

# Newark South Ground Water Plume National Priorities List Proposal (NPL)



U.S. Environmental Protection Agency,  
Region 3

**August 15, 2017**



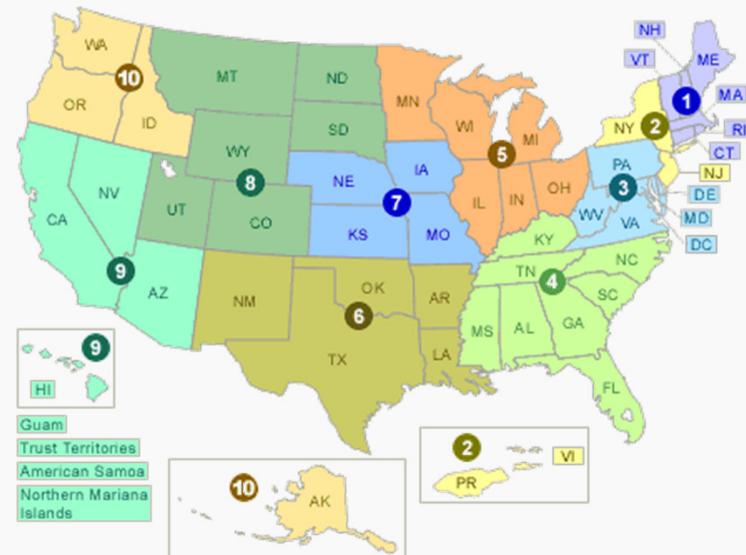
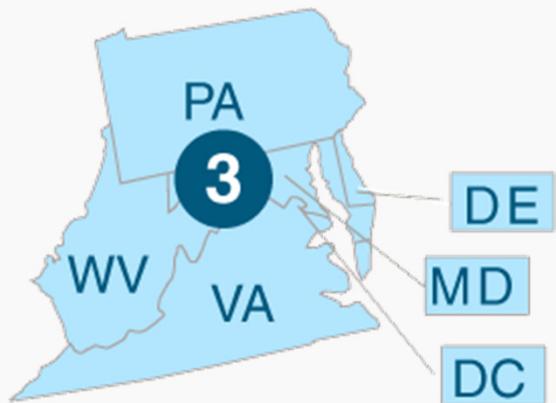
# Who Are We & What Is Our Mission

Lisa Denmark  
EPA Remedial Project Manager



# Who Are We?

- Environmental Protection Agency (EPA)
- Established December 2<sup>nd</sup>, 1970
- Region 3 of 10
- Location: 1650 Arch Street Philadelphia, PA
- Mission- Protect Human Health and Environment





# How EPA Began

- 50s/60s awareness of human impact on environment
- National Environmental Policy Act (NEPA)-1969
  - Established environmental policy and regulations
  - Protector of Earth, Air, Land, and Water
- Nixon proposed one organization for environmental issues





# EPA Goals

- Enforcement and Environmental Protection Standards
- Research effects and methods to prevent pollution
- Assist others through grants and technical assistance
- Policies to protect human health and the environment



# How to Achieve EPA Goals

- Variety of divisions established for protection
  - Air Protection
  - Land and Chemicals
  - Water Protection
  - Environmental Assessment and Innovation
  - Hazardous Site Cleanup



# Superfund



- 1970's Awareness of dangers grew
  - Love Canal in Niagra Falls, New York
  - Valley of the Drums in Brooks, Kentucky
- Government action and funding needed

- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
- Better known as “Superfund” for the initial trust fund
- Superfund Reauthorization Amendment Act of 1986 (SARA)





## Superfund

- Authorizes EPA to investigate and clean up contamination
- Historically, money came from petroleum and chemical industries
- Now money comes from appropriations or Potential Responsible Parties (PRPs)
- Goal: Clean site to ensure protectiveness for Human Health and Environment



# National Oil and Hazardous Substances Pollution Contingency Plan (NCP)

- 40 CFR Part 300
- Blueprint to clean up hazardous substance releases
- Develops a national response capability
- Includes work under Clean Water Act and Oil Pollution Act
- Includes Remedial, Removal and Emergency Response Efforts



# How We Got Here

Connor O'Loughlin  
EPA Site Assessment Manager



# Site Description

- Located southeast of Newark, DE
- West of Route 72, between Interstate 95 and Route 2
- Comprises two industrial parks and one commercial- retail center
- Encompasses approximately 50 parcels and 164 acres



\*Yellow Area: Boundary of Preliminary Assessment

\*Blue Area: Areas of Initial Extent of Potential Groundwater Contamination



## Site Description (cont.)

- The City of Newark has two onsite and four offsite impacted municipal wells in the site assessment and ongoing investigation.
- Primary contaminants of concern: volatile organic compounds (VOCs) including tetrachloroethene (PCE) and trichloroethene (TCE).



