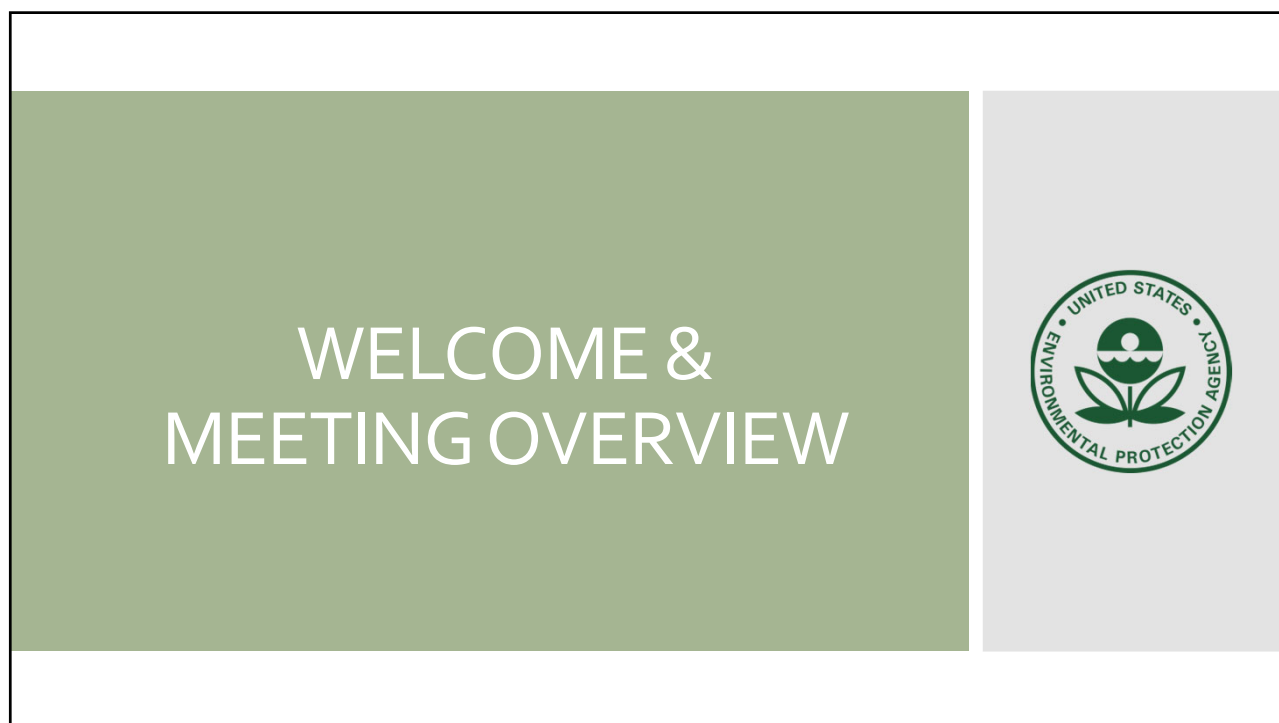




1



2

## Agenda

Welcome & Introductions	6pm – 6:15pm
RI Update	6:15pm – 6:50pm
RI Q&A	
Break	6:50pm – 7pm
RI Split Sampling	7pm – 8pm
Drinking Water Discussion	
Drinking Water Q&A	

3

## Introductions – Facilitator

### Robin Roberts

Contractor through EPA HQ's Conflict Prevention  
and Resolution Center

**Role:** Facilitate Meeting

4

## Introductions –

## EPA Superfund Emergency Management Division (SEMD)

### **Victoria Schantz**

Remedial Project Manager

### **Augusta Mery**

Remedial Project Manager

### **Will Geiger**

Section Chief, VA & WV Remedial Section

**Role:** Manage the investigation and cleanup of the Paden City Groundwater Superfund Site. Does not have authority over the municipal water system.

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## Introductions –

## EPA SEMD Technical Support

### **Martin Gehlhaus**

Toxicologist/ Human Health Risk Assessor

### **Leanne Wiskemann**

Hydrogeologist  
(not present)

### **Matt Taynor**

Biological Technical Assistance Group Member  
(not present)

**Role:** Provide technical assistant for the Paden City Groundwater Superfund Site

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Introductions –

EPA SEMD  
Contractor –  
EA Engineering,  
Science,  
Technology, Inc.

