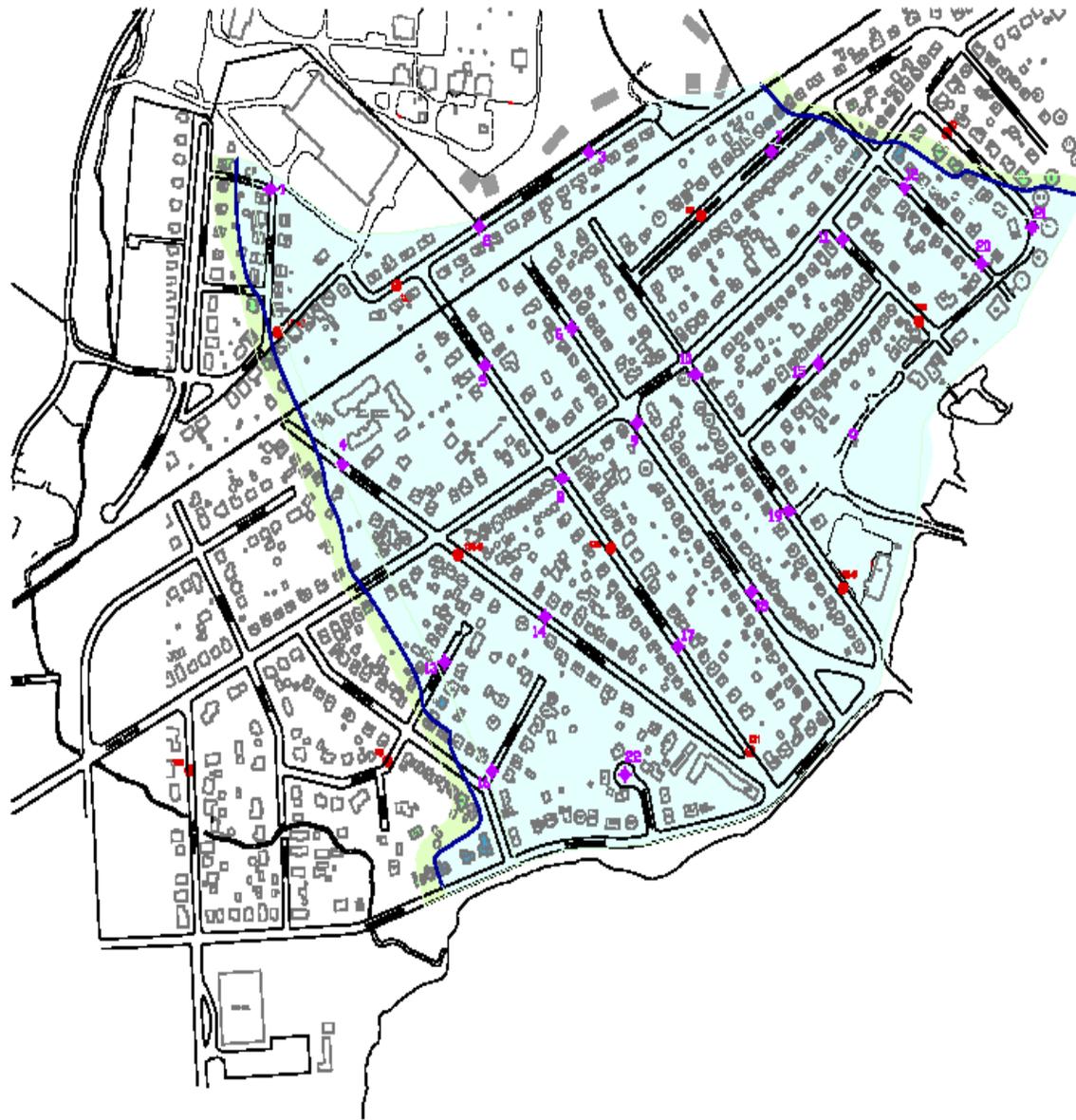


Pompton Lakes Vapor Intrusion Community Update

March 9, 2009



- Legend**
- PROPERTY BOUNDARY
 - PWR BOUNDARY
 - POTENTIAL VAPOR MIGRATION AREA
 - EXPANDED INVESTIGATION AREA
 - NOT YET SAMPLED
 - CONCENTRATION(S) BELOW DETECTABLE LEVELS
 - CONCENTRATION(S) ABOVE DETECTABLE LEVELS
 - NOT YET SAMPLED
 - MONITORING WELL
 - RESPONSE WELL LOCATION



