

# Lessons Learned and Case Study

Brownfield Cleanup Program

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# BCP Pre-Application Meeting

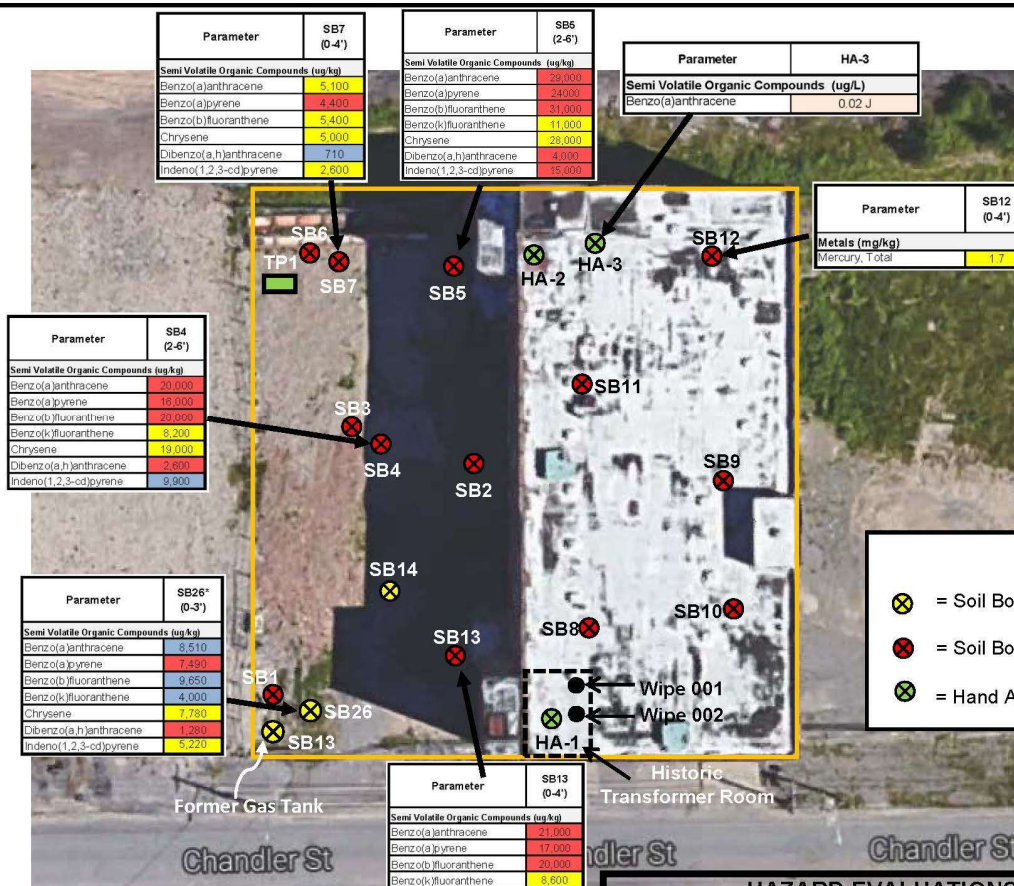
- First Meet and Greet
- Opportunity to Ask Questions
  - Ability of Site to be Accepted BCP
  - Cleanup Criteria and Development Plans
  - Remediation Options
- Allows Client to Understand BCP Requirements and Timing

# BCP Application Deficiencies

- Correct Name of Applicant – Match exactly to NYS Dept. of State
- Proof of access if Requestor is not owner – remember Sale Contract is not enough
- Previous Owner and Occupants
  - Develop a chain of ownership – dating to at least when contamination was released
  - Develop a chain of occupants and operators – include name and contact, if known

# BCP Application Deficiencies

- Contact Lists
  - Include all Contacts – City of Buffalo Planning Board Chairman
  - Adjoining Properties – to include residents and occupants, not just owners of property
- Figures
  - Include County Tax Map – EC GIS map may not be adequate
  - Env. History – include figure that shows concentrations that exceed planned cleanup criteria



Parameter	SB7 (0-4')
<b>Semi Volatile Organic Compounds (ug/kg)</b>	
Benzo(a)anthracene	5,190
Benzo(a)pyrene	4,490
Benzo(b)fluoranthene	5,400
Chrysene	5,000
Dibenzo(a,h)anthracene	710
Indeno(1,2,3-cd)pyrene	2,600

Parameter	SB5 (2-6')
<b>Semi Volatile Organic Compounds (ug/kg)</b>	
Benzo(a)anthracene	29,000
Benzo(a)pyrene	24,000
Benzo(b)fluoranthene	31,000
Benzo(k)fluoranthene	11,000
Chrysene	28,000
Dibenzo(a,h)anthracene	4,000
Indeno(1,2,3-cd)pyrene	15,000

Parameter	HA-3
<b>Semi Volatile Organic Compounds (ug/L)</b>	
Benzo(a)anthracene	0.02 J

Parameter	SB12 (0-4')
<b>Metals (mg/kg)</b>	
Mercury, Total	1.7

Parameter	SB4 (2-6')
<b>Semi Volatile Organic Compounds (ug/kg)</b>	
Benzo(a)anthracene	20,000
Benzo(a)pyrene	16,000
Benzo(b)fluoranthene	20,000
Benzo(k)fluoranthene	8,200
Chrysene	19,000
Dibenzo(a,h)anthracene	2,600
Indeno(1,2,3-cd)pyrene	9,900

