



Public Health Meeting RACER Moraine Facility

April 25, 2012

6:30 - 8:00 p.m.

Moraine Municipal Building

4200 Dryden Road

Moraine, OH

- ❖ **Welcome/Introductions:** (5 min)
- ❖ **Public Health Dayton & Montgomery County (PHDMC) involvement/vapor intrusion activities:** PHDMC, Mark Case, Director of Environmental Health (15-20 min)
- ❖ **TCE/PCE discussion:** Ohio Department of Health (ODH), Health Assessment Section (HAS): Bob Frey, Chief (15-20 min)
- ❖ **Communities and Cancer:** ODH, Comprehensive Cancer Control Program: Robert Indian, Chief (15-20 min)
- ❖ **Question & Answer** (20-30 min)
- ❖ **Adjourn**

U.S. EPA RACER Moraine Facility



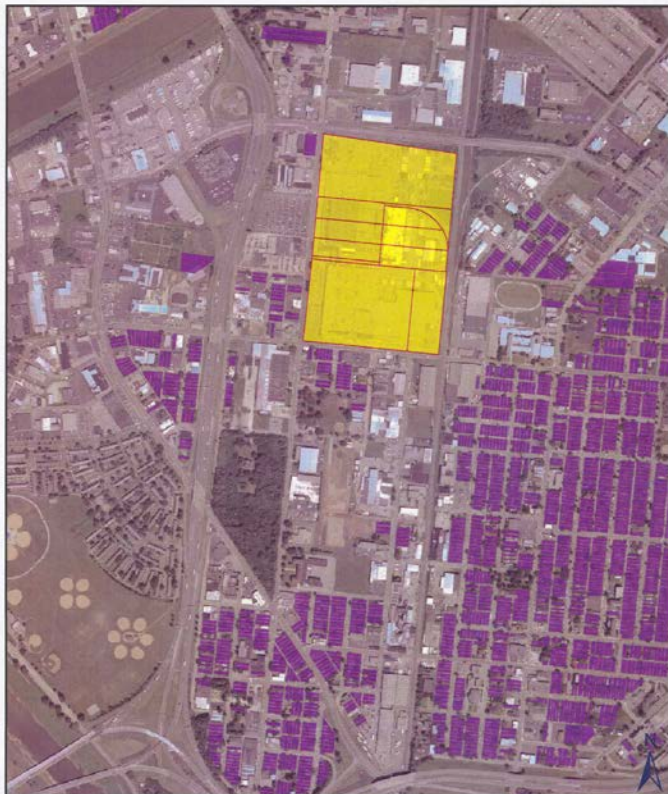
Vapor Intrusion
Investigation
Moraine, OH





Delphi Home Ave. Site West Dayton

Behr-Dayton Site North Dayton



OhioEPA
August 2006

Behr Dayton Thermal Systems LLC
Residential Properties within 4500 Feet South

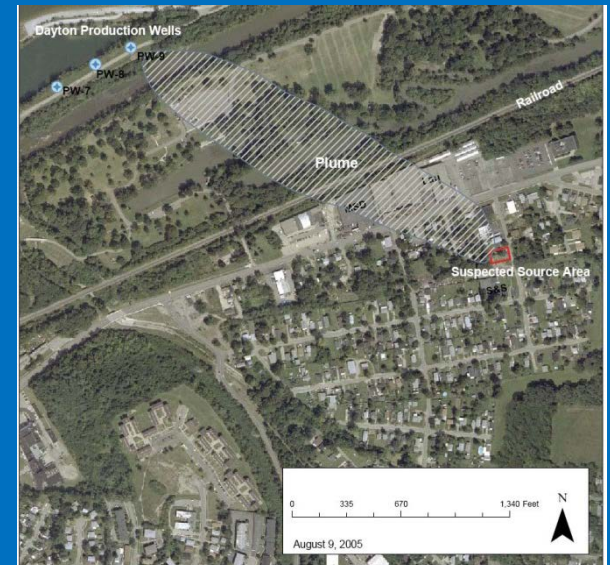
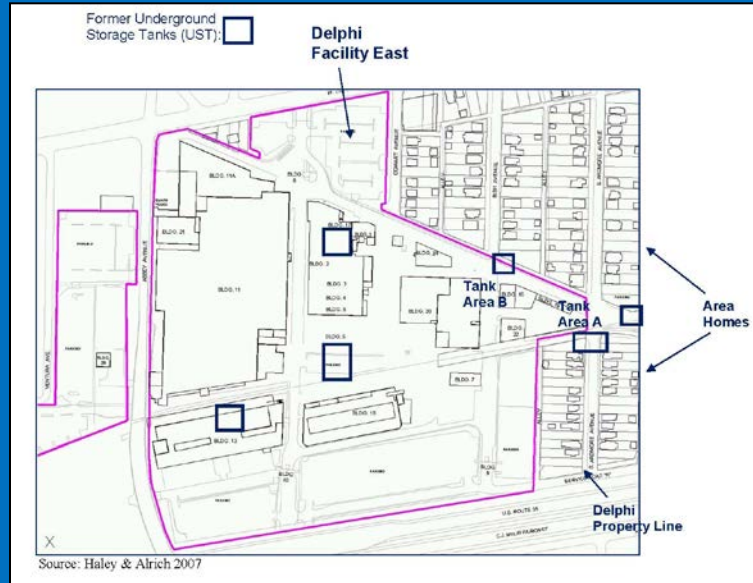
LEGEND

