glenwood Drive, Walker Road, and Spencer Road (February 25 to 26, 2025 and March 15 to 16, 2025);
2. Passive soil gas sampling at 22 properties on Glenwood Drive, Walker Road, and Spencer Road (February 25 to March 14, 2025); and
3. Water sampling from external wells at three (3) properties in the Mt. Eyre Manor neighborhood (March 24, 27, and 28, 2025).

[1] PA DEP. Land Recycling Program Technical Guidance Manual (TGM) Section IV: Vapor Intrusion into Buildings from Groundwater and Soil. 261-0300-101. March 2021.

Additional investigation activities are underway and/or planned. Future planned investigation activities include:

1. A follow-up indoor air sampling event at six (6) residences on Glenwood Drive, Walker Road, and Spencer Road (estimated to occur on or after April 11, 2025);
2. Indoor air sampling at additional residences in the Mt. Eyre Manor neighborhood (estimated to begin on or after April 7, 2025); and
3. Water sampling from additional external wells in the Mt. Eyre Manor neighborhood (planned to begin upon approval of the External Well Water Sampling and Analysis Plan [SAP], which was submitted to the PA DEP on March 17, 2025).

3.0 INDOOR AIR SAMPLING

3.1 Progress to Date

As of the date of this Report, indoor air sampling has been conducted at six residences on Glenwood Drive, Walker Road, and Spencer Road, in accordance with the Indoor Air Sampling and Analysis Plan (SAP) prepared by CTEH personnel, dated February 21, 2025. The indoor air sampling events were conducted by CTEH personnel from February 25 to 26, 2025 and March 15 to 16, 2025. Preliminary results from the five indoor air sampling events conducted from February 25 to 26, 2025 were provided to each property owner on March 15, 2025 and shared with the PA DEP on March 17, 2025.

3.2 Strategy

Residences eligible for the first phase of indoor air sampling were selected based on the results of potable well water sampling conducted at the residence by GES personnel. Specifically, residences were eligible for indoor air sampling if water sampling results at the residence indicated detections of one or more volatile target analytes at a concentration above the Residential groundwater Statewide health standard vapor intrusion screening values (Residential SV_{GW}) established by the PA DEP, or if light non-aqueous phase liquid (LNAPL) was present in the potable water well at the residence. A total of six residences were selected for the first phase of indoor air sampling.

The objectives of the indoor air sampling program are to:

1. Collect indoor air samples from discrete locations inside residences to evaluate potential impacts to indoor air related to the volatile constituents of refined petroleum products, including jet fuel; and
2. Collect outdoor air samples from discrete locations outside residences to evaluate the presence of these constituents in the ambient environment and the potential influence of these constituents on indoor air.

3.3 Methods

Prior to the air sampling event, it was requested that residents remove potential sources of volatile organic compounds (VOCs) (e.g., fuel containers, paints, cleaning products, personal care products, candles) from the air sampling locations at least 24 hours prior to deployment of the air sample. On the day of air sample deployment, a pre-sampling survey was conducted with one resident from each residence, which included a questionnaire for the resident about building-specific factors that could potentially influence the concentration of VOCs in indoor air. During the pre-sampling survey, a visual and air monitoring assessment of accessible portions of the lowest level and first floor of the residence were also conducted to identify any items within the residence that could be potential sources of VOCs.

Air samples were then deployed at three locations: 1) on the lowest level of the residence (e.g., basement); 2) on the first floor of the residence; and 3) outside (and near) the residence. The air sample collected on the lowest level was generally located in an area where vapors may be expected to enter or in an area with the greatest potential for vapor intrusion impact (often near the installed Point-of-Entry Treatment [POET] system). The air sample collected on the first floor was generally centrally located in an area of typical occupancy and/or high activity (e.g., living and/or family room). The air sample collected outside the residence was located in an area that is representative of ambient conditions outside the residence (e.g., backyard).

Each air sample consisted of a 1.4-liter evacuated canister with a 24-hour regulator. Air samples were collected for a duration of approximately 24 hours at a height representative of the breathing zone (i.e., the canister inlet was located four to six feet above the ground). After the air sampling period, air samples were sent under chain-of-custody to Pace Analytical National Center for Testing & Innovation (Pace Analytical) in Mt. Juliet, Tennessee, a National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory, for analysis of target analytes via United States Environmental Protection Agency (US EPA) Method TO-15[2].

