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

September 10, 2020
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
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
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

- RCRA Facility Investigation
  - Surficial
  - Groundwater
- RFI Reports
Remedy Evaluation

- RCRA Facility Investigation
  - Surficial
  - Groundwater

- RFI Reports

- Corrective Measure Study
  - CMS Report
Remedy Decision

- RCRA Facility Investigation
- Surficial Groundwater
  - RFI Reports

- Corrective Measure Study
  - CMS Report

- Remedy Decision
  - Statement of Basis
  - FD/RTC
Remedy Implementation

- RCRA Facility Investigation
  - Surficial
  - Groundwater
  - RFI Reports

- Corrective Measure Study
  - CMS Report

- Remedy Decision
  - Statement of Basis
  - FD/RTC

- Corrective Measures Implementation
  - CMI Report
Interim Actions

- Site Characterization
  - RFI
  - Surficial
  - Groundwater

- Remedy Evaluation
  - CMS

- Remedy Decision
  - Statement of Basis
  - FD/RTC

- Corrective Measures Implementation

- CMS Report

- RFI Reports

- CMI Report
The Process

Site Characterization
- RFI
  - Surficial
  - Groundwater

Remedy Evaluation
- CMS

Interim Measures

Remedy Decision
- Statement of Basis
- FD/RTC

Corrective Measures Implementation
- CMI Report

• RFI Reports
• CMS Report
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
Conceptual Model - Groundwater
Conceptual Model - Groundwater

- Slag Fill
- Sand
- Silt/Clay
- Sand
- Silt/Clay

Diagram showing layers of soil with groundwater flow directions.
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
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