



# Public Informational Meeting on the Former Sparrows Point Steel Mill Environmental Cleanup





## Presentation Agenda

- Site Investigation Status MDE
- RCRA Corrective Action Process EPA
- Sparrows Point Groundwater TPA
- Path to a Groundwater Remedy EPA





# Site Investigation Status

MDE update



#### **Site Investigation Status August 2020**







#### **Phase II Work Plans Submitted Since September 2019**



The Agencies have received the Phase II Work Plans with proposed soil, groundwater and soil gas sampling points based on the location of potential releases from historical processes conducted at that parcel and sufficient additional sampling locations to provide coverage of the entire parcel. The Agencies have approved these work plans.

Phase II Work Plans Submitted And Approved:

Area A Parcels: A18

Area B Parcels:
B9 (Former Penwood Power Plant)
B11 (Coke Oven Area)
B20 (Waste Water Treatment Plant)
B24





#### **Phase II Reports Submitted Since September 2019**



The Agencies have reviewed the Phase II Work Plans, conducted site visits and requested revisions, if necessary. Upon approval of the Phase II Work Plan, field work can begin at the Parcel. Once the field work is completed and the data is validated the Phase II Report summarizing the sample results and initial risk screening is submitted to the Agencies for review.

#### **Area A Parcels:**

A2 (Approved)

A4 (Approved)

A6 (Approved)

A5, A9, A13 (Grey's Rail yard)

A9 will require additional characterization

A11, Rev 1 (Pending response to comments)

#### **Area B Parcels:**

B18 (Pending response to comments)

**B21** 

B23 (Pending response to comments)



#### **Response and Development Work Plans**



#### Received and Approved for Parcels:

A3-1 Addendum (new building addition)

A8-1 Addendum (Gotham Greens)

B1-1 Addendum (Volkswagen)

B2-1 Addendum (BGE Substation)

B2-3

B5-1 Addendum (A-Yard)

B6-2 (Royal Farms Retail Area)

B6-3

Submitted and Reviewed Pending Revision:

A8-2

A10-1

The evaluation of risks and development of remedial measures as part of the redevelopment process relies on the information collected from site-wide studies conducted over 20 years and current soil and groundwater samples collected under the ACO procedure for Parcels or Portions of Parcels.

This process ensures that redevelopment occurs in a way that protects human health and the environment.

Any changes to an approved RDWP must be submitted in a RDWP Addendum to be reviewed and approved by the Department.



# Response and Development Completion Reports B4-1, B19-1 and B22-Phase 1









#### RCRA Corrective Action Process

- The Elements of the CA Process:
  - Site Assessment/Characterization
  - Remedy Evaluations
  - Remedy Decision
  - Remedy Implementation
  - Interim Actions
- A flexible program