## Site Description (cont.)

- The City of Newark reported the presence of low levels of contaminants in the untreated/raw groundwater from several of its public supply wells since 2000.
- The public drinking water supplied by the City has long been treated to remove the contaminants from the untreated/raw water and continues to meet Federal and State Safe Drinking Water Act standards, as shared annually in its water quality reports.

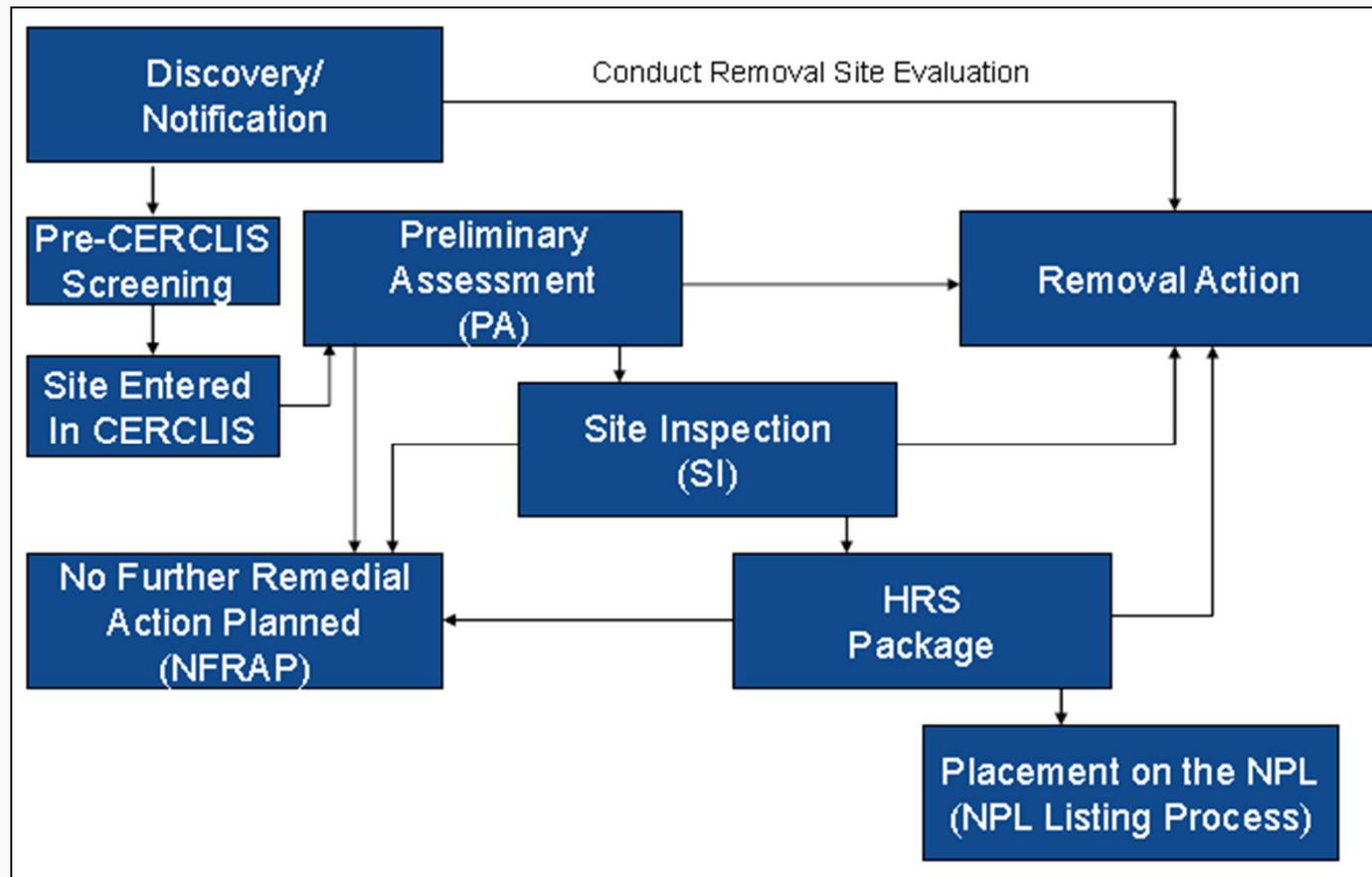


# Responsibility for Ongoing Operations

- DNREC has requested EPA's assistance in investigation of the Site.
- EPA will lead the next phase of the investigation and potential future cleanup efforts.
- Newark's groundwater is and will continue to be treated by the city to remove VOCs from the water supply, enabling the water to continue meeting both federal and the more stringent state safe drinking water standards.