POTENTIAL VAPOR MIGRATION AREA AND EXPANDED INVESTIGATION AREA

DELOUNT PUMPOUT LAYER MONITORING
Princeton, NJ, New Jersey

3 Studies conducted to develop “Big Picture” for the area

- Area-Wide Sub-slab Soil Gas and Indoor Air Study
- Buffer-zone Investigation
- Ground Water Investigation

Sub-Slab Soil Gas and Indoor Air Study

- Purpose
 - Identify homes to represent neighborhood conditions
 - Sample Sub-Slab Soil Gas and Indoor Air
 - 39 Structures were investigated as part of this study (37 within the Vapor Mitigation Area)

Results

- Of the 37 structures within the installation area,
 - 35 structures (95%) had exceedances of DEP screening criteria in Sub-Slab Soil Gas (SSSG)
 - 16 structures (43%) had exceedances of DEP screening criteria in the Indoor Air

Range of Concentrations

- Sub Slab Soil Gas
 - TCE:
 - Non-Detect – 1,200 ug/m³
 - Screening Level is 11 ug/m³
 - PCE:
 - Non-Detect – 6,800 ug/m³
 - Screening Level is 16 ug/m³

Range of Concentrations

■ Indoor Air

- TCE:

- Non-Detect – 6 ug/m³
- Screening Level is 1 ug/m³

- PCE:

- Non-Detect – 68 ug/m³
- Screening Level is 1 ug/m³

Buffer Zone Investigation

- Purpose:
 - Conduct Sub-Slab Soil Gas sampling at all homes on the perimeter of the ground water contamination area to confirm the boundary of the vapor contamination
- 32 Structures were targeted
- 17 Structures were sampled (53%)
- 59% had levels > screening level

Range of Concentrations in SSSG

- TCE:
 - Non-Detect – 110 ug/m³
 - Screening level is 11 ug/m³
- PCE:
 - Non-Detect – 410 ug/m³
 - Screening level is 16 ug/m³
- 10 Structures were added to the Vapor Mitigation Area

Ground Water Investigation

- March – August 2008 Shallow ground water monitoring event
 - 7 Permanent Wells
 - 22 Temporary Wells
- PCE Range: <0.1 - 25 ppb
 - Screening level 1ppb
- TCE Range: <0.01 – 12 ppb
 - Screening level 1ppb

Ground Water (cont.)

- Data received confirmed our initial assessment of the limits of shallow ground water contamination.
- While shallow ground water contamination remains low, levels in the soil gas remain elevated

Summary

- The data we have received confirms our initial recommendation that all residents within the PVMA should install Vapor Mitigation Systems.
- NJDEP will require DuPont to conduct a sub-slab soil gas test at any property within the PVMA that does not agree to installation of a system.

If my air results are clean, do I need a system?

- The greatest threat from vapor intrusion occurs in the winter time
- Indoor air collection was not designed to determine if there is a threat
- Sub-slab soil gas results are a better indicator of risk
- 95% of homes tested for sub-slab soil gas exceeded NJDEP criteria

Why should I install a system now?

■ System installation:

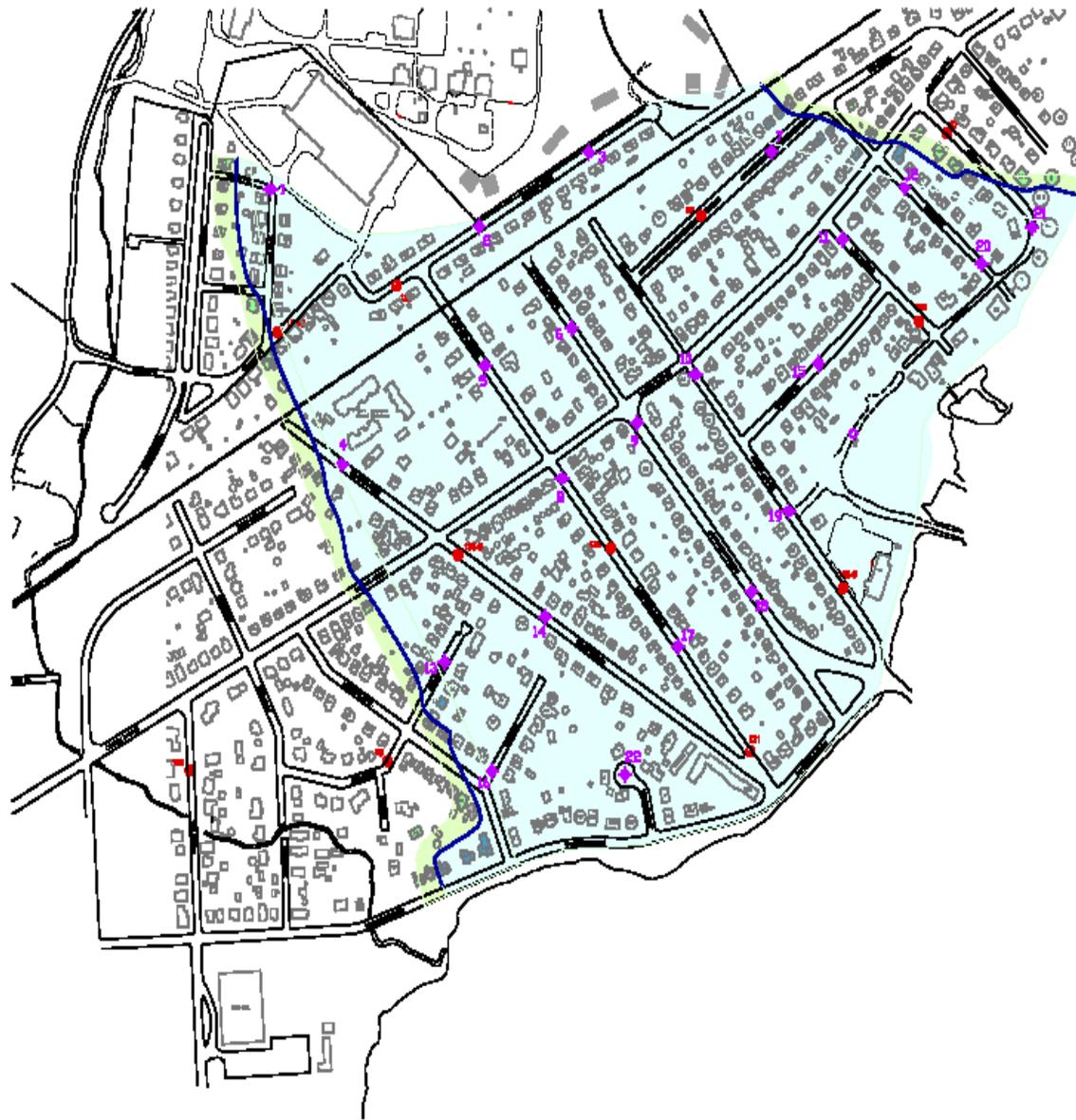
- Immediately eliminates risks from contaminated ground water and soil gas vapors
- Can be installed quickly
- Allows evaluation of technologies that may be used to address subsurface contamination

Vapor Mitigation Systems

- Are these the best systems to install?
- Will the system ever be able to be removed?

System Installation Summary

- 438 Structures Identified
- 102 Systems have been installed (23%)



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**POTENTIAL VAPOR MIGRATION
AND EXPANDED INVESTIGATION AREA**

DUPONT PUMP/OUT LINES WORKS
Princeton Lakes, New Jersey

Next Steps

- Continue investigation of Buffer-Zone area
- Continue installation of Vapor Mitigation Systems
- Sample Lakeside Middle School
- Additional DEP oversight of sampling

Entire Site Overview

- Plant Site
- Wanaque River Valley
- Pompton Lake Delta
- Ground Water

Entire Site Overview

■ Plant Site

- North Plant - RI underway, RIR anticipated 3rd Quarter 2009
- Mid Plant - RI underway, RIR anticipated 3rd Quarter 2009
- South Plant - RIR approved in March 2003
- Off Site (PVMA) - Vapor Mitigation System Installation on Schedule

■ Wanaque River Valley

- On-Site - RI underway, RIR anticipated 4th Quarter 2009
- Off-Site - Soil and Bank Sediment removal conducted
 - Wetland remediation completed in 2000
 - Reevaluation of soil and sediment anticipated in 2009

Entire Site (Cont.)

- Pompton Lake Delta
 - Uplands - RIWP submitted January 2009
 - Delta Sediments - RIR approved June 2008
 - Remedial Action Selection Report submitted November 2008
 - Remedial Action Work Plan due December 2009

- Ground Water - On-Site
 - Pump and Treat System Operation - Ongoing
 - Optimize System and evaluate treatment technology alternatives