Target analytes were selected based on analytical requirements for soil and/or water testing related to refined petroleum products, including jet fuel, as outlined in the Short List of Petroleum Products in the Land Recycling Program Technical Guidance Manual established by the PA DEP. Specifically, all volatile parameters related to refined petroleum products, including jet fuel, were selected as target analytes for air sampling. Hexane and cyclohexane were additionally selected based on their listing on the safety data sheet (SDS) for one of the products (unleaded gasoline) that traveled through the impacted pipeline. Target analytes were the following VOCs: benzene, toluene, ethylbenzene, total xylenes (calculated by adding the concentrations of m&p-xylene and o-xylene), isopropylbenzene, methyl tert-butyl ether (MTBE; also known as methyl tertiary butyl ether), naphthalene, 1,2,4-trimethylbenzene,

[2] Benzene, naphthalene, 1,2-dichloroethane, and 1,2-dibromoethane were analyzed using US EPA Method TO-15 in Selective Ion Monitoring (SIM) mode to achieve lower detection limits.

1,3,5-trimethylbenzene, 1,2-dichloroethane (EDC), 1,2-dibromoethane (EDB; also known as ethylene dibromide), hexane, and cyclohexane.

A post-sampling survey and a visual and air monitoring assessment of accessible portions of the lowest level and first floor of the residence were also conducted at the end of the air sampling period.

3.4 Results

Indoor air sampling results were compared to one-tenth (1/10) of the Residential indoor air Statewide health standard vapor intrusion screening values (Residential SV_{IA}) established by the PA DEP.

A summary of the preliminary air sampling results collected during the first indoor air sampling event is provided in **Table 1**. Analytes detected in at least one indoor air sample at a concentration above one-tenth of the Residential SV_{IA} were benzene (12 of 12 samples), ethylbenzene (5 of 12 samples), xylenes (1 of 12 samples), naphthalene (9 of 12 samples)[3], and 1,2-dichloroethane (9 of 12 samples). Several analytes were also detected in at least one outdoor air sample.

Preliminary results for the five indoor air sampling events conducted from February 25 to 26, 2025 were provided to each respective property owner on March 15, 2025. These preliminary result packages included a Summary of Air Sampling Results letter and the preliminary laboratory report issued by Pace Analytical. These preliminary result packages were subsequently shared with the PA DEP on March 17, 2025. The preliminary results for the one residence where indoor air sampling was performed from March 15 to 16, 2025 were received on March 24, 2025. A preliminary result package for this indoor air sampling event has not yet been provided or shared, but the preliminary results have been included in Table 1.

[3] The laboratory method detection limit (MDL) for naphthalene is higher than one-tenth of the Residential SV_{IA} for naphthalene. Therefore, any detection of naphthalene is above one-tenth of the Residential SV_{IA} for naphthalene.

Table 1. Summary of Preliminary Air Sampling Results

Analyte	1/10 PA DEP Residential SV_{IA} (µg/m³)	Number of Indoor Samples	Number of Indoor Detections	Range of Indoor Detections (µg/m³)	Number Detected Above 1/10 Residential SV_{IA}	Number of Outdoor Samples	Number of Outdoor Detections	Range of Outdoor Detections (µg/m³)
Benzene	0.31	12	12	0.604 – 3.55	12	6	6	0.562 – 1.53
Toluene	520	12	12	2.66 – 19.6	0	6	6	0.987 (J) – 26.7
Ethylbenzene	0.97	12	11	0.38 (J) – 4.11	5	6	1	1.74
m&p-Xylene	10*	12	10	1.14 (J) – 9.19	1	6	2	0.941 (J) – 4.08
o-Xylene		12	10	0.46 (J) – 3.82		6	2	0.46 (J) – 2.01
Isopropylbenzene	42	12	5	0.404 (J) – 1.68	0	6	1	0.424 (J)
Methyl tert-butyl ether	9.4	12	0	–	0	6	0	–
Naphthalene	0.072	12	9	0.134 (J) – 0.357	9	6	0	–
1,2,4-Trimethylbenzene	6.3	12	10	0.643 (J) – 5.25	0	6	1	0.736 (J)
1,3,5-Trimethylbenzene	6.3	12	6	0.496 (J) – 2.66	0	6	0	–
1,2-Dichloroethane	0.094	12	12	0.0705 (J) – 1.13	9	6	6	0.0595 (J) – 0.115
1,2-Dibromoethane	0.0041	12	0	–	0	6	0	–
Hexane	73	12	11	1.33 (J) – 10.7	0	6	3	0.582 (J) – 1.7
Cyclohexane	630	12	5	0.802 – 11.5	0	6	1	2.74

µg/m³ = micrograms per cubic meter. Laboratory non-detections are reported as less than (<) the laboratory Method Detection Limit (MDL). Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are as follows. J: Result is estimated between the laboratory method detection limit and reporting limit.
* The PA DEP Residential SV_{IA} is established for total xylenes. The concentration of total xylenes is calculated by adding the concentrations of m&p-xylene and o-xylene.