Parameter	SB26* (0-3')
<b>Semi Volatile Organic Compounds (ug/kg)</b>	
Benzo(a)anthracene	3,510
Benzo(a)pyrene	7,490
Benzo(b)fluoranthene	9,650
Benzo(k)fluoranthene	4,000
Chrysene	7,780
Dibenzo(a,h)anthracene	1,280
Indeno(1,2,3-cd)pyrene	5,220

Parameter	SB13 (0-4')
<b>Semi Volatile Organic Compounds (ug/kg)</b>	
Benzo(a)anthracene	21,000
Benzo(a)pyrene	17,000
Benzo(b)fluoranthene	20,000
Benzo(k)fluoranthene	8,600
Chrysene	19,000
Dibenzo(a,h)anthracene	2,400
Indeno(1,2,3-cd)pyrene	9,900

**KEY**

- = Soil Boring Location (9/16)
- = Soil Boring Location (11/16)
- = Hand Auger Location (11/16)

**Notes:**

- 1 – Detected concentrations for SVOCs in ppb; metals in ppm
- 3 - Proposed Cleanup Standards = Restricted Residential

- = exceeds Restricted Residential SCO
- = exceeds Commercial SCO
- = exceeds Industrial SCO
- = exceeds Groundwater Standards

**HAZARD EVALUATIONS, INC.**  
*Phase I/II Audits – Site Investigations – Facility Inspections*

**SOIL BORING LOCATIONS**  
 166 CHANDLER STREET  
 BUFFALO, NEW YORK

**SIGNATURE DEVELOPMENT OF WNY, LLC.**  
 BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1608
CHECKED BY: EB	DATE: 01/17	FIGURE NO: III-A

# Case Study – 2017 Project, Buffalo, NY

- Client wanted Certificate of Completion by December 2017
- Application Submitted November 15, 2016
- Letter of Incompleteness on December 1, 2016
- Final Application Resubmittal and Letter of Completion in January 2017
- Acceptance Letter received March 3, 2017
- Final BCP Agreement Issued April 24, 2017

# Case Study – 2017 Project, Buffalo, NY

- Work Plans for RI and IRM submitted with Application; Work Plan approval end of April 2017.
- IRM included removal of soil from courtyard and parking lot areas – remaining portions of property covered by building
- IRM anticipated to be final remedy

# Case Study – 2017 Project, Buffalo, NY

- Early May 2017
- Asbestos Identified throughout entire building and courtyard deemed ACM Containing – all work ceased.
- Client still wanted COC by Dec. 2017
- ACM work required removal of top 2-inches of soil due to evidence of ACM.
- Soil Piles had roofing shingles mixed in
- Soil also had PCBs over 50 ppm.



# Case Study – 2017 Project, Buffalo, NY



# Case Study – 2017 Project, Buffalo, NY



# Case Study – 2017 Project, Buffalo, NY

- Worked with ACM Contractor for Soil Removal
- ACM and PCB soil removed July 2017
- Courtyard Control not until August 2017
- Remove PCB soil over 50+ ppm
- Remove concrete footers and foundations
- Remove UST, drainage structures, and impacted fill
- Chimney Stabilization and Restoration Issues
- Confirmatory sample results confirmed no testing results above Restricted Residential numbers – End of October 2017

# Case Study – 2017 Project, Buffalo, NY

Courtyard –  
December  
2017



# Case Study – 2017 Project, Buffalo, NY

Parking Lot –  
July 2017



# Case Study – 2017 Project, Buffalo, NY

- Parking Lot area
  - Plan was simple - excavate to 3 to 4 feet
  - Identified hazardous levels of Lead – May 2017
  - Submittal of additional Work Plan for delineation of Lead
  - Submittal of Work Plan for Lead Stabilization
  - Work completed in September 2017
  - Excavation and confirmatory sample results confirmed no testing results above Restricted Residential numbers – End of September 2017

# Case Study – 2017 Project, Buffalo, NY

Parking Lot –  
December 5,  
2017



# Case Study – 2017 Project, Buffalo, NY

- Interior Investigation required to be done
- Due to ACM issues, No access to inside the building until July 2017
- Found areas of impact – Removed as discovered
- PCBs on Concrete – resulting removal of areas of the concrete floor
- Final interior removal in October 2017



# Case Study – 2017 Project, Buffalo, NY

- Last sample collected October 20, 2017
- Draft RI/IRM/AAR report issued October 24, 2017
- Final Engineering Report Issued December 14, 2017
- No Further Action Remedy was accepted and Decision Document Issued December 20, 2017
- Site Management Plan accepted December 20, 2017
- Certificate of Completion received December 27, 2017

# Case Study – 2017 Project, Buffalo, NY

- Success at Site due to:
- IRM was the final remedy and no further action needed.
- Coordination of work with NYSDEC – Worked with us every step of the way and kept us aware of impending deadlines
- Motivated Client – Would not postpone COC
- Cooperation with owner, contractors, and NYSDEC