Restoration Advisory Board Meeting

17 October 2017

Agenda

Introductions

Environmental Restoration, Site 31

Interim Removal Action, Site 55

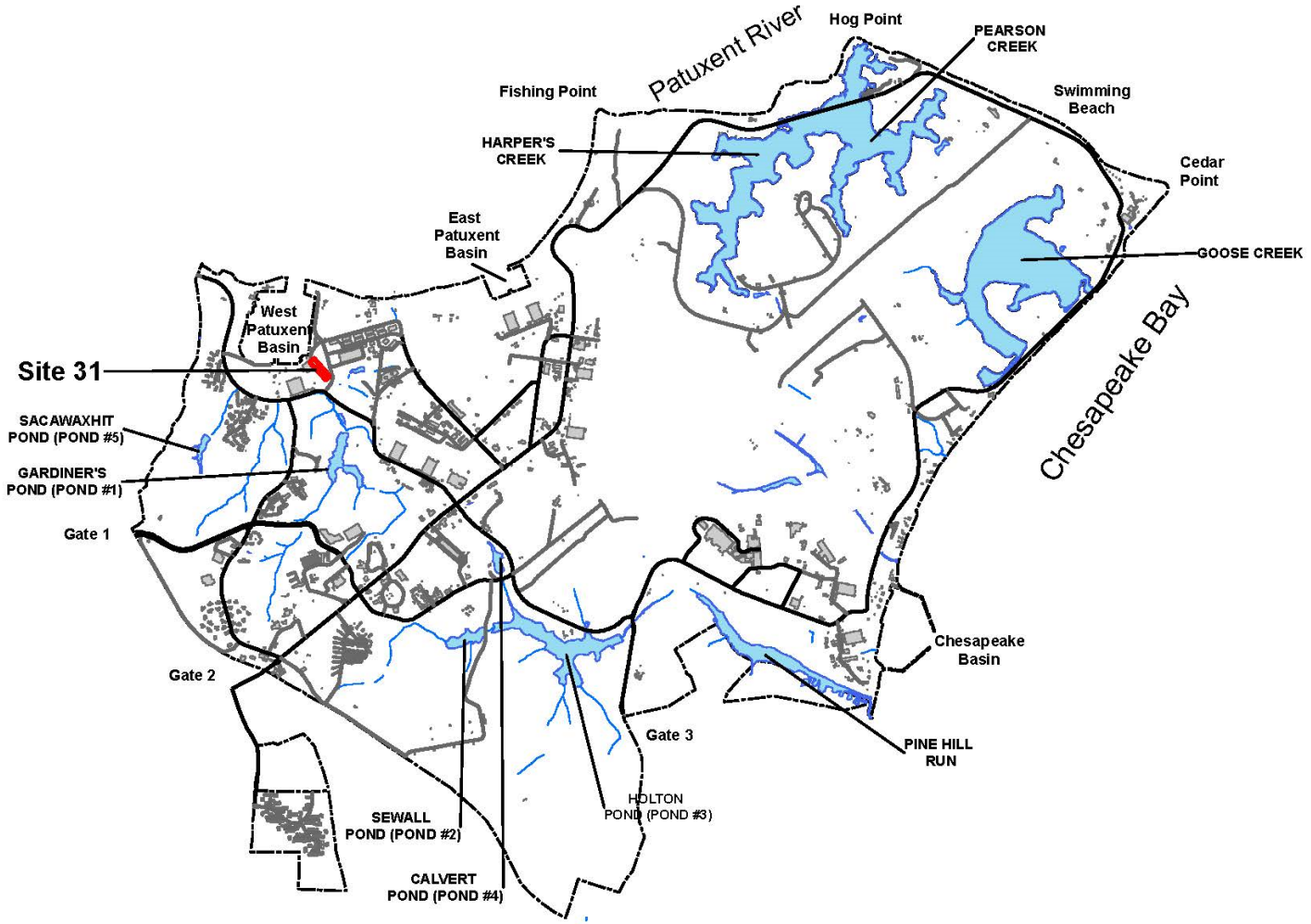
Open Discussion

Future Restoration Advisory Board Meeting Dates

Introductions

- Introduce team members

Site 31Location



Site 31 Layout

Site 31 History

- Building 307 was used to conduct airplane parts maintenance and testing
  - Cleaning aircraft tires
  - Repairing fiberglass ray domes
  - Painting aircraft ground handling equipment
- Activities required the use of solvents, specifically trichloroethene (TCE)