3.5 Additional Planned Activities

The preliminary air sampling results collected during the first indoor air sampling event are undergoing Stage IV data validation by Environmental Standards, Inc. (Environmental Standards). If any issues with data quality are identified during data validation, Sunoco Pipeline personnel will notify the respective property owner.

The PA DEP Land Recycling Program Technical Guidance Manual outlines that, for vapor intrusion assessment, a minimum of two air sampling events should occur at least 45 days apart. In addition, both air sampling events should occur when the daily average outdoor temperature is at least 15 degrees Fahrenheit below the minimum indoor temperature in the occupied space. In accordance with this guidance, a follow-up air sampling event is planned at the six residences sampled during the first phase of indoor air sampling. The second air sampling event will be conducted in the same manner as the first air sampling event and is estimated to occur on or after April 11, 2025 (i.e., 45 days after the first air sampling event that occurred from February 25 to 26, 2025 or from March 15 to 16, 2025). The preliminary air sampling results collected during the second indoor air sampling event will also undergo Stage IV data validation by Environmental Standards.

After the first and second indoor air sampling events have been completed and the results have undergone Stage IV data validation, the indoor air sampling results may be used to calculate estimates of lifetime cancer risk and noncancer hazard quotient for the inhalation exposure pathway.

In addition to the first phase of indoor air sampling, which included six residences selected as outlined in Section 3.2, a second phase of indoor air sampling for additional selected residences in the Mt. Eyre Manor neighborhood is also planned. Residences eligible for the second phase of indoor air sampling will be selected based on inferred fracture trace from electrical resistivity imaging and will include additional residences on Glenwood Drive, Walker Road, and Spencer Road. In addition, any residences that previously did not meet the eligibility criteria for the first phase of indoor air sampling but have now met the criteria (i.e., since selection for the first phase of indoor air sampling, LNAPL has been found in the potable water well at the residence or water sampling results collected at the residence have indicated detections of one or more volatile target analytes at a concentration above the Residential SV_{GW} established by the PA DEP) will also be eligible for the second phase of indoor air sampling. The second phase of indoor air sampling will occur in the same manner as outlined in Section 3.3 and is estimated to begin on or after April 7, 2025, with a follow-up sampling event to occur at least 45 days after the first air sampling event.

4.0 PASSIVE SOIL GAS SAMPLING

4.1 Progress to Date

As of the date of this Report, passive soil gas sampling has been conducted at 22 properties on Glenwood Drive, Walker Road, and Spencer Road. The passive soil gas sampling events were conducted by GES personnel from February 25 to March 14, 2025. Preliminary results packages have been prepared and will be provided to each property owner during the week of March 31, 2025. The preliminary results were also shared with the PA DEP on April 1, 2025.

4.2 Strategy

Properties eligible for passive soil gas sampling were selected based on electrical resistivity imaging, and the locations of sampling were influenced by property access limitations. A total of 22 properties were selected for passive soil gas sampling.

The objective of the passive soil gas sampling program was to:

1. Collect passive soil gas samples from discrete locations on residential properties to evaluate the potential plume footprint along electrical resistivity transects and identify areas where constituents of refined petroleum products, including jet fuel, may exist in the subsurface.

4.3 Methods

Passive soil gas samples were collected at one to nine discrete locations on each property, depending on electrical resistivity transects and property size. Each soil gas sample consisted of a Beacon Passive Sampler installed at a depth of approximately 30 inches below the soil surface using a hand tool. Soil gas samples were collected for a duration of approximately one week. After the soil gas sampling period, the passive soil gas samples were sent under chain-of-custody to Beacon Environmental in Bel Air, Maryland, a National Environmental Laboratory Accreditation Program (NELAP)-accredited laboratory, for analysis of target analytes via US EPA Method TO-17.