## Michael Thornton

Project Manager

## Jason McNew

Project Manager

(not present)

**Role:** Contractor to EPA for work on the Paden City Groundwater Superfund Site. Perform Remedial Investigation and Feasibility Study.

7

Introductions –

EPA Office of  
Public Affairs  
(OPA)

## John Brakeall

Community Involvement Coordinator

## Eric Pollard

Community Involvement Coordinator

## Kia Long

Acting Chief, Community Involvement Branch

## Mark Ferrell

Congressional and Intergovernmental Liaison

**Role:** Handle community relations for the Paden City Groundwater Superfund Site.

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## Introductions –

### EPA Water Division (WD)

#### **Bill Richardson**

Chief, Drinking Water Section

#### **Karrie Crumlish**

Chief, Drinking Water & Source Water Protection  
Branch

(not present)

**Role:** Delegates and oversees implementation of  
the Safe Drinking Water Act (SDWA)

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## Introductions –

### Agency for Toxic Substances and Disease Registry (ATSDR)

#### **Emily Adler**

Regional Representative

**Role:** Sister agency to EPA and is part of the  
Centers for Disease Control and Prevention. Assists  
EPA with health-related topics.

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## Introductions –

West Virginia  
Department of  
Environmental  
Protection  
(WVDEP)

### **Bill Huggins**

Remedial Project Manager

### **Ross Brittain**

Toxicologist

### **Drew Waggener**

Hydrogeologist

**Role:** State counterpart to EPA SEMD for management of the Paden City Groundwater Superfund Site

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## Introductions –

West Virginia  
Department of  
Health and  
Human  
Resources  
(WVDHHR)

### **Bob Smith**

District Engineer

### **Meredith Vance**

Division Director  
(not present)

### **Jason Frame**

Office Director  
(not present)

**Role:** Primacy Agency for Drinking Water in West Virginia. An entity with primacy is the agency with primary responsibility for implementing the SDWA.

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Introductions –

The Town of  
Paden City

**Steve Kastigar**

Mayor

**Josh Billiter**

Public Works Director

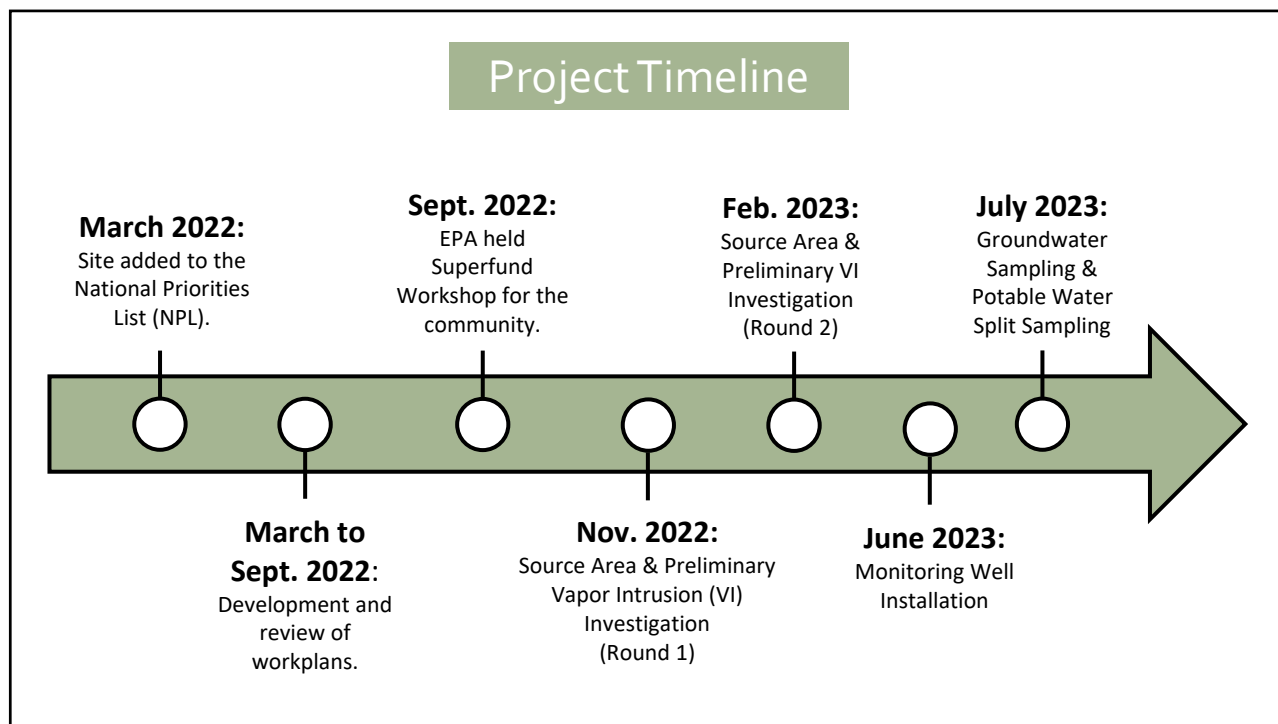
**Role:** Local representatives. Manages the  
municipal water treatment plant.