- Behr Dayton Thermal Systems LLC Project Boundary
- Residential Properties

0 500 1,000 2,000 Feet



Springfield St. Site Riverside

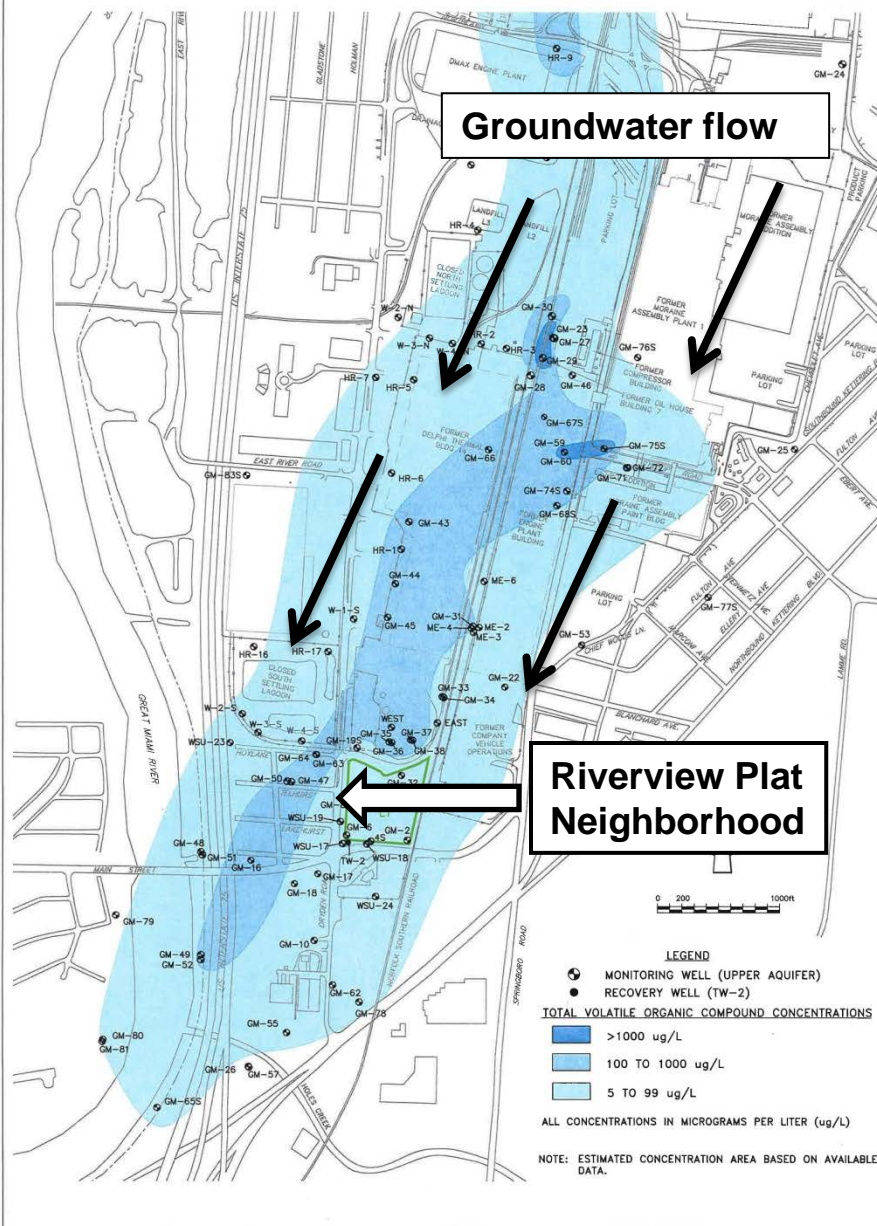


Riverview Plat

Vapor Intrusion Investigation



**TOTAL VOLATILE ORGANIC COMPOUND CONCENTRATIONS FOR
SHALLOW GROUNDWATER (2008-2010)
RACER
MORaine, OHIO**



What is Vapor Intrusion?