Target analytes were selected based on analytical requirements for soil and/or water testing related to refined petroleum products, including jet fuel, as outlined in the Short List of Petroleum Products in the Land Recycling Program Technical Guidance Manual established by the PA DEP. Specifically, all volatile parameters related to refined petroleum products, including jet fuel, were selected as target analytes for passive soil gas sampling. Target analytes were the following VOCs: benzene, toluene, ethylbenzene, total xylenes (calculated by adding the concentrations of m&p-xylene and o-xylene), isopropylbenzene, methyl tert-butyl ether (MTBE; also known as methyl tertiary butyl ether), naphthalene, 1,2,4-trimethylbenzene,

1,3,5-trimethylbenzene, 1,2-dichloroethane (EDC), and 1,2-dibromoethane (EDB; also known as ethylene dibromide).

4.4 Results

Passive soil gas sampling results were compared to the Residential sub-slab soil gas Statewide health standard vapor intrusion screening values (Residential SV_{SS}) established by the PA DEP. However, it is important to note that the soil gas samples were not collected underneath the slabs of residences; rather, they were collected at other permeable locations on the properties (e.g., in grassy areas).

A summary of the preliminary passive soil gas sampling results is provided in **Table 2**. No analytes were detected in any sample at a concentration above the Residential SV_{SS}.

Preliminary results, including a Passive Soil Gas Survey Results letter and the preliminary laboratory report issued by Beacon Environmental, will be provided to each respective property owner during the week of March 31, 2025. The preliminary results were also shared with the PA DEP on April 1, 2025.

Table 2. Summary of Preliminary Passive Soil Gas Sampling Results

Analyte	PA DEP Residential SV_{SS} (µg/m³)	Number of Samples	Number of Detections	Range of Detections (µg/m³)	Number Detected Above Residential SV_{SS}
Benzene	120	47	1	3.63	0
Toluene	200,000	47	17	5.20 – 28.5	0
Ethylbenzene	370	47	0	–	–
m&p-Xylene	4,000*	47	0	–	–
o-Xylene		47	0	–	
Isopropylbenzene	16,000	47	0	–	–
Methyl tert-butyl ether	3,600	47	0	–	–
Naphthalene	28	47	0	–	–
1,2,4-Trimethylbenzene	2,400	47	0	–	–
1,3,5-Trimethylbenzene	2,400	47	0	–	–
1,2-Dichloroethane	36	47	0	–	–
1,2-Dibromoethane	1.6	47	0	–	–

µg/m³ = micrograms per cubic meter. Laboratory non-detections are reported as less than (<) the laboratory Limit of Quantification (LOQ).
* The PA DEP Residential SV_{SS} is established for total xylenes. The concentration of total xylenes is calculated by adding the concentrations of m&p-xylene and o-xylene.

4.5 Additional Planned Activities

The preliminary passive soil gas sampling results may undergo data validation by Environmental Standards. If data validation occurs, all sampling results will undergo Stage II data validation, and 10% of the sampling results will undergo Stage IV data validation. If any issues with data quality are identified during data validation, Sunoco Pipeline personnel will notify the respective property owner.

As of the date of this Report, no additional properties are scheduled for passive soil gas sampling. However, additional passive soil gas samples may be collected at additional residences in the Mt. Eyre Manor neighborhood based on inferred fracture trace from electrical resistivity imaging.

5.0 EXTERNAL WELL WATER SAMPLING

5.1 Progress to Date

As of the date of this Report, water sampling from external wells has been conducted at three properties in the Mt. Eyre Manor neighborhood, in accordance with the External Well Water Sampling and Analysis Plan (SAP) prepared by CTEH personnel, dated March 20, 2025. The external well water sampling events were conducted by GES personnel on March 24, 27, and 28, 2025. Preliminary results were provided to each property owner between March 27 and April 2, 2025 and shared with the PA DEP on April 1, 2025.

In addition, the External Well Water SAP was submitted to the PA DEP on March 17, 2025; upon approval of the Plan, water sampling from additional selected external wells in the Mt. Eyre Manor neighborhood will be conducted.

5.2 Strategy

External well water samples were/will be collected from selected domestic wells in the Mt. Eyre Manor neighborhood. As of the date of this Report, a total of three properties have been sampled. Water sampling from additional selected external wells in the Mt. Eyre Manor neighborhood will be conducted after the External Well Water SAP is approved by the PA DEP.