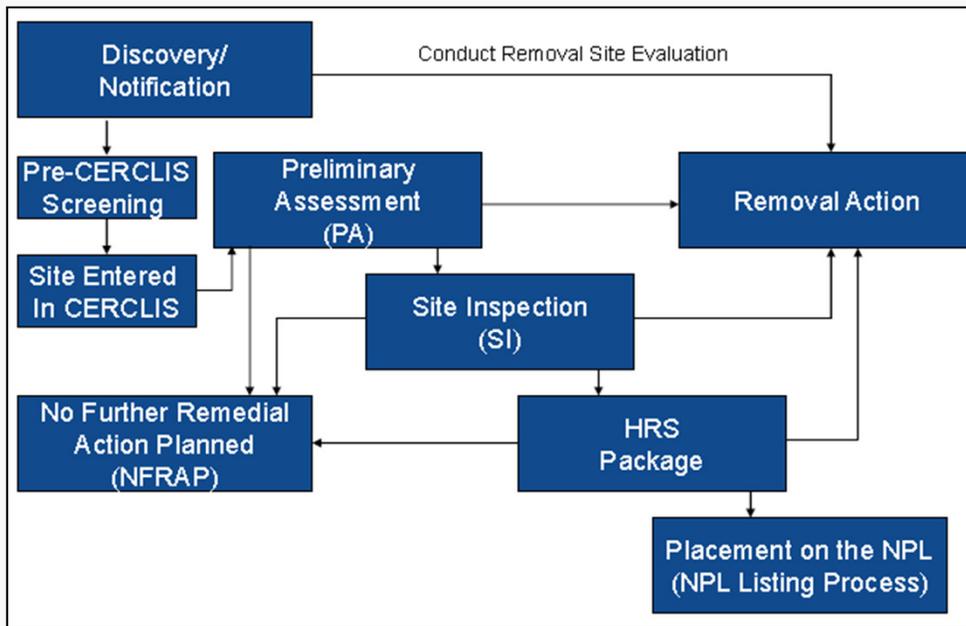


# Past Site Assessment Processes





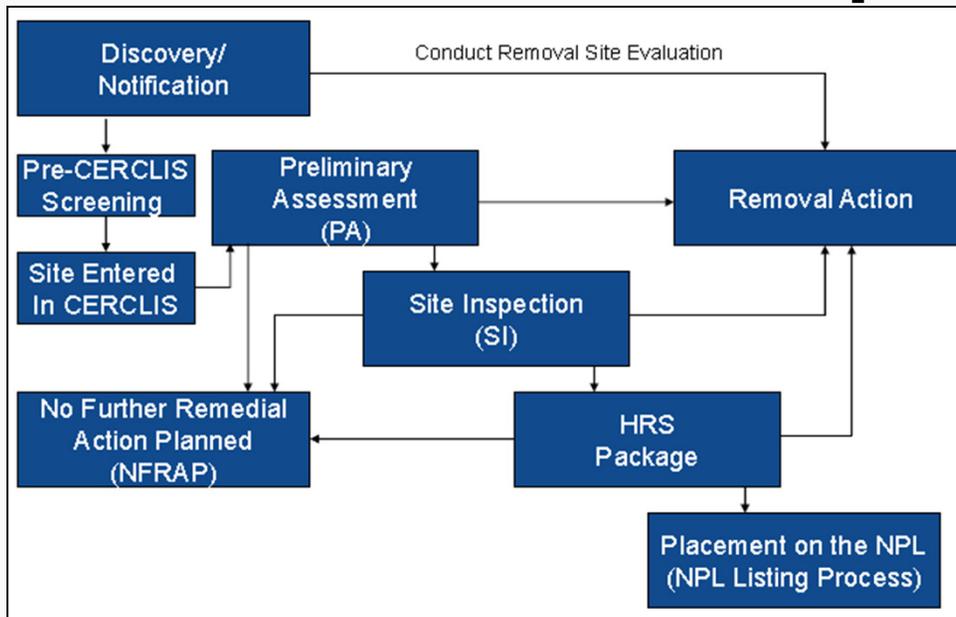
# Preliminary Assessment (PA)



2010 - EPA provides funding to DNREC to conduct a preliminary assessment (PA) to investigate the presence of possible contamination in the area and to identify potential sources of the contaminants.