Connecting The Dots

**Former GM Plant
Chemical Spill
TCE - PCE**



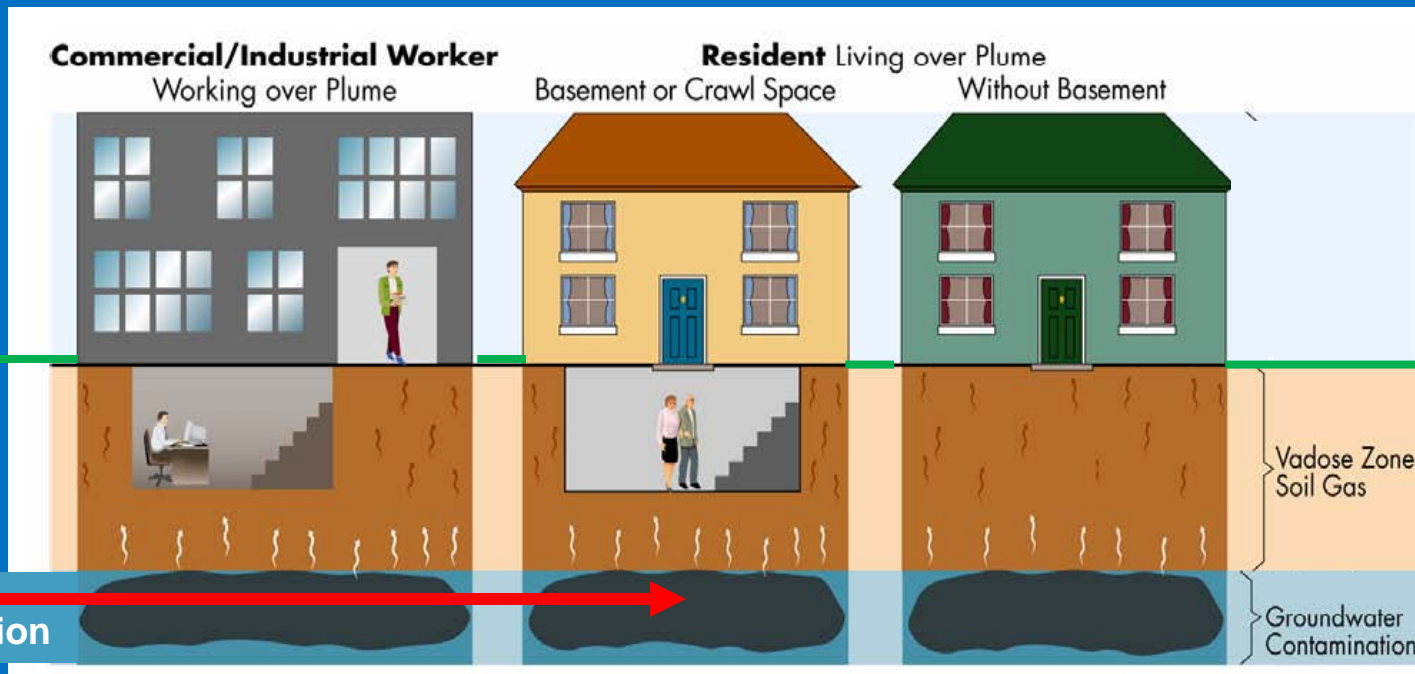
Groundwater contamination..... inhalation?

* Make note the Riverview Plat community is on a clean, safe public water supply

Vapor Intrusion

U.S. EPA RACER Moraine Facility

**Former GM Plant
Chemical Spill
TCE - PCE**



On-site

Groundwater levels:

(Nov 2001)