The objectives of the external well water sampling program are to:

1. Conduct air monitoring of external wellhead headspace as screening for VOCs; and
2. Collect water samples from external well water to evaluate potential impacts to domestic well water, including the potential for vapor intrusion impacts, related to refined petroleum products, including jet fuel.

5.3 Methods

Prior to the water sampling event, headspace air monitoring of the external wellhead is used as a field screening tool. The headspace of the external wellhead is screened by slowly lifting the well cover and placing the inlet of the PID into the well headspace. The peak reading for VOCs is recorded. Headspace air monitoring is conducted using a properly calibrated photoionization detector (PID) with a 10.6 electron volt (eV) lamp (e.g., RAE Systems by Honeywell MultiRAE or MiniRAE 3000+, ION Science Tiger XT; detection limit = 0.1 parts per million [ppm]). Regardless of whether VOCs are detected in the headspace of the external wellhead, an aliquot of water is then drawn from the well for observation using approved materials (i.e., single-use bailer and/or peristaltic pump with single-use tubing). Observations of product and/or odor, or lack thereof, are made (e.g., visual observation of separate phase liquids, color, and clarity; character and strength of odor).

A HydraSleeve or equivalent no-purge groundwater sampling device is then used to collect water samples without disturbing the water column. Prior to deployment, field personnel calculate the proper sampling depth based on the depth to water and attach the HydraSleeve to a weighted line with clear depth markings. Once lowered to the target sampling depth, the HydraSleeve is activated with a quick upward pull, allowing water to flow through the check valve and fill the sampling sleeve. After retrieval to the surface, field personnel transfer the collected water sample to laboratory-provided containers.

Samples are then sent to Pace Analytical in Westborough, Massachusetts for analysis of target analytes via US EPA Method 524.2 (for select VOCs), US EPA Method 504.1 (for 1,2-dibromoethane), and US EPA Method 200.8 (for lead)[4]. Pace Analytical in Westborough, Massachusetts is accredited for analysis of the target VOCs in drinking water via US EPA Method 524.2 and is accredited for analysis of EDB in drinking water via US EPA Method 504.1. The Westborough laboratory is not accredited for analysis of lead in drinking water; therefore, the Westborough laboratory sends the water sample collected for lead analysis to Pace Analytical in Mansfield, Massachusetts, and the sample is analyzed for lead by the Mansfield laboratory, which is accredited for analysis of lead in drinking water via US EPA Method 200.8.

Target analytes were selected based on analytical requirements for water testing related to refined petroleum products, including jet fuel, as outlined in the Short List of Petroleum Products in the Land Recycling Program Technical Guidance Manual established by the PA DEP. Target analytes are the following VOCs: benzene, toluene, ethylbenzene, total xylenes (calculated by adding the concentrations of m&p-xylene and o-xylene), isopropylbenzene, methyl tert-butyl ether (also known as methyl tertiary butyl ether or MTBE), naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and

[4] The external well water sample at one of the three properties sampled to date was analyzed only for VOCs via US EPA Method 524.2. Analysis of 1,2-dibromoethane and lead via US EPA Methods 504.1 and 200.8, respectively, was not conducted.

1,2-dichloroethane (also known as ethylene dichloride or EDC); 1,2-dibromoethane (also known as ethylene dibromide or EDB); and lead (dissolved).

5.4 Results

To evaluate potential vapor intrusion impacts to residences, external well water sampling results were/will be compared to the Residential groundwater Statewide health standard vapor intrusion screening values (Residential SV_{GW}) established by the PA DEP.

A summary of the preliminary external well water sampling results is provided in **Table 3**. Aside from one detection of lead, no analytes were detected in any sample.

Preliminary results, including a cover letter and the preliminary laboratory report issued by Pace Analytical, were provided to each respective property owner between March 27 and April 2, 2025. The preliminary results were also shared with the PA DEP on April 1, 2025.