Site 31 History

- Prior to 1970, waste liquids flowed into floor drains that discharged to an open ditch north and east of the building
- In 1970, a floor sump was constructed to convey the liquids to aboveground drums
- At the same time, the ditch was enclosed in a storm drain

Site 31 Layout

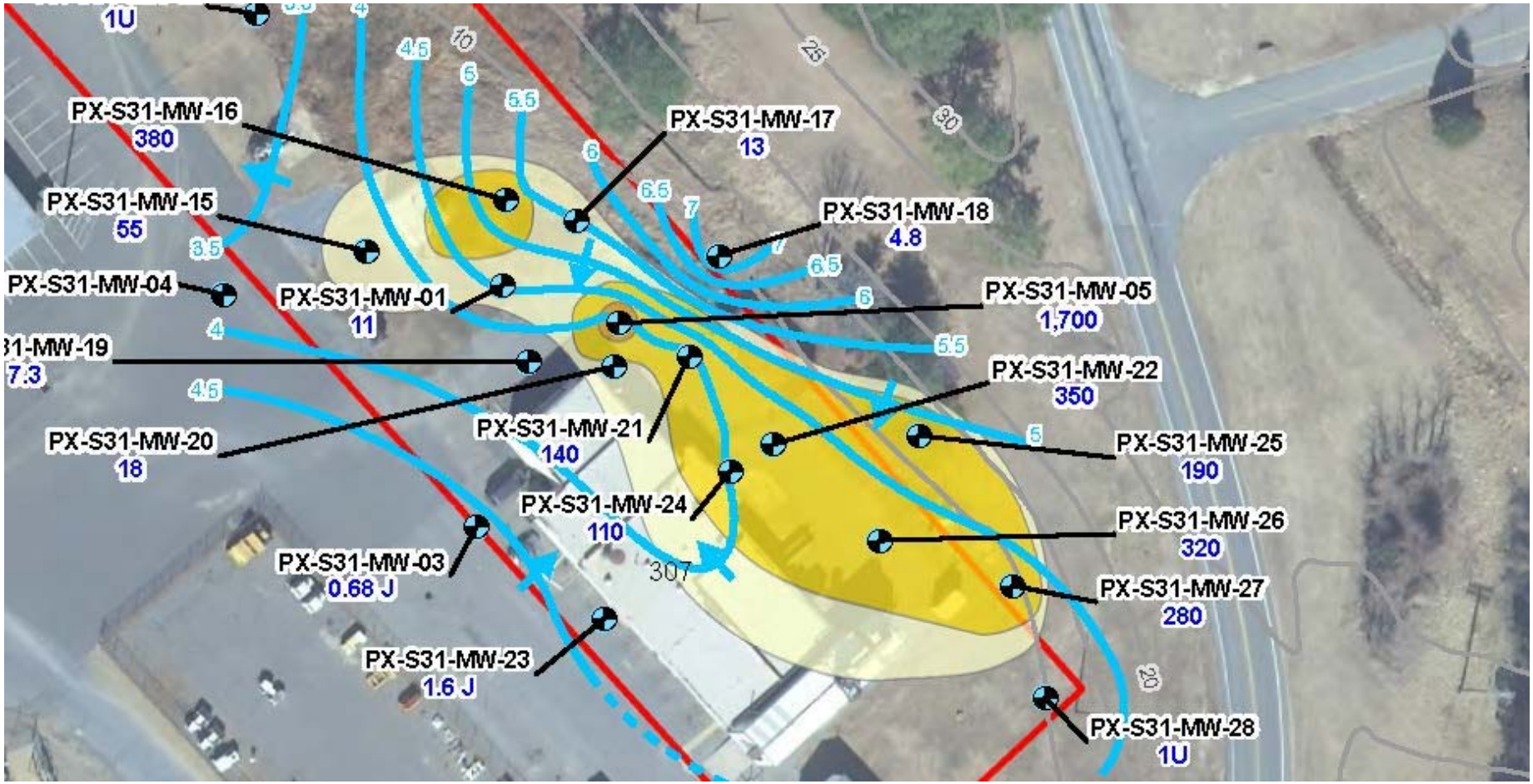
Site 31 Investigation/Removal History

- 1984-1987 – Initial Assessment Study
- 1999 – Site Screening Investigation
- 2004 – Expanded Site Investigation
- 2005 – Engineering Evaluation/Cost Analysis
- 2007 – Interim Removal Action (small soil removal)
- 2008 – 2016 Remedial Investigation