# Site Inspection (SI)



2012 - EPA reviews DNREC's PA and agrees that a Site Investigation (SI) should be conducted.

2014- EPA funds the SI and DNREC completes the Site Inspection in 2015.



# 2017 Vapor Intrusion Study

- EPA installed monitoring wells.
- EPA tested for Vapor Intrusion (VI).
- Low levels of VOCs detected in some of the wells.
- **Study found these low levels of VOCs do not present a vapor intrusion concern at this time.**
- The EPA will retest the wells later this year.





## Contamination and Potential Sources - NPL Listing

- Based on groundwater and soil sampling, two groundwater plumes have been identified.
- Several potential light industrial, chemical, commercial sources are suspected, but the full extent of the groundwater plumes will be explored in future Remedial Investigations (RI).





# Hazard Ranking System (HRS) Factors and Process

- EPA uses a scoring system called the HRS to evaluate relative risks to human health and the environment posed by contaminated sites.
- This site scored above the threshold, meaning it is eligible for further investigation and long-term remedial action (cleanup) and is proposed to be placed on the National Priorities List (NPL or Superfund).



# Where We Go From Here

Jeff Thomas

EPA Remedial Project Manager



# Why list a site on the NPL?

- Federal Funding
- Increased Technical Resources
- DNREC Requested Assistance, with Governor John Carney's concurrence
- Identify Polluters



# Why list a site on the NPL?

- EPA as Lead Agency
- Requires Community Involvement
- Mandates Public Health Evaluation
  - Agency for Toxic Substances and Disease Registry (ATSDR)

# What is being listed?

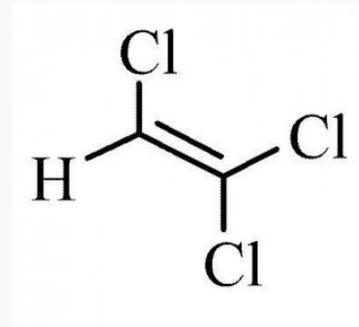
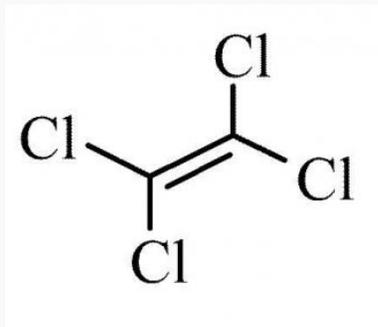


- The NPL listing is for the groundwater plume only.
- Residential properties above the plume are not included.



# What are the contaminants?

- Tetrachloroethylene  
[aka perchloroethylene – (PCE)]
- Trichloroethylene (TCE)





# Next Steps



- Investigate the nature and extent of contamination at the Site
- Develop cleanup options



# The Superfund Process

Investigation

1.

Site Discovery

2.

Site Evaluation

3.

NPL Listing

4.

Remedial Investigation

Planning

5.

Feasibility Study

6.

Proposed Plan

Decision

7.

Remedy Selection

Public Comment Opportunities





# What will you see while we investigate?



Drill Rigs  
&  
Water Sampling



# How Can I Get Involved?

Gina Soscia

EPA Community Involvement Coordinator





## How You Can Get Involved:

- Public Comment Period is Open until October 2, 2017.
- Comments can be submitted at [www.regulations.gov](http://www.regulations.gov).
  - Enter Docket #EPA-HQ-OLEM-2017-0073
- Comment directly via the website below:  
<https://www.epa.gov/superfund/current-npl-updates-new-proposed-npl-sites-and-new-npl-sites>.
- Comments can also be submitted by mail.
- Docket is also available for viewing at Newark Free Library.



## How You Can Get Involved:

U.S. Environmental Protection Agency  
EPA Docket Center  
National Priorities List, Notice of Proposed  
Rulemaking:  
Docket # EPA-HQ-OLEM-2017-0073, Mail  
Code 28221T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460



## How You Can Get Involved:

- Community Involvement Plan (CIP)
- Technical Assistance Grant (TAG) Program
- Technical Assistance Services for Communities (TASC) Program
- Superfund Community Advisory Group (CAG)



## Contact us!

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