13

# REMEDIAL INVESTIGATION UPDATE



14



15

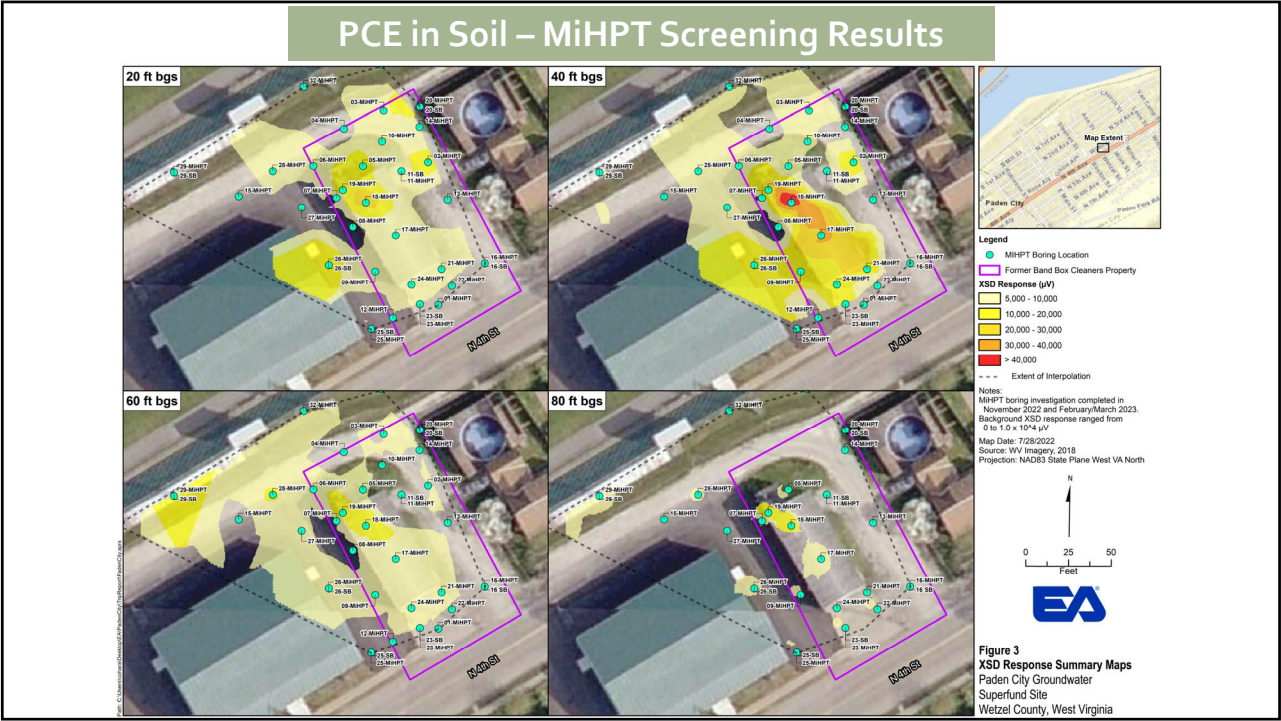
## Source Area Investigation

Nov. 2022 & Feb./Mar. 2023 -

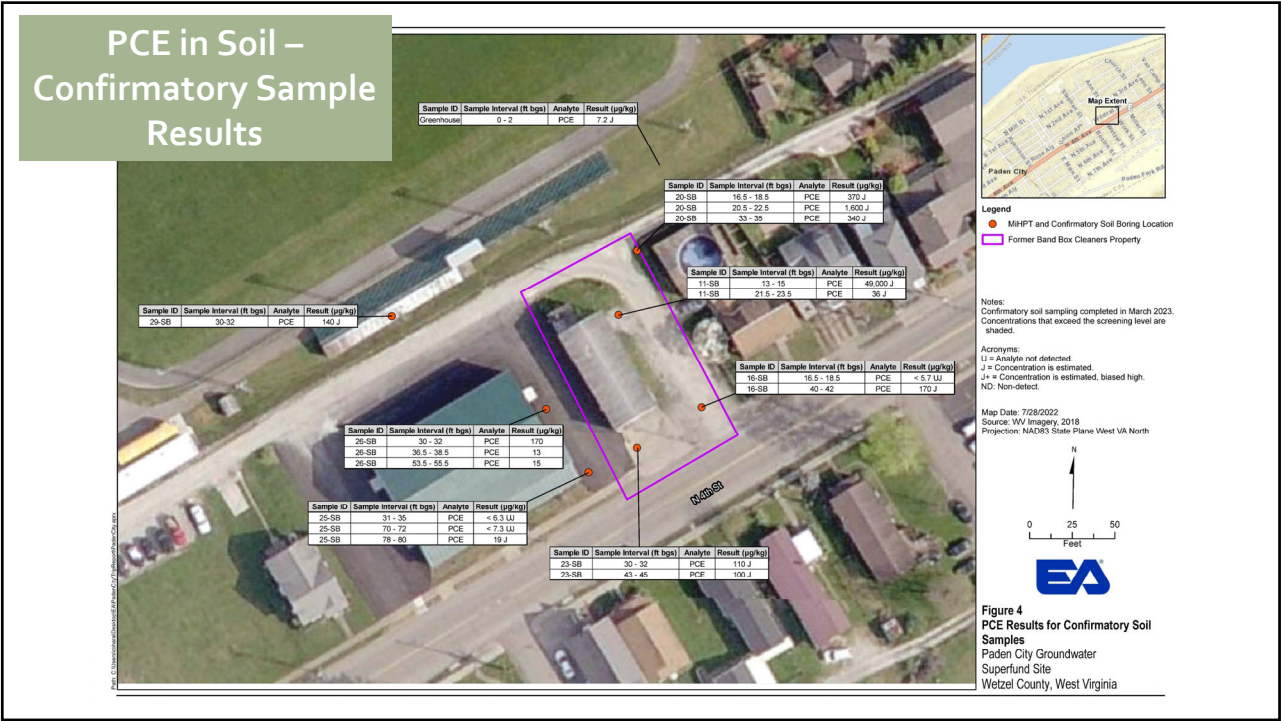
- **Location:** Near the former Band Box Cleaners property
- **Purpose:** To confirm the source of contamination and to define the extent of the contaminated soil.
- **Activities:**
  - MiHPT screening
  - Confirmatory soil sampling

