BISHOP TUBE HSCA SITE

East Whiteland Township
Information Session

June 7, 2017
• History

• DEP’s Investigation

• Prospective Purchaser Agreement (PPA) & Amendments

• DEP’s Response Action
- Consent Order and Agreement (CO&A)
- Johnson Matthey Inc/Whittaker Corp (JM/W) Investigation Activities
- Constitution Drive Partners (CDP)’s Proposed Cleanup Activities
- DEP’s Next Steps
The Property
History

• 1950s: J. Bishop
  – Precious Metals
  – Tube Milling and Manufacturing

• 1960s - 1990s: Matthey Bishop, Whittaker Corp., Christiana Metals, Alloy Steel & Marcegaglia, USA
  – Stainless Steel Tubing
• Early 1970s: Discovered releases to Little Valley Creek from waste acid (pickle liquor) lagoon

• 1980s: Groundwater contamination discovered (fluoride initially, later chlorinated degreasers)

• 1980s - 1990s: Actions by Christiana Metals to study the contamination

• 1999: Site abandoned by Christiana Metals and HSCA Investigation initiated
DEP’s Investigation

- 1999: Hazardous Sites Cleanup Program
  - Soil
  - Groundwater (shallow & deep)
  - Surface water (Little Valley Creek)
  - Exposure pathways (i.e., private wells)
Figure 31: 2015 Remedial Investigation Report
DEP’s Investigation - Groundwater

2000 - 2008: Findings

• Onsite groundwater contaminated by TCE and other chlorinated solvents in deep and shallow aquifers
• Evidence of free product
• Onsite stream discharge of contaminated groundwater.
• Migration off-site confirmed (bedrock geology increases complexity)
• Full extent of the contamination was not known
2007: East Whiteland’s Environmental Advisory Committee (EAC) petitioned the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct “public health assessment activities” for the community.

2008: ATSDR completed the Health Consultation in cooperation with the Chester County Health Department, PA’s Department of Health, and DEP.

- the report identified off-site data gaps.

2016: the Health Consultation was updated.
A PPA is a common agreement between DEP and parties that want to purchase a contaminated property and remediate it for reuse and limit their liability associated with the existing contamination.

Prospective Purchaser Agreement (PPA)

• In the PPA, CDP agreed to

  (1) assess and clean up soil contamination to a nonresidential Act 2 Standard;

  (2) not to exacerbate any existing contamination; and

  (3) to provide access and right of entry to the DEP for potential future remediation of groundwater contamination
Prospective Purchaser Agreement (PPA)

- January 2007 amendment: defined responsibilities associated with the Air Sparging & Soil Vapor Extraction remedial system (AS/SVE System)

CDP’s responsibilities
- Design the system
- Provide the mechanical equipment for the system
- Demonstrate the performance of the system

DEP’s responsibilities
- Install the system
- Operate the system after the performance demonstration
A system that involves pumping air into ground to help flush (bubble) the contaminants up through collection pipes (suction).
DEP’s Response Action

• September 2007: DEP selected a response action that involved the treatment of groundwater within the former Plant #8 Source Area.

• October 2007: The installation of the system was completed.

• February to April 2008: CDP undertook the system performance demonstrations.

**The system failed to meet some of the flow rate performance requirements.**
Prospective Purchaser Agreement

• June 2010: Second Amendment to the PPA. CDP agreed to:
  – repair and run the AS/SVE system for a seventy-two (72) hour period
  – after which it would relinquish control to the DEP
  – pay the DEP an amount of $30,000

*CDP had fulfilled remedial obligations
Consent Order & Agreement

• August 2008: DEP entered into a Consent Order and Agreement (CO&A) with Johnson Matthey Inc.

• August 2009: the CO&A was amended to include Whittaker Corp.
Johnson Matthey Inc. and Whittaker Corp (JM/W) agreed to:

1) Investigate groundwater contamination contained within the bedrock and the overburden
2) Investigate the vapor intrusion pathway
3) Investigate the groundwater to surface water pathway
4) Perform of a Risk Assessment
5) Perform a Feasibility Study
JM/W Activities

JM/W has submitted the following for DEP approval:

• February 2009 - Remedial Investigation (RI) Work Plan
• December 2010 - RI Report
• July 2011 - Supplemental RI Work Plan
• December 2012 - RI Conceptual Work Plan
  - Treatability Study (TS) Conceptual Work Plan
• March 2013 - RI Workplan Addendum

**Note: this is not a comprehensive list of all of the documents that JM/W has submitted**
JM/W Activities

JM/W documents continued:

• September 2014 - TS Work Plan
• August 2015 - RI Report
• October 2015 - TS Report
• July 2016 - Feasibility Study (FS) Work Plan
• December 2016 - FS Work Plan Addendum
• March 2017 - Preliminary FS Screening Memorandum

**Note: this is not a comprehensive list of all of the documents that JM/W has submitted**
Approximate sampling locations

(Modified) Figure 8: 2015 Remedial Investigation Report
**JM/W Activities - Groundwater**

**Estimated Area of Study**

The Property
• Delineate the full downgradient extent of groundwater contamination
• Complete the Risk Assessment
  – Vapor Intrusion (VI) investigation activities
  – Update the Surface Water Risk Assessment information
    • Additional sampling
    • Toxicology information
• 2016: Letter of Intent to apply for an Industrial Sites Reuse (ISRP) Grant submitted by Chester County Economic Development Council (CCEDC) to Department of Community and Economic Development (DCED).

• CDP plans to partner with the CCEDC to remediate three soil hotspots by excavating the soil and transporting it off-site.
• DEP’s role in the ISRP grant process:
  – Help determine eligibility of a Site
  – Review the scope of work (SOW) to determine if the proposed activities will meet requirements of our Land Recycling Program (Act 2)
  – If the grant is awarded by DCED
    • CDP will perform the work under CCEDC’s direction
    • DEP will provide oversight

*DEP has not yet approved a SOW.*
• After review and approval of JM/W’s RI and FS: DEP will propose a comprehensive response action to fully address the contamination (soil, ground & surface water).

• DEP will open an Administrative Record for a 90 day public comment period. A Public Hearing will be held during the comment period.

• After the comment period closes DEP will respond to public comments and select and implement the remedy.
Key Points

• Any local land development issues, such as zoning or steep slope variances, are exclusively under the authority of East Whiteland Township.

• DEP’s role is to review cleanup plans/reports related to the proposed use of the property.

• Full remediation means that the cleanup will address soil, groundwater, and surface water contamination.
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