TCE = 2,200 ppb

PCE = 15,000 ppb

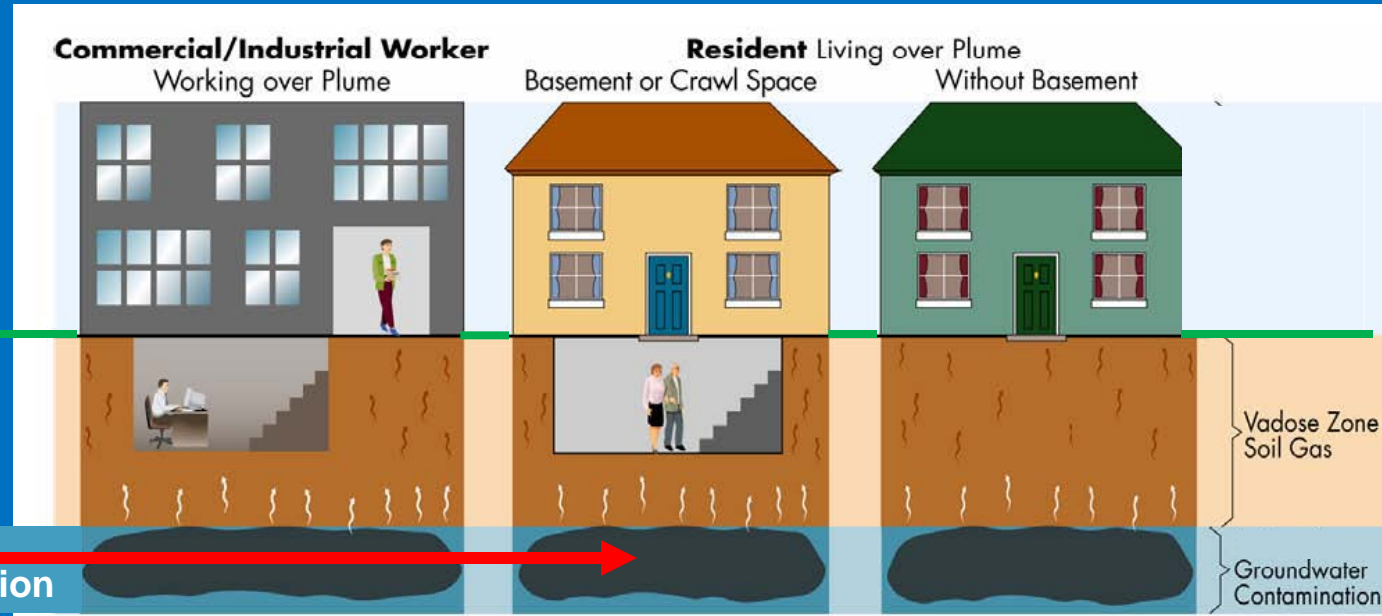
Vapor Intrusion

Riverview Plat Community

1. Groundwater Contamination

**Former GM Plant
Chemical Spill
TCE - PCE**

Groundwater Contamination



Groundwater Flow

**On-site
Groundwater levels:
(Nov 2001)
TCE = 2,200 ppb
PCE = 15,000 ppb**

**Riverview Plat Groundwater levels:
TCE = 140 ppb
PCE = 180 ppb**

Soil Gas Sampling

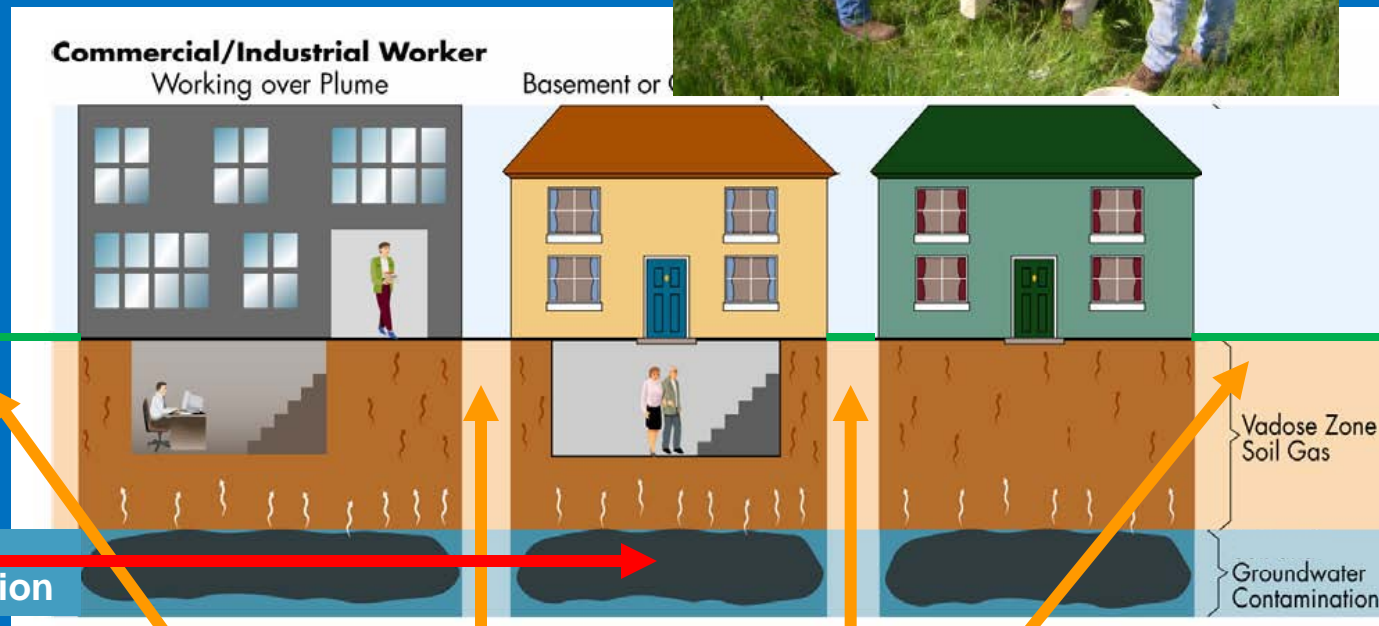
2. Soil Gas action levels (residential):