Site 31 Remedial Investigation

- Findings
  - Volatile organic compounds (VOCs), specifically TCE and its natural degradation products are present in groundwater
  - Some metals contamination remains in soil
- Risk Summary
  - Human health risks are present associated with the hypothetical future consumption of groundwater
  - Ecological risk due to residual metals in soil

VOC Concentration Map



Preferred Cleanup Alternative

- Soil excavation and insitu bioremediation
  - Remove metals-impacted soils and dispose in approved landfill
  - Inject vegetable oil into the ground to induce natural bacteria to degrade VOCs
    - Monitor results
    - Reinject if necessary
  - Employ land use controls to ensure that consumption of groundwater is prevented

Insitu Bioremediation

Site 31 Remedial Action

Site 31 Remedial Action

Site 31 Remedial Action

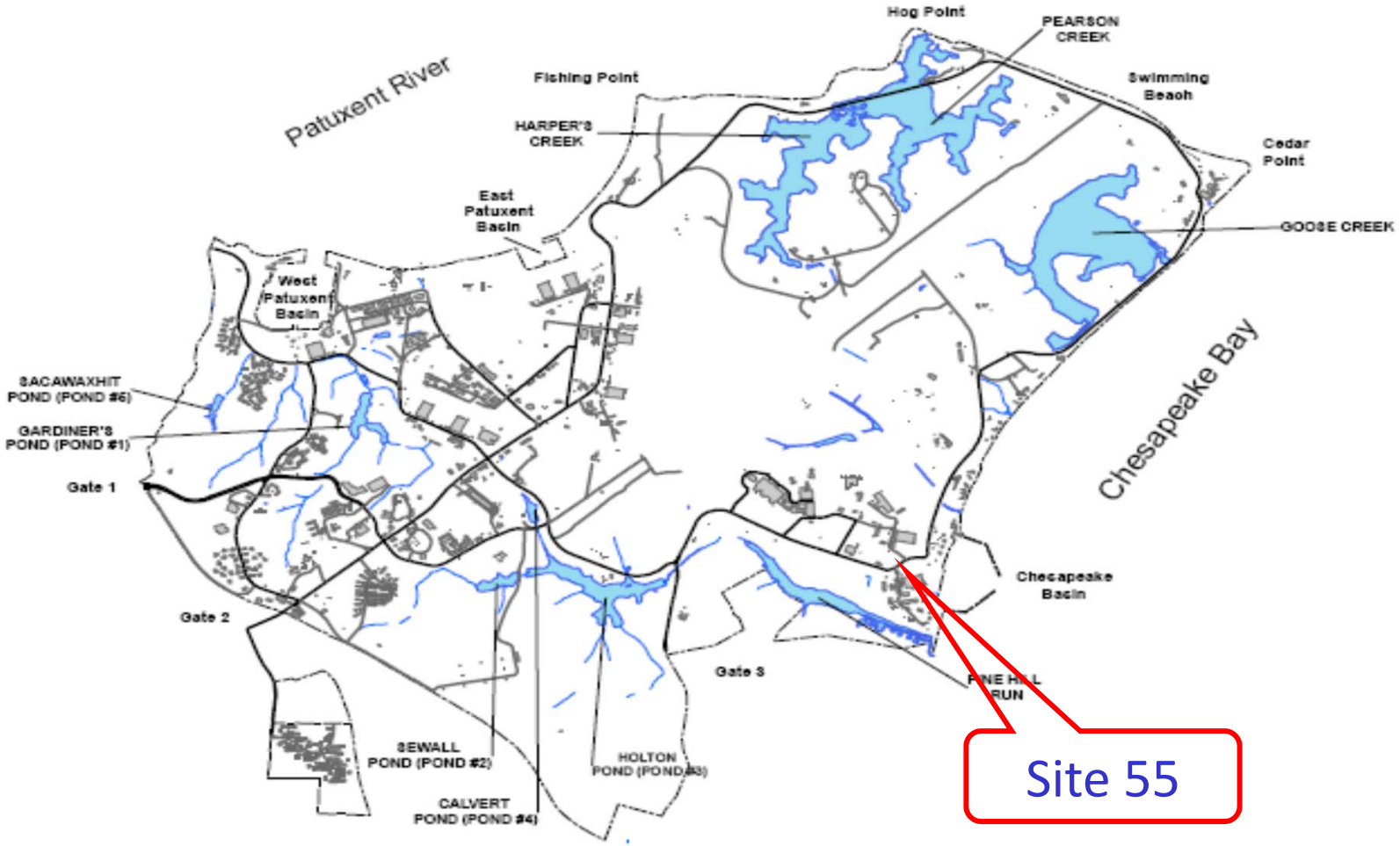
Site 31 Remedial Action

Site 31 Remedial Action

Path Forward

- Completed groundwater injections and soil excavation in August
- Generate Land Use Control document
- Monitor VOC concentrations in groundwater quarterly, until cleanup goal is achieved
- Additional injections if warranted in the future

Site 55 – PCBs in Sediment



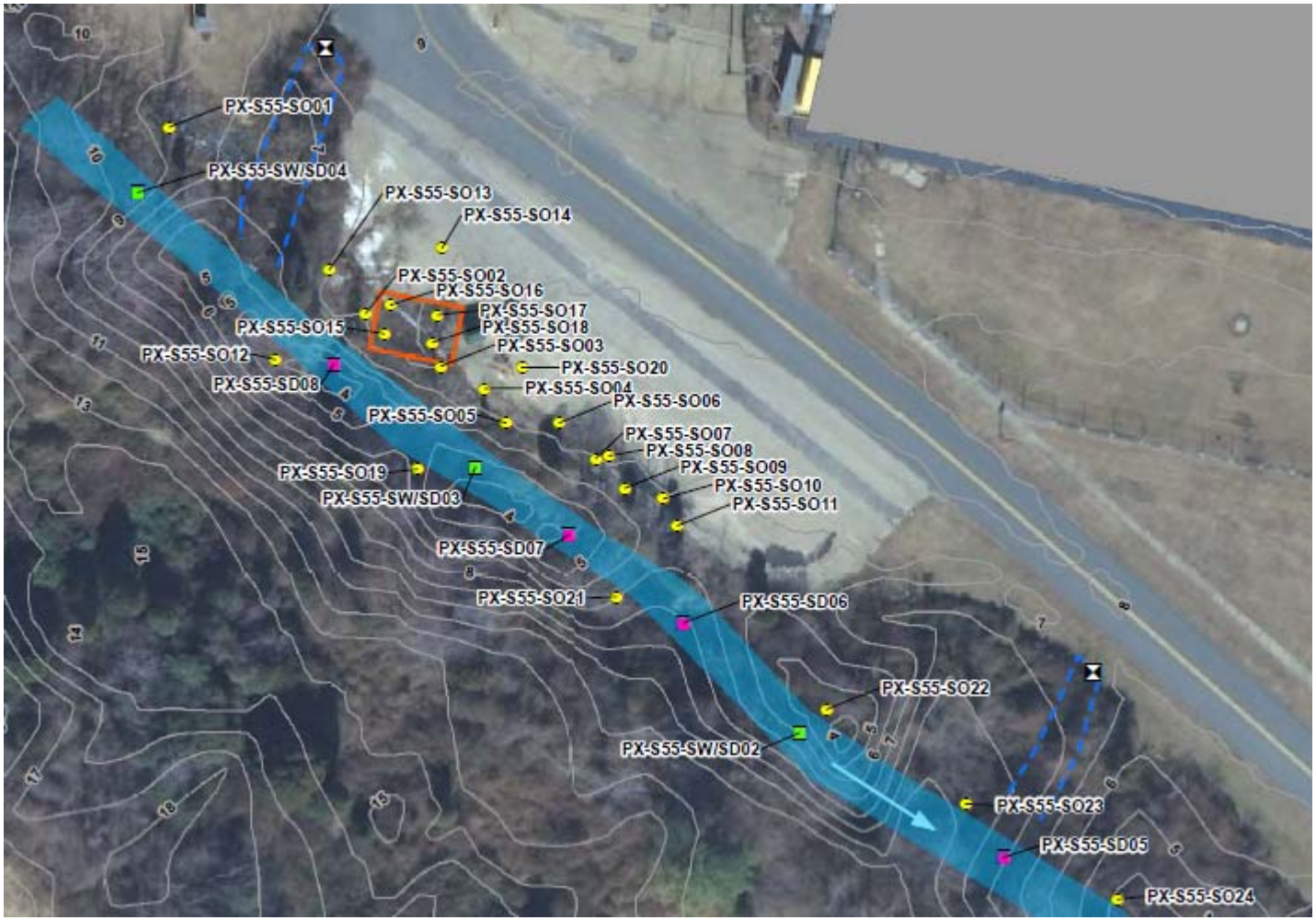
Site Layout


Building 115
Direction of Stream Flow
Site 55 - Former Hazardous Waste Storage Hut
ELMER
SHAW

