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

November 13, 2014
Site History

• First furnace at Sparrows Point built in 1887
• Bethlehem Steel Corporation purchased facility in 1916
• Produced cold rolled steel, galvanized sheets, tin mill products and steel plate
• Steel making from blast furnace and basic oxygen furnace (BOF) ceased in 2012
• Demolition of the Former Mill Ongoing
Sparrows Point Steel Mill Historical Conditions
Ownership History:

- 2001 - Bethlehem Steel Corp. declares bankruptcy
- 2003 - International Steel Corp. acquires steel mill
- 2005 - Mittal acquires International Steel Corp.
- 2006 - Mittal merges with Arcelor
- 2008 - Severstal N.A. acquires steel mill
- 2011 - RG Steel Sparrows Point LLC (RGGSP) acquires steel mill
- 2012 – RGGSP files for bankruptcy, steel making operations cease
- 2012 - Joint venture (ELT, Inc., CDC, Inc., HRE Sparrows Point, LLC, & Sparrows Point LLC) acquires facility in September
- 2014 - Sparrows Point Terminal, LLC acquires facility
1997 Consent Decree

Signed by EPA, MDE, Department of Justice (DOJ) and Bethlehem Steel Corporation and included requirements for:

- **Site Wide Investigation (RCRA Assessment)**
  - Human Health Risk Assessment
  - Ecological Risk Assessment (on and off-site)
  - Groundwater Assessment

- **Interim Measures implemented**
  - Rod and Wire Mill
  - Cells 1-6 Coke Oven Area

- **Corrective Measures Study (CMS)**

- **Waste Minimization**

- **Compliance Requirements for Air Emissions**

- **Compliance Requirements for Operation and Closure of Solid Waste Landfills**
Amended 1997 Consent Decree

Signed by Sparrows Point LLC, MDE, DOJ and EPA
Approved by Judge Motz on July 28, 2014.

• Acknowledges Site Wide Investigation work already completed.
• Removes requirement to comply with Waste Minimization Plan and Visible Emissions from Basic Oxygen Furnace and Kish Reduction.
• Notes that under the 2012 sale Sparrows Point LLC did not assume any obligation to conduct the offshore investigation or prepare corrective measures study for off-shore.

• All other provisions of the 1997 Consent Decree remain in effect.
Work under the 1997 Consent Decree ends with the approval of the Corrective Measures Study and does not include provisions for installation, operation and monitoring of cleanup remedies or financial assurance to ensure work is completed.

What framework moving forward will govern site activities required to complete the necessary cleanup plans and achieve the goal of a clean and redeveloped site?
Environmental Work On the Entire Site For MDE and EPA

MDE will assume primary responsibility for overseeing implementation of the onshore work in consultation and cooperation with EPA.

EPA will assume primary responsibility for implementation of the offshore work in consultation and cooperation with MDE.

Prospective Purchaser Agreement (PPA)  EPA, DOJ and SPT

Administrative Consent Order (ACO)  MDE and SPT

Amended 1997 Consent Decree (CD)  MDE, EPA, DOJ and SPL
Removal of Land Under 1997 Consent Decree

- September 12, 2014
  MDE and EPA approve request to remove 2,200 acres from 1997 Consent Decree because its requirements have been achieved

- Entire 3,100 acres remain subject to final federal and state regulatory closure.
Administrative Consent Order (ACO)

Voluntarily entered into between the Maryland Department of the Environment and Sparrows Point Terminal, LLC

Purpose of Agreement is to protect public health and the environment by providing a framework for prompt and effective remedial measures to address treat, control prevent or mitigate the presence and/or release of contaminants of concern at the facility.

Effective Date September 18, 2014
Responsibility for Interim Remedial Measures and Other Ongoing Environmental Work

Completion of the Site-wide Cleanup
• Can use Voluntary Cleanup Program process to assess and remediate the entire site but per agreement in ACO, SPT cannot withdraw from the program.
• Allows environmental work to satisfy both MDE and EPA requirements
• Allows portions of the property to obtain regulatory signoff to allow clean or remediated parcels to be redeveloped
• Covers undiscovered contamination

Provision of Financial Assurance
• Upfront financial assurance of $48 million dollars-with $43 million in trust fund and $5 million letter of credit has been funded.
• Mandatory six month review to ensure sufficient funds till the final regulatory signoff.
• MDE can take over and use funds if work is not completed.

Oversight Costs-$100,000 yearly for MDE staff time

Stipulated Penalties if work is not completed according to schedule
Clean up

Calculated Based on Site Conceptual Cleanup Plan

Site Conceptual Cleanup Plan
Draft

Former RG Steel Facility

Prepared for:

Sparrows Point LLC
1430 Sparrows Point Boulevard
Sparrows Point Maryland 21219

May 22, 2014

5 CONCEPTUAL CLEANUP AND RESPONSE PLAN ........................................ 5-1
5.1 General Approach .................................................................................. 5-1
5.2 Closure Approach ................................................................................ 5-1
5.3 Area-Specific Conceptual Cleanup Actions ........................................ 5-2
   5.3.1 Special Study Areas ..................................................................... 5-3
   5.3.1.1 Coke Point Area .................................................................... 5-3
   5.3.1.2 Tin Mill Canal/Finishing Mills Area ..................................... 5-8
   5.3.1.3 Rod and Wire Mill Area ....................................................... 5-9
   5.3.1.4 Greys Landfill Area (County Lands) .................................. 5-12
   5.3.1.5 Humphrey Impoundment Area ......................................... 5-13
   5.3.1.6 Site Wide Groundwater .................................................... 5-14
5.3.2 State Administrative Order Area .................................................... 5-14

6 COMPLIANCE PLAN FOR SOLID WASTE LANDFILLS .................... 6-1
6.1 Compliance Actions .......................................................................... 6-1
6.2 Coke Point Landfill ........................................................................... 6-1
6.3 Greys Landfill .................................................................................... 6-2
MDE, EPA and US Army Corp of Engineers (USACE) performed an independent cost estimate for proposed cleanup remedies.