TCE = 40.0 ppb

PCE = 600.0 ppb



**Former GM Plant
Chemical Spill
TCE - PCE**



**Soil Gas TCE = 2,900 ppb
Soil Gas PCE = 5,600 ppb**

Sub-Slab Sampling

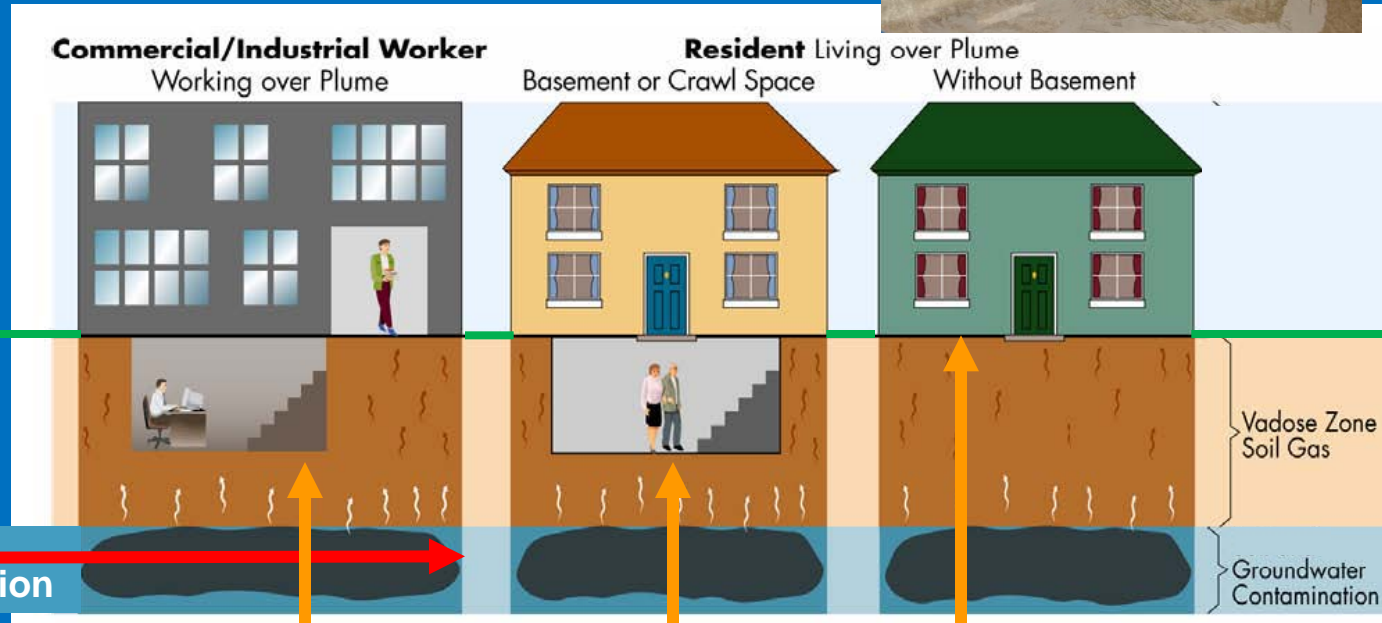
3. Sub-Slab action levels (residential):