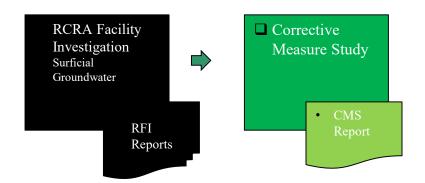
#### Site Characterization







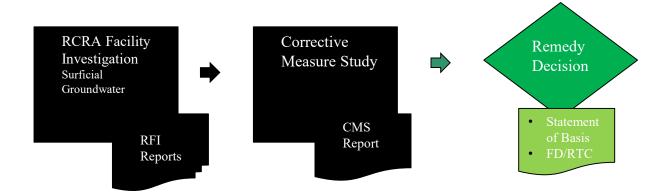
## Remedy Evaluation







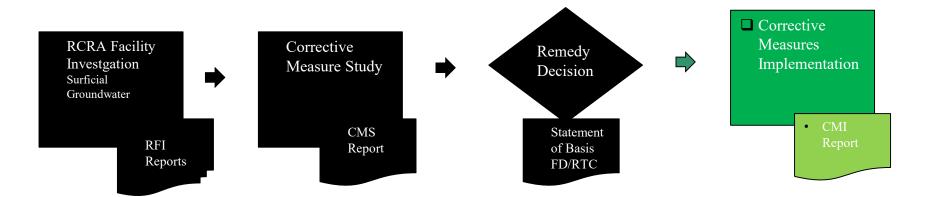
# Remedy Decision







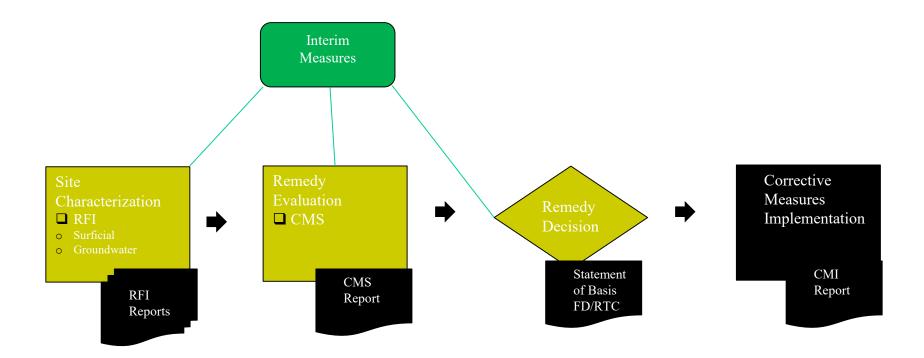
## Remedy Implementation







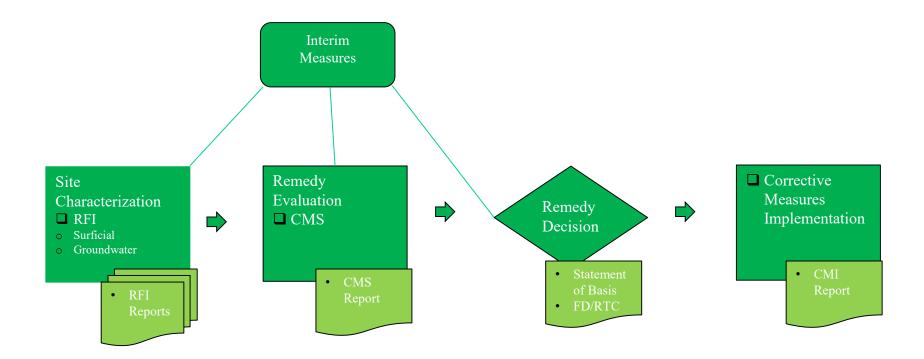
#### Interim Actions







#### The Process







## Long Term Care

- Long-Term Protection
  - Protects integrity of remedy
  - Prevents/Limits exposure
- Institutional Controls





# RCRA Corrective Action Process at Sparrows Point

- Remedy decisions for individual parcels
- Groundwater interim measures for:
  - Coke Oven Area
  - Rod & Wire Mill
  - NAPL anywhere on site
- Remedy decision for groundwater





## PLACEHOLDER SLIDE for: Sparrows Point Groundwater (TPA)

- Overview of Sparrows Point
- History of Groundwater Use
- Site-wide Groundwater Quality
- Groundwater Quality at Specific Areas
- Current Interim Measures





## Path to a Groundwater Remedy

- Cleanup Objectives
  - Coke Point Area
  - Rod & Wire Mill
  - Site-wide Groundwater
- Remedy Selection & Implementation





## Cleanup Objectives

- Also called Corrective Action Objectives
- What, where, when
  - Cleanup levels or performance measures
  - Location where cleanup levels apply
  - Time frame to achieve (short-term, intermediate, final cleanup goals)





## Cleanup Levels

- Based on:
  - Who (or what) exposed
  - Type and duration of exposure
  - Chemicals in groundwater
  - Properties of the chemicals