Table 3. Summary of Preliminary External Well Water Sampling Results

Analyte	PA DEP Residential SV_{GW} (µg/L)	Number of Samples	Number of Detections	Range of Detections (µg/L)	Number Detected Above Residential SV_{GW}
Benzene	23	3	0	–	–
Toluene	34,000	3	0	–	–
Ethylbenzene	700	3	0	–	–
m&p-Xylene	10,000*	3	0	–	–
o-Xylene		3	0	–	
Isopropylbenzene	1,900	3	0	–	–
Methyl tert-butyl ether	6,300	3	0	–	–
Naphthalene	100	3	0	–	–
1,2,4-Trimethylbenzene	510	3	0	–	–
1,3,5-Trimethylbenzene	360	3	0	–	–
1,2-Dichloroethane	34	3	0	–	–
1,2-Dibromoethane	2.9	2	0	–	–
Lead	N/A	2	1	0.0007 (J) mg/L	N/A

µg/L = micrograms per liter. mg/L = milligrams per liter. N/A = No Residential SV_{GW} has been established for the analyte. Laboratory non-detections are reported as less than (<) the laboratory Method Detection Limit (MDL). Laboratory result qualifiers are reported to the right of corresponding detections (in parentheses). Definitions of reported qualifiers are as follows. J: Result is estimated between the laboratory method detection limit and reporting limit.

* The PA DEP Residential SV_{GW} is established for total xylenes. The concentration of total xylenes is calculated by adding the concentrations of m&p-xylene and o-xylene.

5.5 Additional Planned Activities

The preliminary external well water sampling results are undergoing data validation by Environmental Standards. All sampling results are undergoing Stage II data validation, and 10% of the sampling results are undergoing Stage IV data validation. If any issues with data quality are identified during data validation, Sunoco Pipeline personnel will notify the respective property owner.

As of the date of this Report, no additional properties are scheduled for external well water sampling. However, water sampling from additional selected external wells in the Mt. Eyre Manor neighborhood will be conducted after the External Well Water SAP is approved by the PA DEP.

6.0 MITIGATION MEASURES

Vapor intrusion mitigation measures may be implemented and may include (but are not limited to) the inspection of pre-existing radon mitigation systems and the installation of sub-slab depressurization systems at select residences. If implemented, the installation of new vapor intrusion mitigation measures will be employed after adequate data is collected and validated to support decision making (e.g., after both the first and second indoor air sampling events have been conducted and the data validated).

In the meantime, product recovery from groundwater is ongoing via recovery wells that were installed near the Site during the week of March 17, 2025.

Attachment A

Site Location Map

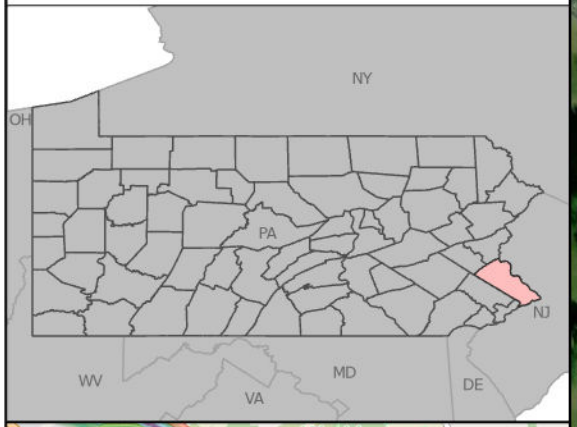
CTEH®

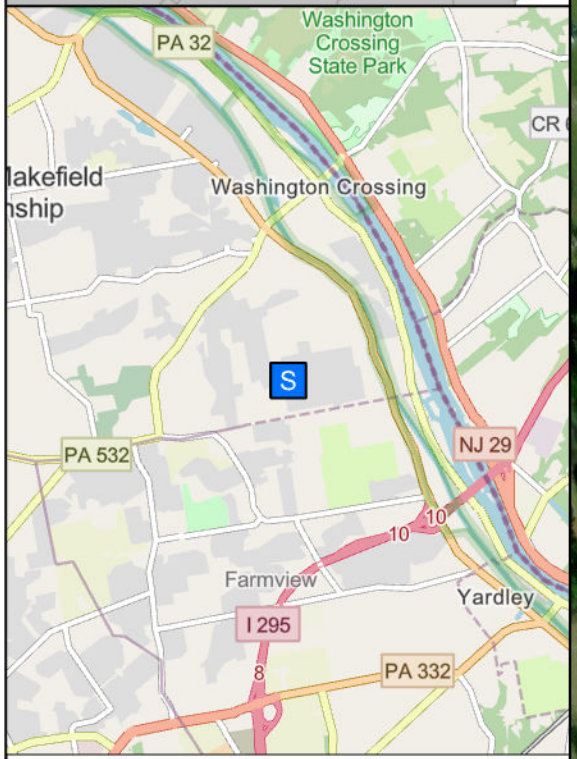
Upper Makefield Response

Incident Location

Washington Crossing, PA | Bucks County

PROJ-051861





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