TCE = 4.0 ppb

PCE = 60.0 ppb



**Former GM Plant
Chemical Spill
TCE - PCE**



Groundwater Contamination

**Sub Slab Soil Gas TCE = 2,000 ppb
Sub Slab Soil Gas PCE = 3,700 ppb**

Indoor Air Sampling

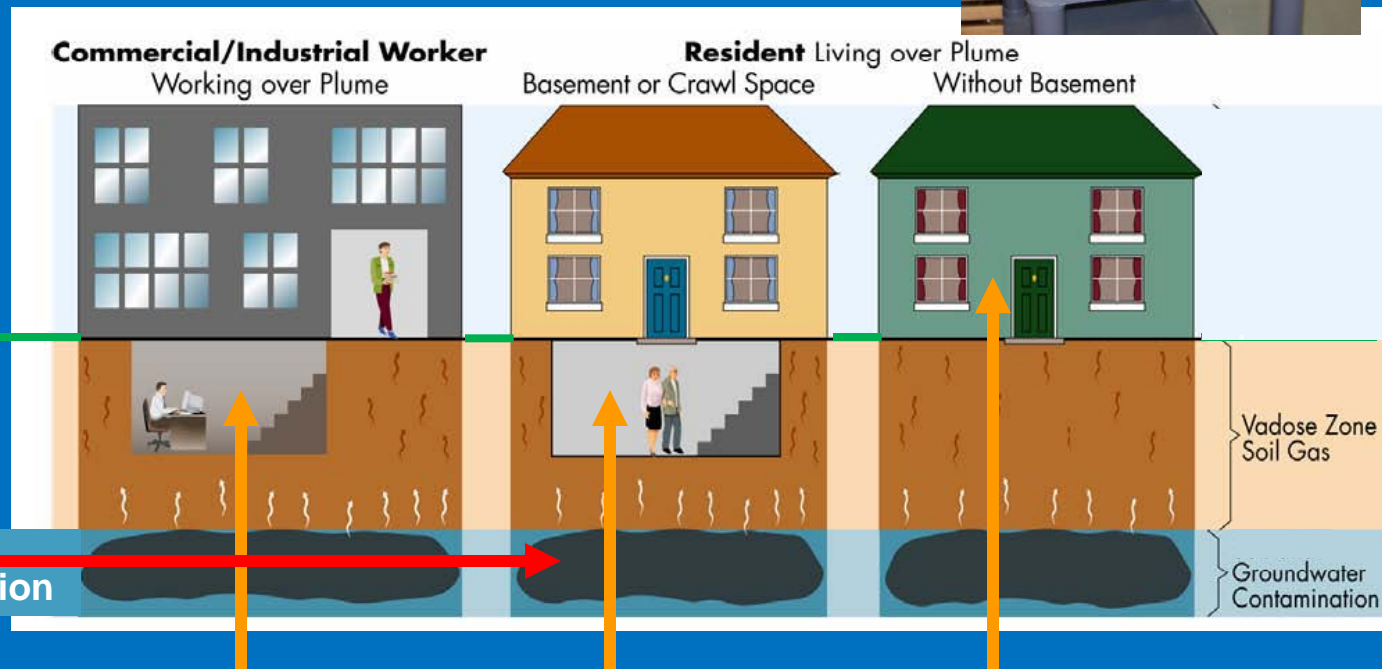
4. Indoor Air action levels (residential):