16





17



18

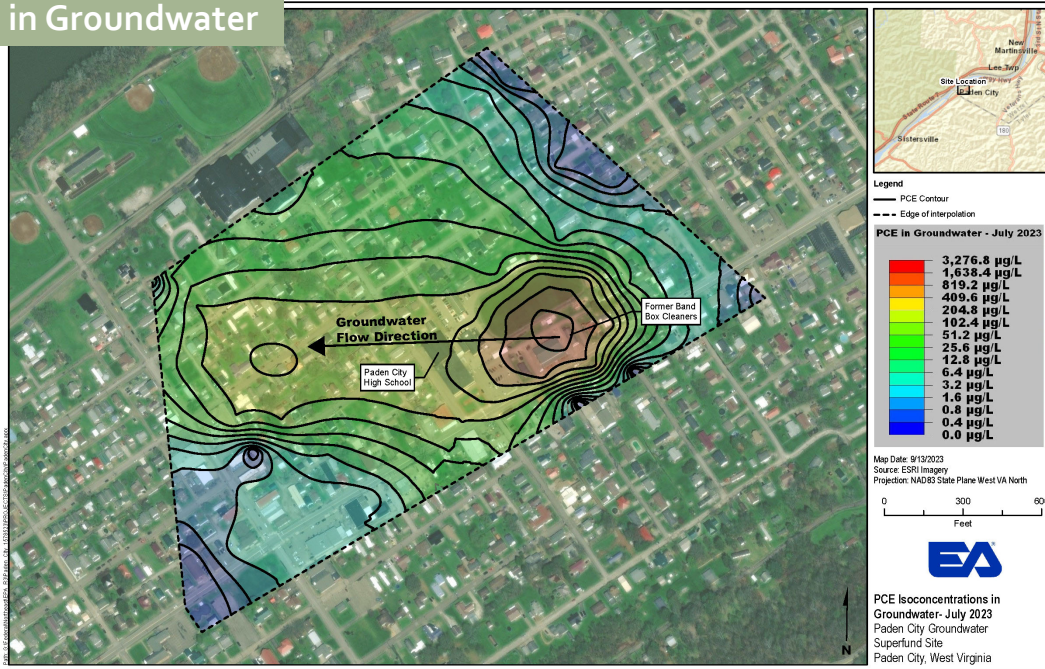
## Monitoring Well Installation & Groundwater Sampling

June/July 2023 -

- **Locations:**
  - Near the former Band Box Cleaners
  - Various locations around Paden City
- **Purpose:**
  - Define extent of groundwater contamination
  - Use data to plan expanded VI investigation (January 2024)
- **Activities:**
  - Installed groundwater monitoring wells
  - Groundwater sampling

19

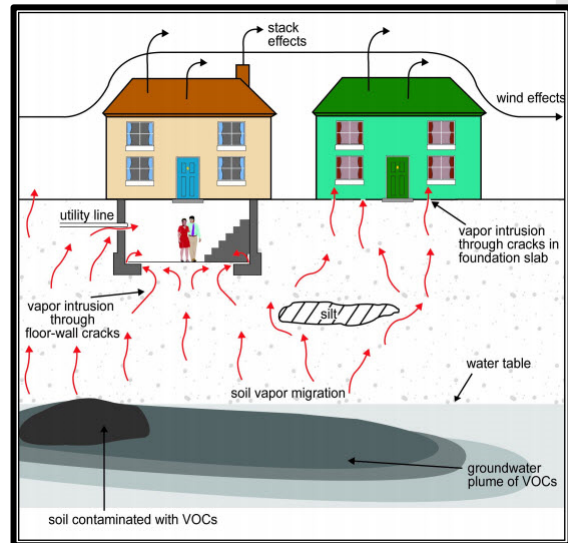
## PCE in Groundwater



20

## Vapor Intrusion (VI)

- A process where vapors from volatile organic compounds (VOCs), such as PCE, contamination in groundwater make their way into indoor air
- In some cases, the vapors may accumulate in buildings to levels that may pose an unacceptable risk of health effects due to long-term exposure



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## Preliminary VI Investigation