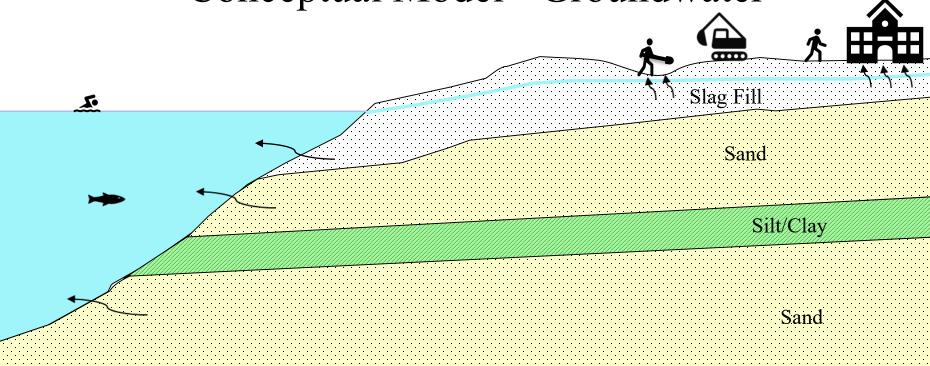


# How do we develop cleanup objectives?





### Conceptual Model - Groundwater

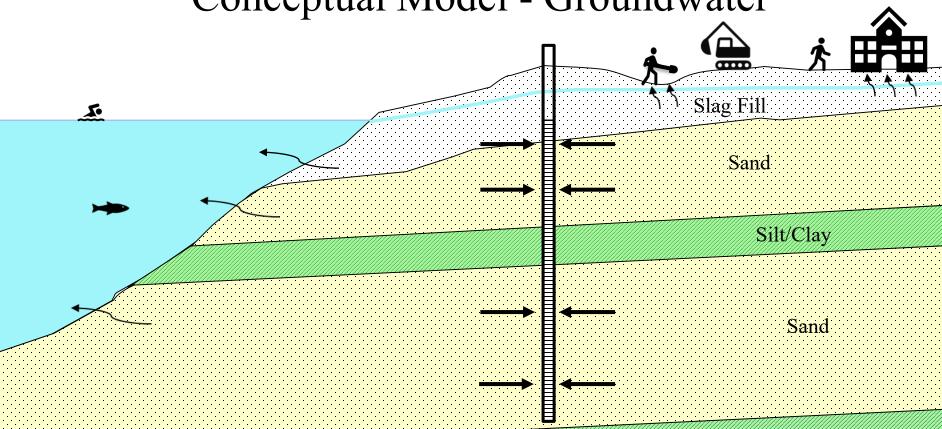


Silt/Clay





Conceptual Model - Groundwater

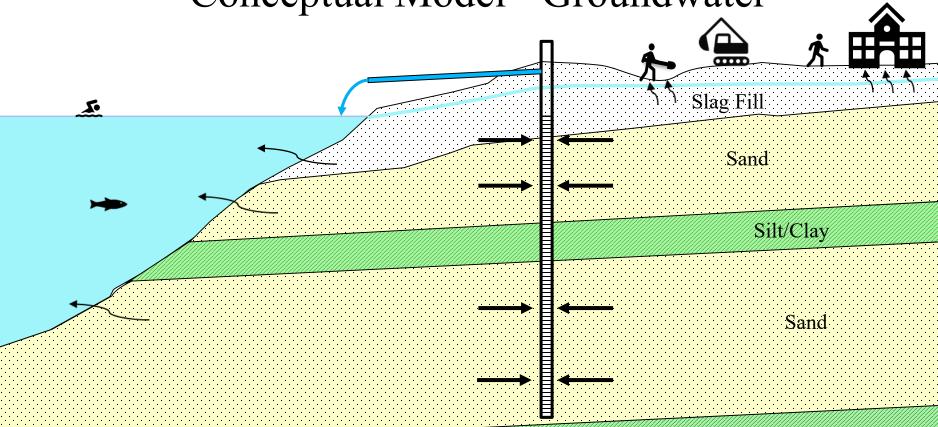


Silt/Clay





### Conceptual Model - Groundwater



Silt/Clay





# Groundwater Remedy Components (institutional & engineering control examples)

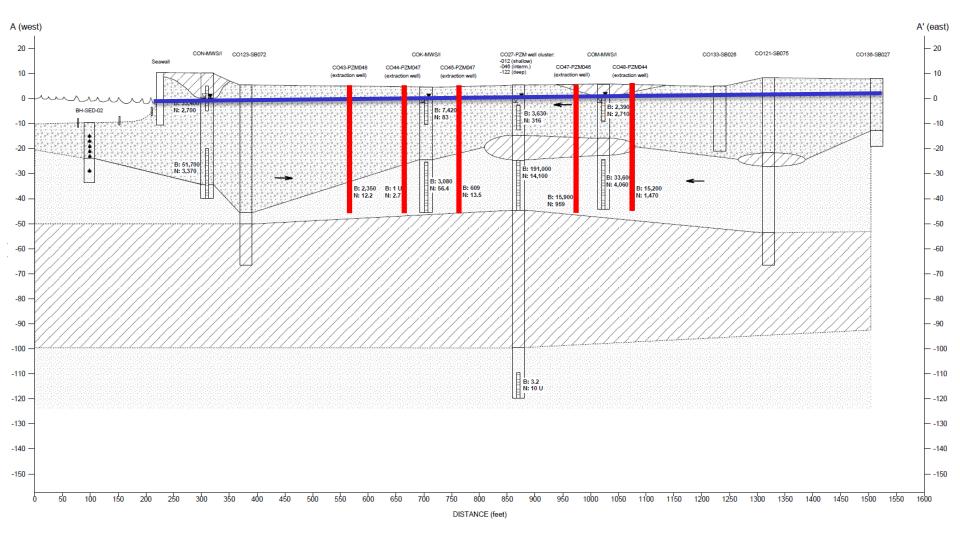
- Control use
- Prevent exposure
- Manage exposure
- Control groundwater migration & discharge

- Control/mitigate sources
- Groundwater treatment
- Natural attenuation
- Long-term monitoring





#### Coke Oven Area – Interim Measure Cell 2







## Groundwater Remedy Selection

- Currently have Groundwater CMS work plans for:
  - Rod & Wire Mill
  - Coke Point
- Currently developing CMS work plan for site-wide groundwater
- Once approved, CMS conducted & report issued
- EPA prepares Statement of Basis
- Public Comment Period
- EPA issues Final Decision and Response to Comments





## Remedy Selection Criteria

#### **Threshold Criteria**

- Protect human health & environment
- Achieve media cleanup objectives
- Control sources of release

#### **Balancing Criteria**

- Long-term reliability and effectiveness
- Reduction of toxicity, mobility, or volume
- Short-term effectiveness
- Implementability
- Cost
- Community acceptance
- State acceptance





## Important Meeting Notes

#### **Ground Rules**

- Mute your lines during presentations, no exception
- One speaker at a time
- Be brief and meaningful when voicing your opinion
- Allow every voice to be heard
- Listen for understanding- inquire (ask) before you advocate (persuade)
- Critique ideas, not people
- Seek common grounds and understanding

#### **Q&A Process**

- Write your questions in the 'Chat' box
- If you prefer to speak, indicate in the "Chat" box
- For telephone participants, use \* 6 to unmute during Q&A
- Questions will be taken in the following order:
  - a. Questions in 'Chat' box
  - b. Identified speakers in 'Chat' box
  - c. Telephone participants





### Thank You