

Phase 1B Bank Management Areas Pre-Remedial Design Bank Soil Investigation

Former DuPont Waynesboro Site, Virginia
Area of Concern (AOC) 4



July 26, 2016



AECOM

Agenda

- Background
- Objectives
- Methodology
- Results
- Path Forward



Background

- Phase 1B BMAs include city and private ownership
- Mixture of Primary and Secondary BMAs
- Phase 1A and 1B BMAs, account for ~90% of Hg bank loading from RRM 0-2

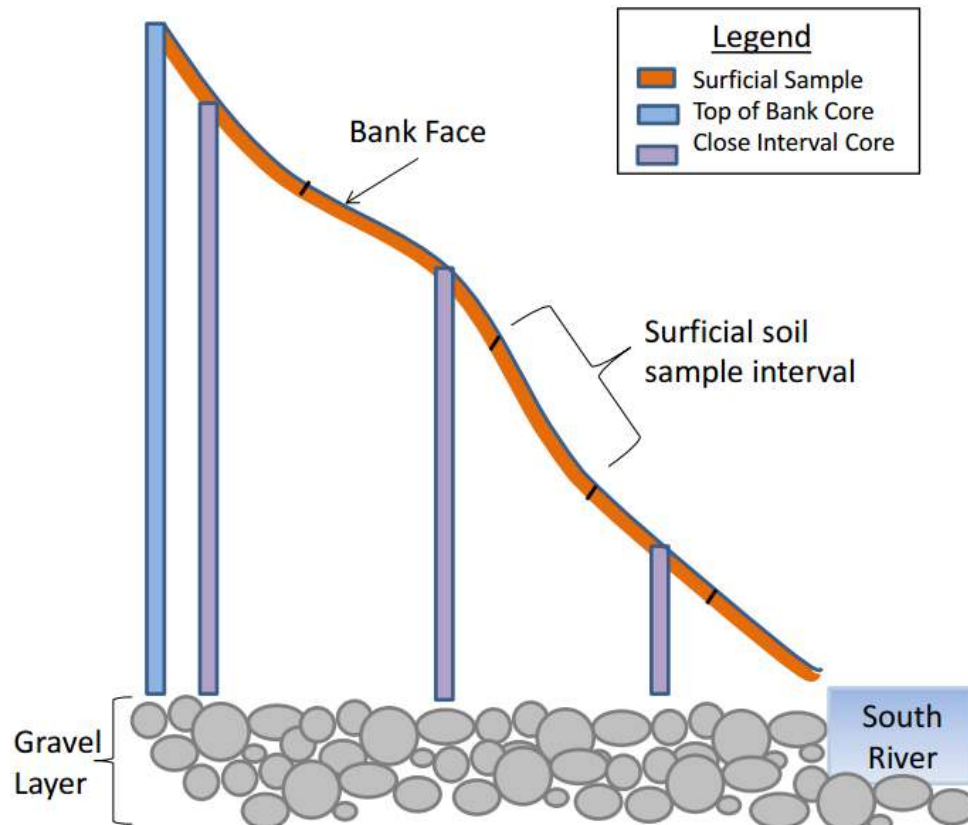


Objectives



- Provide additional data to refine loading estimates to inform Phase 1B BMA remedial designs
- Horizontal and vertical delineation within potential removal areas
- Close data gaps at Secondary BMAs

Methodology

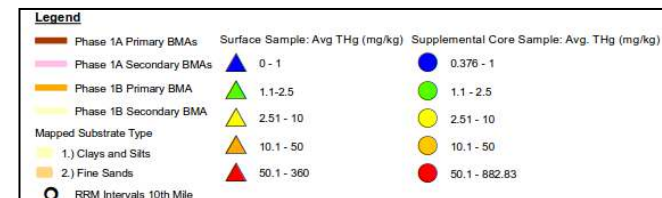


- Surficial soil transects
- Top of bank cores
- Close interval cores
- THg analysis by EPA Method 7471A
- *Coordination with JMU for field testing of XRF technology*

Sample Results – Reach 1



- Elevated concentrations w/in removal areas
- LBH-08 to LBH-10
 - Max THg 1,440-1,520 mg/kg
 - Additional close-interval sampling to delineate downstream end of removal area
- RBH 01
 - Max THg 151 mg/kg