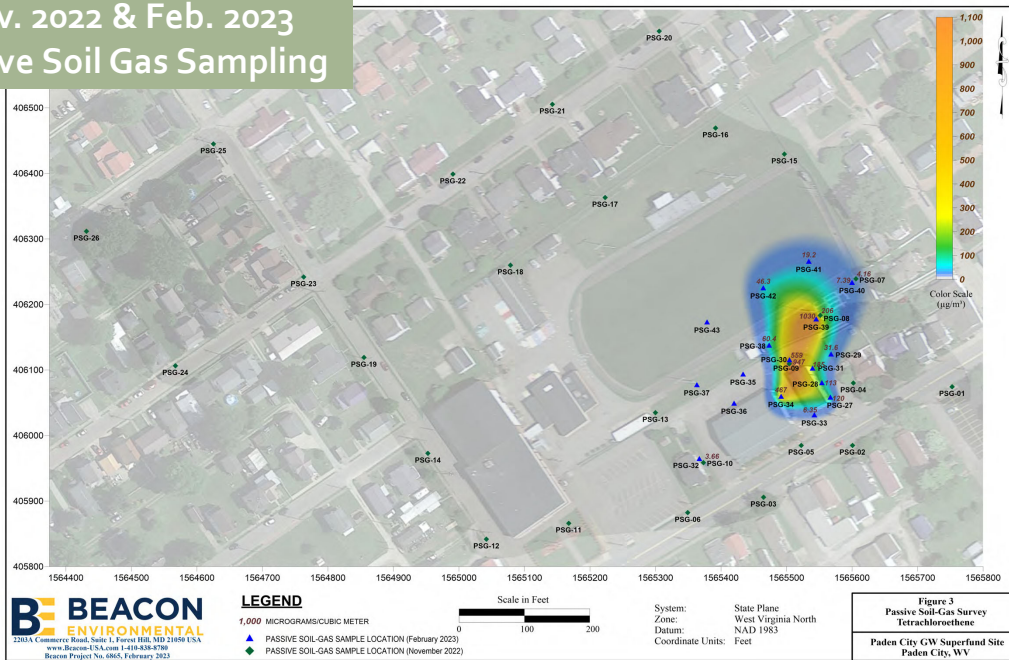
Nov. 2022,  
Feb. 2023,  
& March 2023

- **Locations:**
  - Near the former Band Box Cleaners
  - Various locations around town
  - Paden City High School & greenhouse
  - Paden City Elementary School
  - Municipal air stripper exhaust
  - Residences located near the former Band Box Cleaners
- **Purpose:** Assess potential VI resulting from contaminated soil and/or groundwater from releases at the former Bandbox Cleaners.
- **Activities:**
  - Collect passive soil gas samples
  - Collect indoor air, sub-slab soil gas, and/or ambient air samples

22



## Nov. 2022 & Feb. 2023 Passive Soil Gas Sampling



23

## February/March 2023 Preliminary VI Investigation Sampling Locations



\*Two private residences sampled not shown.

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## Preliminary VI Investigation – Results

Location/ Samples	Results
<b>High School</b> <ul style="list-style-type: none"> <li>• 6 indoor air samples</li> <li>• 6 sub-slab soil gas samples</li> <li>• 1 ambient air sample</li> </ul>	<ul style="list-style-type: none"> <li>• PCE detected in indoor air and sub-slab but <b>NOT</b> exceeding VISL.</li> <li>• Based on the analytical results, VOCs from the former Band Box Cleaners <b><i>do not appear to indicate a VI concern.</i></b></li> <li>• Results are consistent with prior results collected in November 2020 during the Site Inspection.</li> </ul>
<b>Elementary School</b> <ul style="list-style-type: none"> <li>• 2 indoor air samples</li> <li>• 1 sub-slab soil gas sample</li> <li>• 1 ambient air sample</li> </ul>	
<b>Two Residences near Bandbox</b> <ul style="list-style-type: none"> <li>• 2 indoor air samples each</li> <li>• 1 sub-slab soil each</li> </ul>	<ul style="list-style-type: none"> <li>• PCE detected in indoor air and sub-slab but <b>NOT</b> exceeding VISL.</li> <li>• Based on the results, there <b><i>does not appear to be a VI concern</i></b> for the property at this time.</li> </ul>