History

- PCBs stored in a hazardous waste storage hut adjacent to the site
- Performed a remedial investigation
  - PCBs identified in stream sediment
  - Low concentrations of VOCs identified in groundwater

Sample Locations



Non-Time Critical Removal Action

- PCBs identified in sediment present ecological risk to stream biota
- Simplest, most cost-effective solution: excavate and dispose of sediment, backfill with clean fill

Removal Action

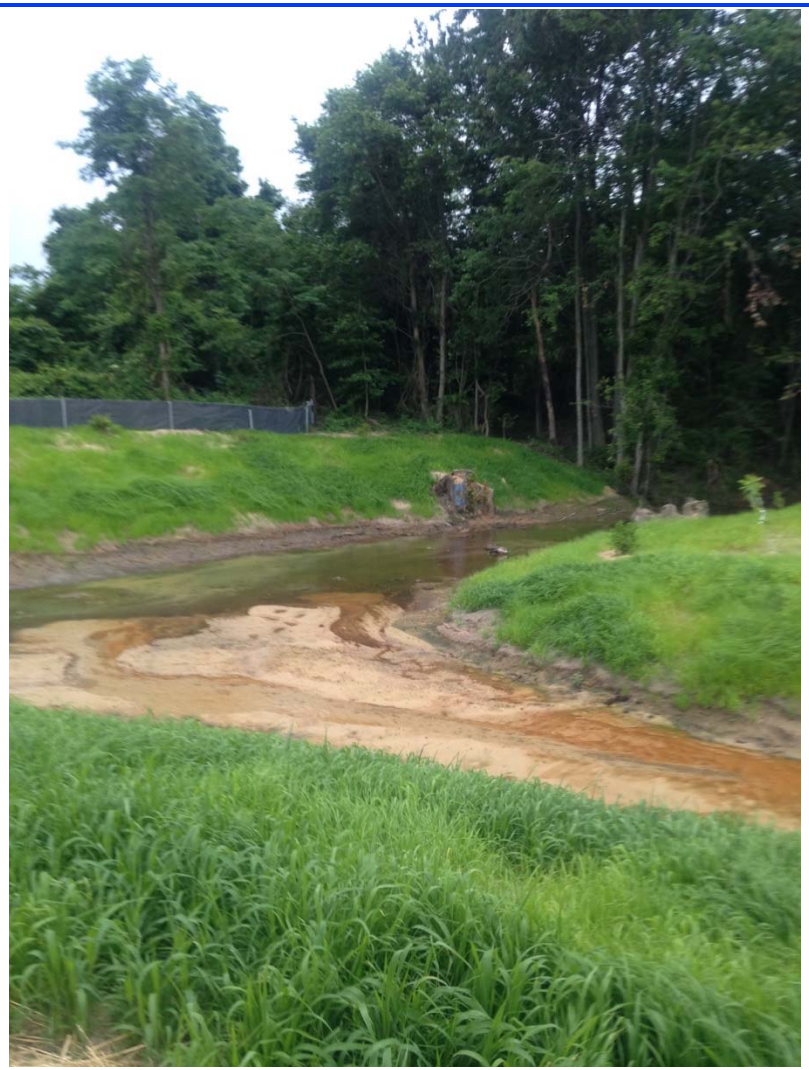
Removal Action

Removal Action

Removal Action

Removal Action

Removal Action



Removal Action

Path Forward

- Low concentrations of VOCs in groundwater
  - Additional groundwater sampling to determine if action is warranted
  - If so, likely to occur in 2019
  - If not, sign a no further action record of decision and close site

Questions/Open Discussion

- Questions?
- Comments?
- Input?

Proposed Future RAB Meeting Schedule*

- Spring 2018: 18 April 2018
- Fall 2018: 7 November 2018

*Dates are tentative

Have a good fall and winter - we'll see you in the spring!