Sample Results – Reach 2

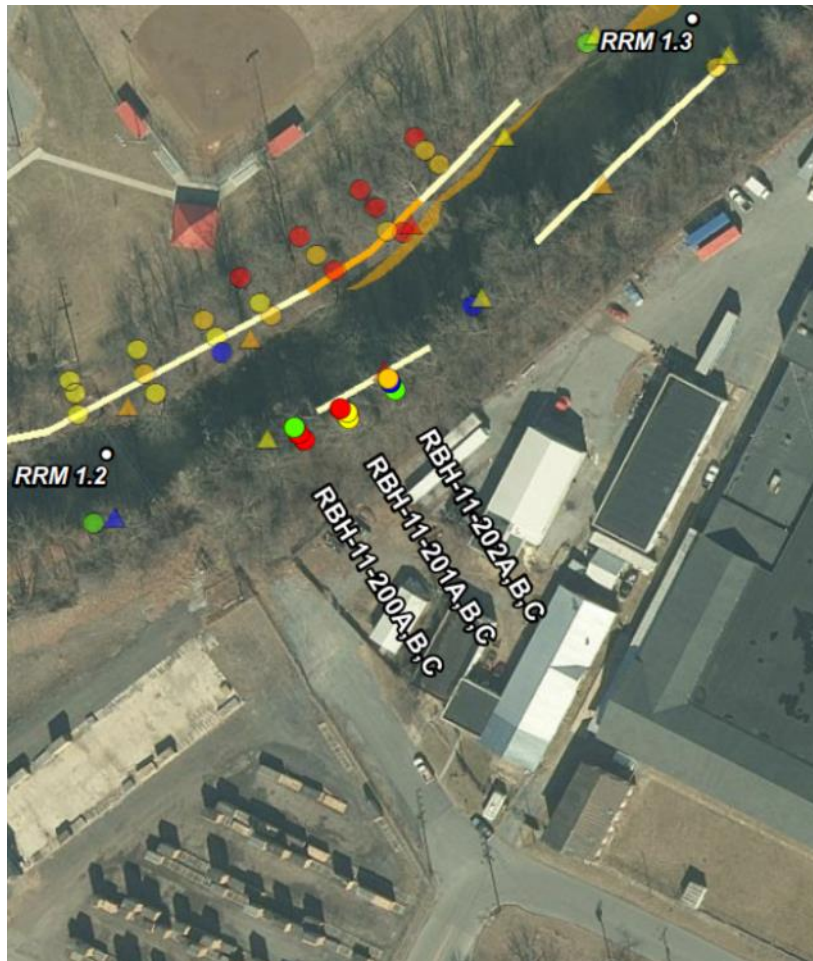


- Generally lower concentrations
- Unique profile at RBH07-201

Transect	Depth Interval (feet)	THg (mg/kg)
RBH07-201	0-1	0.76
	1-2	0.32
	2-3	22.5
	3-4	21.3
	4-5	151
	5-6	845
	6-6.5	78.1

Legend		
Phase 1A Primary BMAs	Surface Sample: Avg THg (mg/kg)	Supplemental Core Sample: Avg. THg (mg/kg)
Phase 1A Secondary BMAs	0 - 1	0.376 - 1; 0.7
Phase 1B Primary BMA	1.1 - 2.5	1.1 - 2.5
Phase 1B Secondary BMA	2.51 - 10	2.51 - 10
1.) Clays and Silts	10.1 - 50	10.1 - 50
2.) Fine Sands	50.1 - 360	50.1 - 862.83
○ RRM Intervals 10th Mile		

Sample Results – Reach 3



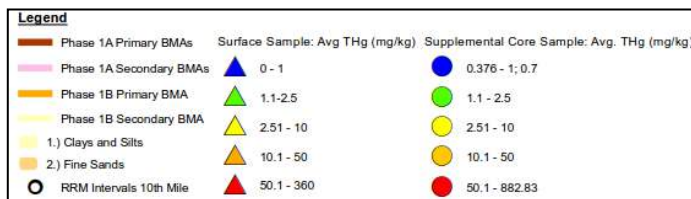
- Data consistent with previous results
- BMA may be extended extended upstream to RBH-11-200
- Max THg 126 mg/kg

Legend		
Phase 1A Primary BMAs	Surface Sample: Avg THg (mg/kg)	Supplemental Core Sample: Avg. THg (mg/kg)
Phase 1A Secondary BMAs	0 - 1	0.376 - 1; 0.7
Phase 1B Primary BMA	1.1 - 2.5	1.1 - 2.5
Phase 1B Secondary BMA	2.51 - 10	2.51 - 10
1.) Clays and Silts	10.1 - 50	10.1 - 50
2.) Fine Sands	50.1 - 360	50.1 - 882.83
RRM Intervals 10th Mile		

Sample Results – Reach 4



- Greatest THg at depths > 2-3' BGS
- Max THg 2,470 mg/kg
- BMA boundaries may be extended after additional characterization data are collected



Path Forward

- Update bank loading model
- Refine Phase 1B BMA boundaries
- Begin Phase 1B remedial design (~Q4 2016/Q1 2017)





Thank You

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