TCE = 0.4 ppb

PCE = 6.0 ppb



**Former GM Plant
Chemical Spill
TCE - PCE**



**Indoor Air TCE = 9.3 ppb
Indoor Air PCE = 22.0 ppb**

} highest levels found

Vapor Intrusion

Connecting The Dots

Riverview Plat Community

**Completed
Exposure
Pathway**

**Former GM Plant
Chemical Spill
TCE - PCE**

Commercial/Industrial Worker
Working over Plume

Resident Living over Plume
Basement or Crawl Space Without Basement

Indoor Air

Sub-slab

Soil Gas

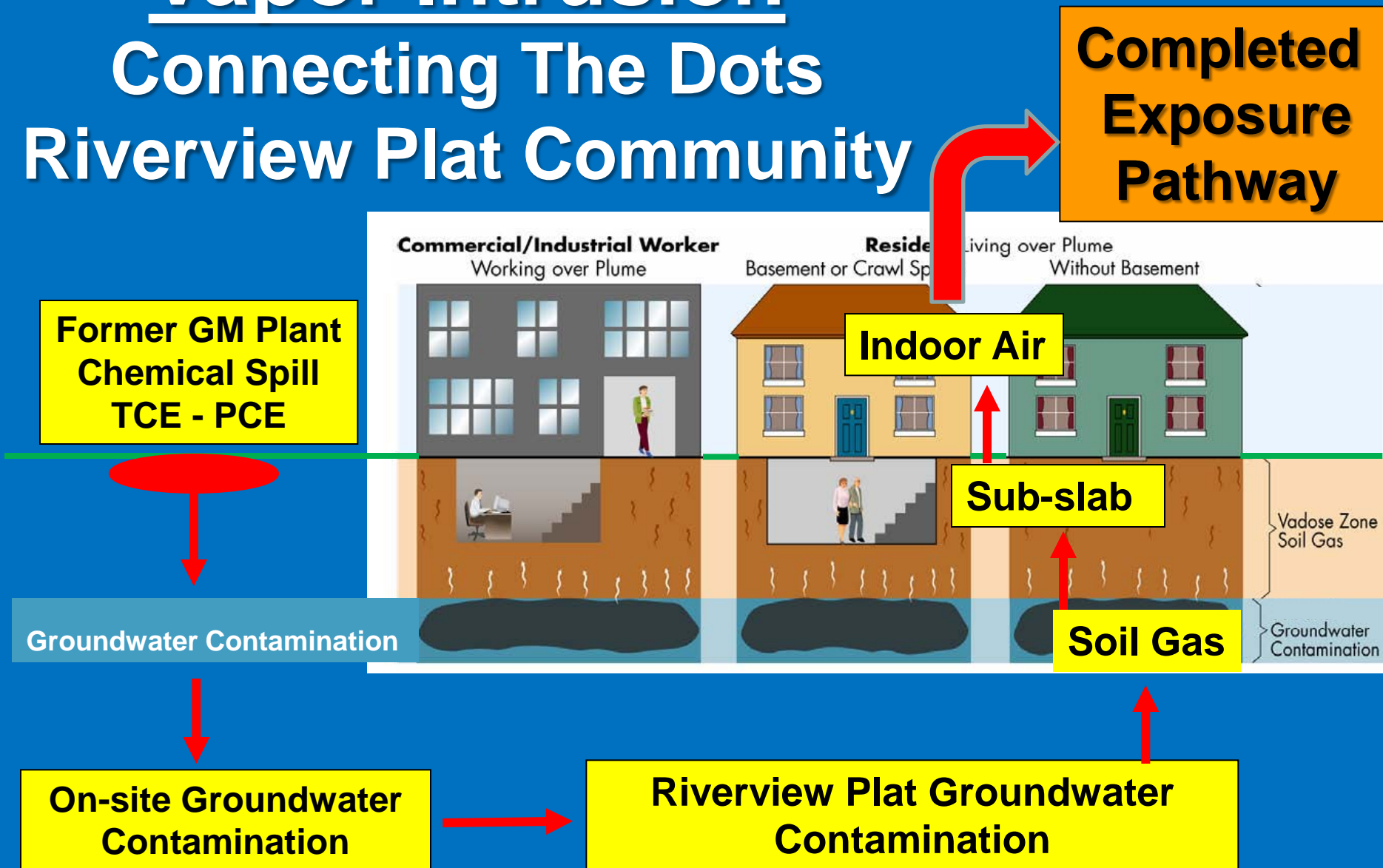
Vadose Zone
Soil Gas

Groundwater
Contamination

Groundwater Contamination

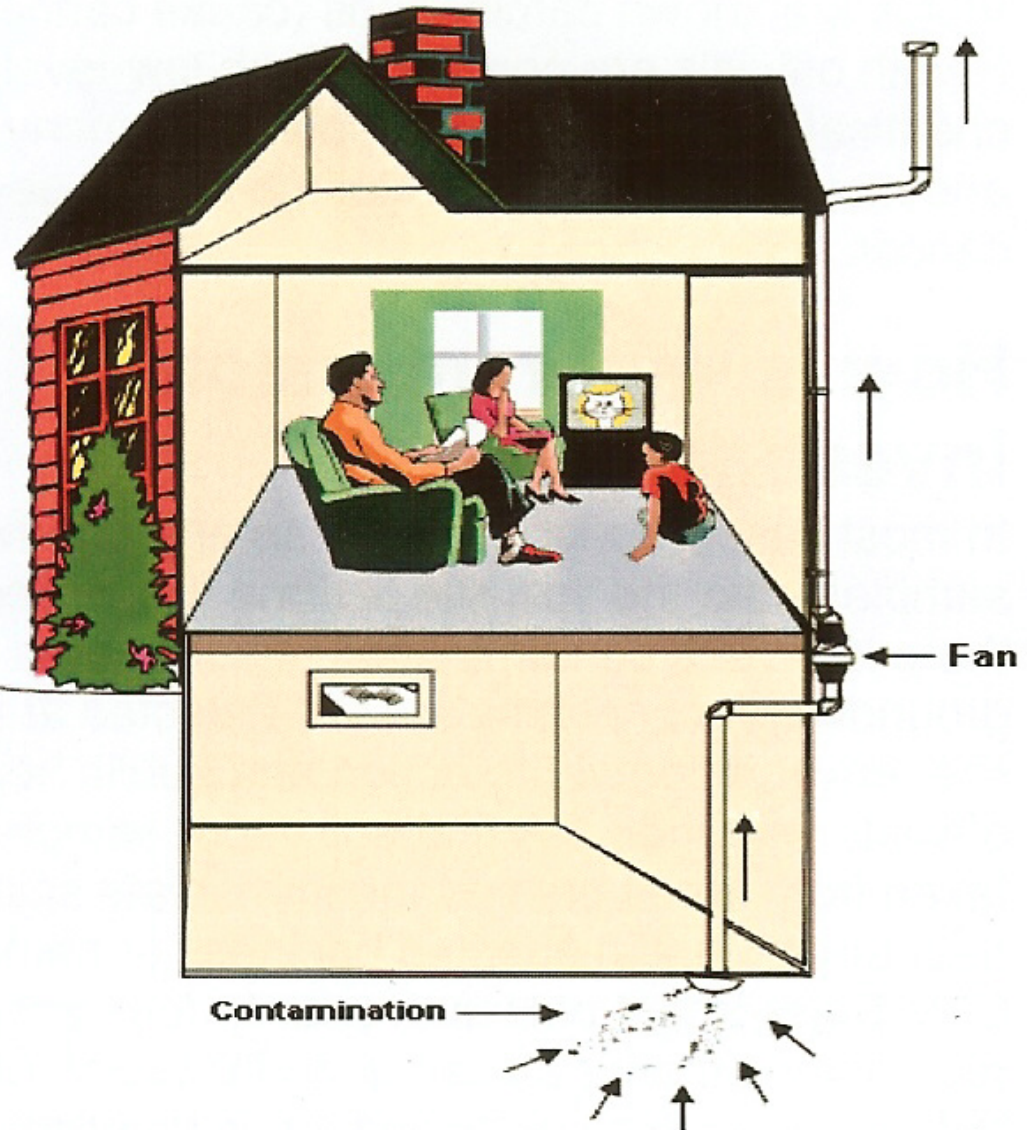
**On-site Groundwater
Contamination**

**Riverview Plat Groundwater
Contamination**



Vapor Abatement Mitigation System

The Solution



Riverview Plat

Vapor Intrusion Investigation

- ❖ 63 Properties in Riverview Plat Neighborhood (60 Residential; 3 Commercial)
- ❖ 1 Property (municipal building) south of Dryden Road included
- ❖ 42 Properties Sampled and Validated Results Received
- ❖ 38 of 42 Properties with Sample Results Require Mitigation
- ❖ 34 Access Agreements for Mitigation Systems