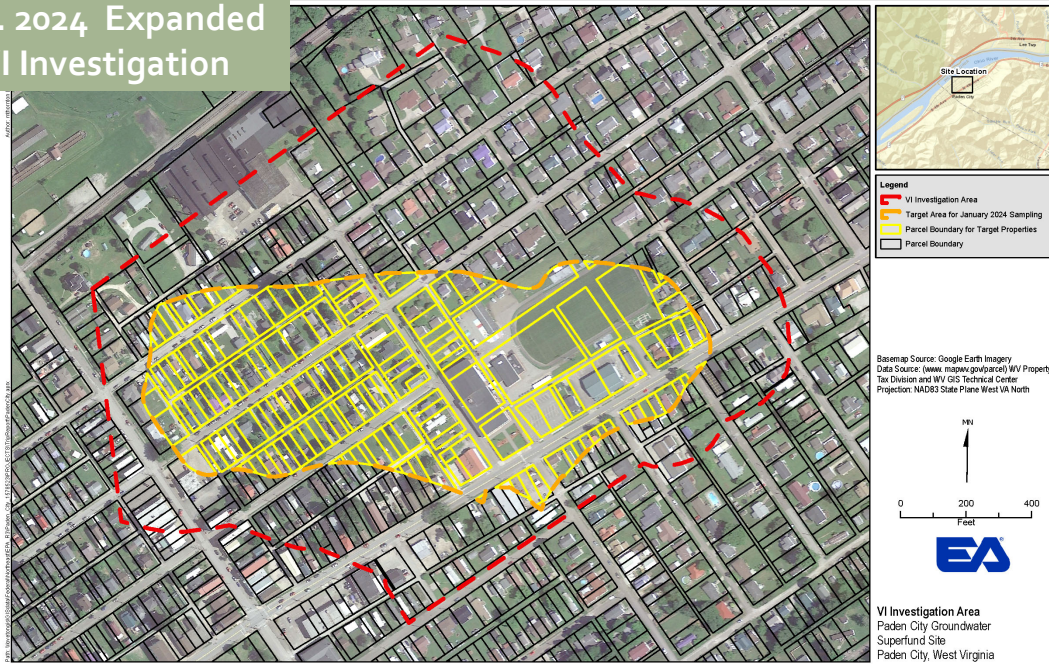
25

## Preliminary VI Investigation – Results

Location/ Samples	Results
<b>High School Greenhouse</b> <ul style="list-style-type: none"> <li>• 1 indoor air sample</li> <li>• 1 passive soil gas sample Nov. 2022</li> <li>• 1 passive soil gas sample Feb. 2023</li> </ul>	<ul style="list-style-type: none"> <li>• PCE detected in indoor air but <b>NOT</b> exceeding VISL.</li> <li>• PCE <b>was elevated</b> in passive soil gas samples.</li> <li>• For current conditions/use. If the greenhouse enclosure was intact, VI would likely be a concern based on the passive soil gas results.</li> </ul>
<b>Air Stripper Exhaust</b> <ul style="list-style-type: none"> <li>• 1 ambient air sample upwind of air stripper</li> <li>• 1 ambient air sample downwind of air stripper</li> <li>• 1 ambient air sample near the air stripper exhaust</li> </ul>	<ul style="list-style-type: none"> <li>• The air stripper exhaust <b>does not appear</b> to be responsible for any ambient air screening level exceedances.</li> </ul>

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## Jan. 2024 Expanded VI Investigation



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## What is Asked of Residents?

- If your property is identified for sampling, provide access  
***Access agreements are available at the sign in table if you'd like to provide access today!***
- Work with us to coordinate schedule sampling
  - 2-day event, ~1 hour each day
- Answer questions about use of chemicals/cleaning supplies
- Put away chemicals that may interfere with study during sampling
- Help us to identify a location to set the sampler
- Leave sampler in location and refrain from using chemicals

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Indoor Air Sample Setup (summa canister on table)