USACE estimates included construction costs, operation and maintenance costs, monitoring costs, staff time, decommissioning costs and contingency planning.

Both Cost Estimates provided by USACE and SPT/SPLLC were similar.

ACO requires additional funding if actual costs exceed estimates.
The Environmental Work Processes detailed in the PPA and ACO will be applied at the entire site; can be applied to individual parcels to facilitate redevelopment.
Environmental Work Process

Assess Site Conditions → Evaluate Risk Based on Industrial Land Use

Risk Identified

Propose Cleanup Plan → Public Participation

No Risk

Regulatory Sign Off EPA & MDE → Implement Clean up Plan → Redevelop
Sampling Data for Risk Assessment

- Inhalation
- Ingestion of soil
- Dermal contact

- Inhalation of volatiles
- Ingestion of water
- Dermal contact

- Fish Consumption

- Air Transport

- Ingestion
- Inhalation
- Dermal contact

- Runoff

- Sediments

- Soils

- Groundwater discharge

- Vapor Intrusion

- Water Table

- Groundwater Transport

- Leaching
Public Participation Meeting Notice Information

- Sign at Property
- MDE Website - Meeting Calendar
- MDE Sparrows Point Website
- Notice in Local Paper
MDE has determined that Sparrows Point Terminal, LLC is an inculpable person (no prior ownership history in the site as defined in the VCP statues) therefore is eligible for participation in the Voluntary Cleanup Program.

- IP Letter issued to SPT on September 11, 2014
- SPT VCP Application for the entire property submitted on June 26, 2014 for 3100 Acres
- SPT VCP Application for Area A submitted on September 12, 2014 for 789 Acres

VCP Application for Industrial Land Use (Tier 3B)
Included Phase I Environmental Site Assessment dated May 19, 2014 and draft Site Conceptual Cleanup Plan dated May 22, 2014
Development Area A - Exhibit A
General Motors Site Before:
Joint MDE/EPA Cleanup Sites

General Motors Site After:
Prospective Purchaser Agreement (PPA)

- Signed by EPA, DOJ and Sparrows Point Terminal, LLC in September 2014.
- After 30 day public comment period and EPA review of public comments, EPA will determine whether to finalize.
- SPT assumes responsibility for Interim measures (along with SPLLC under the Consent Decree)
- Phase II investigation conducted as necessary.
- EPA’s proposed determination for a parcel (cleanup work or no further action, as appropriate) set forth in a Statement of Basis made available to the public for review and comment.
- Corrective Measures Implementation (CMI) to complete work
- $3,000,000 to EPA to conduct offshore investigation, and remediation as necessary
- $100,000 initially and $50,000 annually thereafter to EPA for oversight costs related to offshore work.
Within 60 days of EPA approval of the PPA, Sparrows Point Terminal, LLC is required to:

Submit a Phase II Investigation plan for Area A and the Coke Oven Area and schedule for Area B

Timeframes for submittal to Agencies of other documents outlined in PPA and ACO
Interim Measures

Interim Measures are included in the 1997 Consent Decree to address appropriate areas prior to developing a final remedy in the RCRA process.

Interim Measures technology may be incorporated into the final remedy selected.
Rod and Wire Mill Interim Measure

Semi-annual groundwater elevation monitoring
Semi-annual sampling and analysis of groundwater

Maintaining institutional controls at the former in situ leaching area

Groundwater treatment system (cadmium and zinc), monitoring, operation and maintenance,
From 1987 to the end of 2013 the groundwater pumping system has removed:

10,529 lbs of cadmium and

334,806 lbs of zinc
Cove Over Interim Measures Air and Water Treatment Equipment
Coke Oven Interim Measures Progress

- **Cell 1** - Shallow groundwater treatment with Air Sparging and soil vapor extraction.
  
  Cell 1 has destroyed approximately 12,422 pounds of recovered hydrocarbons

- **Cell 2** - Groundwater Extraction Intermediate Aquifer and Air Sparging and Soil Vapor Extraction Shallow Groundwater
  
  Pumping began September 2014.

- **Cell 3** - Shallow Groundwater Treatment with Air Sparging and soil vapor extraction.
  
  Cell 3 has destroyed approximately 1,428.6 pounds of recovered hydrocarbons

- **Cell 4/5** - Shallow Groundwater pumping replaces bio-remediation augmentation to recover naphthalene.
  
  Pumping began September 2014

- **Cell 6** - Recovery of carrier oil (LNAPL) from coke oven area.
  
  Cell 6 has recovered 82,156 pounds of hydrocarbons or 11,213 gallons as of September 30, 2014.
Scope of Offshore Investigation

Sparrows Point Offshore Investigation

- Phase 1 Northwest Shoreline
- Phase 2 Southeast Shoreline

0 2,000 4,000 6,000 8,000 10,000 Feet
First Phase Off-Shore Sampling
Sediment Sampling

Photo credit EA Engineering
The PPA and ACO provide the financial and legal framework to bind the new owner to complete the Site Investigation and to develop and implement a Master Cleanup plan to address the entire site and redevelop portions of the site as they are cleaned up.
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Visit the MDE Website!
http://www.mde.maryland.gov
THANK YOU!

Northpoint-Edgemere Volunteer Fire Department
Questions?