- ❖ 25 Mitigation Systems Installed
- ❖ 19 O&M (operation & maintenance) visits completed
- ❖ 17 30-Day Post-Installation Proficiency Sampling (PIPS) completed
- ❖ Results for 15 PIPS – ALL currently below action levels (4 results pending)
- ❖ 7 180-Day PIPS events completed, data pending

For more information:

For health-related questions and/or information about public health involvement:

Public Health Dayton & Montgomery County
117 South Main Street
Reibold Building
Dayton, OH 45422-1280
Contact: Mark Case OR Tom Hut
Phone: (937) 225-4395
E-mail: mcase@phdmc.org OR thut@phdmc.org



**Dayton &
Montgomery
County**

Ohio Department of Health
Bureau of Environmental Health
Health Assessment Section
246 N. High Street
Columbus, Ohio 43215
Site Assessor: Bob Frey
Phone: (614) 466-1390
E-mail: bob.frey@odh.ohio.gov



For information about the site contamination and cleanup activities:

U.S. EPA Region 5
Land and Chemicals Division [L-8J]
77 West Jackson Boulevard
Chicago, IL 60604-3507
Public Affairs Specialist: Rafael P. Gonzalez
Phone: 312-886-0269
E-mail: Gonzalez.Rafaelp@epa.gov