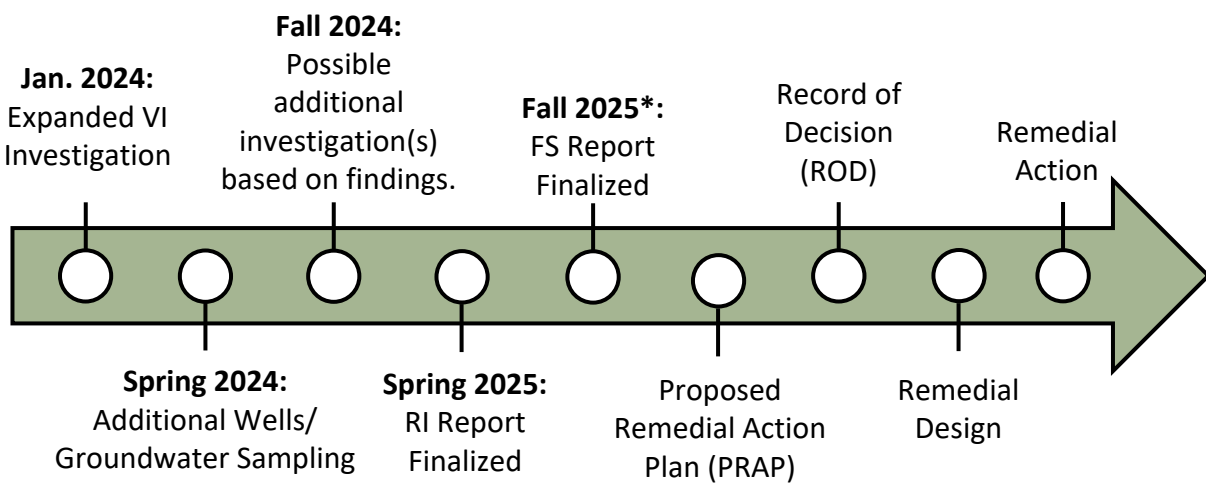
Sub-Slab Sample Port



Sub-slab Sample Setup (summa canister connected to sub-slab sample port)

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## Superfund Next Steps



Additional groundwater & potable water sampling will be performed until RI completion.

\* dates are estimated

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Q&A



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10- Minute Break

Next Up: Municipal Water Sampling



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# MUNICIPAL WATER SAMPLING



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## Potable Water Sampling (Split Sampling Event)

July 2023

- EPA conducted split sampling in conjunction with the Paden City Water Department on July 26-27, 2023.
- Approximately 20 locations were sampled along the municipal water treatment and distribution system.
- Sampling was conducted as part of the Remedial Investigation to ensure the air stripper was effectively addressing PCE contamination after concerns were raised by the community.
- Preliminary results (which have since been validated) reported detections of PCE in finished water samples ranging from 14 ug/L to 39 ug/L, exceeding the Maximum Contaminant Level (MCL) of 5 ug/L.
- Results for samples collected by the Town of Paden City are comparable to results for samples collected by EPA on the same dates and at the same locations.
- Upon receipt of preliminary analytical results on August 15, 2023, EPA SEMD immediately notified EPA WD, WVDHHR, WVDEP, and the Town of Paden City.
- WVDHHR, *the primacy agency*, issued a "Do Not Consume" order for the municipal water supply on August 16, 2023.

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## EPA SEMD & WD - Roles in the response

- An EPA SEMD On Scene Coordinator (OSC), an EPA Emergency Response Team (ERT) representative, and a WVDEP representative visited the air stripper on August 18, 2023 to inspect the air stripper.
- EPA SEMD performed sampling on 8/21, 8/23, 8/28, 8/30, 9/1, 9/5, 9/11, 9/19, 9/26, 10/3, 10/10, 10/18, 10/24, and 11/7
- EPA SEMD plans to collect one more round at the end of November
- EPA SEMD will collect samples in concurrence with our RI groundwater sampling schedule (quarterly)

EPA has issued an FAQ document which can be found at:  
<https://semspub.epa.gov/work/03/2360138.pdf>

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## Discussion with Paden City Public Works

- How did that the contamination get into the treated water?
- What contingencies have been put in place to prevent this from happening again?
- What testing will be conducted going forward?
- Next steps?

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## Discussion with WVDHHR

- How did WVDHHR handle the issue?
- Next steps?

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## Q&A



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## Contact Info

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(215) 814-3246  
Schantz.Victoria@epa.gov

**John Brakeall**

Community Involvement  
Coordinator  
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Brakeall.John@epa.gov

**Bill Richardson**

Chief, Drinking Water Section  
(215) 814-5675  
Richardson.William@epa.gov

**Bill Huggins**

WVDEP Remedial Project  
Manager  
(304) 238-1220  
William.Huggins@wv.gov

**Bob Smith**

WVDHHR District Engineer  
(304) 312-0322  
Bob.A.Smith@wv.gov

**Emily Adler**

ATSDR, Site Lead  
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qgk3@cdc.gov

[www.epa.gov/superfund/padencitygroundwater](http://www.epa.gov/superfund/padencitygroundwater)

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# THANK YOU!



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