Agenda

- October 5 2016 Minutes approval
- RAB Member Administrative Items
- Restoration Activities General Update
- PFCs at Pease Update
- Public Comments
- Meeting Recap, Next Steps, Upcoming Meeting Dates
- Adjourn
RAB Member Administrative Items

- Approve Summary From Oct 2016 RAB Meeting
- RAB Operating Procedures Update
Air Force Restoration Program

• 83 IRP sites
  – 51 sites closed (cleanup finished, unrestricted use)
• Of remaining 32 sites
  – 11 have cleanup activities complete (monitoring continues)
  – 21 have active cleanup ongoing, including
    • Groundwater treatment
    • Air sparging/soil vapor extraction
    • Permeable reactive barrier
    • Monitored natural attenuation
    • Long-term monitoring
Site 39- Bldg 227 Hangar

- Largest Hangar at Pease
  - Constructed in 1956
  - 600ft L x 250ft W x 60ft H

- Aircraft Maintenance facility
  - Degreasing
  - Paint stripping
  - Aircraft repairs
  - Wash down of aircraft

Areas of Concern
- Former Wash Rack & HWSA in NE corner
- Floor drains/Sewer-Industrial waste lines – SW Corner
Site 39 - Bldg 227 Hangar

- Current Use – Storage of plow equipment for Airfield snow removal
Site 39 - Restoration Program

- 1991 – Base Closure
- 1991 to 1993 – Initial Site Characterization & Remedial Investigation
  - COCs (PCE, TCE, BTEX, PAHs)
  - PCE → TCE → cis-1,DCE → vinyl chloride
- 1991 – Floor drains cleaned and sealed
- 1992 to 1993 - dual-phase groundwater/SVE treatment system
- 1995 – Zone 3 Record of Decision
- 1996 – Soil removal – 2 areas outside SW corner
- 1997 to 2015 GW Extraction & Treatment – LS/SBR
  - Substantially cleaned up Site GW
- 2011 to 2013 Vapor Intrusion Investigation – Subslab PCE/TCE vapors
- 2014 – Supplemental Soil Investigation
- 2015 - GW Bio Treatment – Lower Sand
- 2016 to 2017 – Supplemental subslab vapor/shallow GW investigation
- 2017 – SVE under building
Site 39 – GW Well Network

39-MWE10 (Pumping Well)
Site 39 – GW Treatment – 2004

Legend

- Screened (whistle)
- Interbed Contact
- Tetrachloroethylene (TCE) (µg/L) (Restoration Goal = 5 µg/L)
- cis-1,2-Dichloroethylene (cis-DCE) (µg/L) (Restoration Goal = 10 µg/L)
- Vinyl Chloride (µg/L) (Restoration Goal = 2 µg/L)
- Contaminant Plume consisting of TCE, cis-DCE, and Vinyl Chloride above Zone 3 restoration goals.

1. Well construction data as presented in the "Garrison 436" database.
2. Westport Site 39 Tech Memo Phase II Groundwater Investigation Report or Tech Memo: Site 39 Groundwater Investigation Phase II.
3. J = Estimated
4. SS = 0.5 X Flood Mean Sea Level
5. ND = Not Available
6. U = Analyzed for, but not detected. Associated values are the sample quantification limit.
Site 39 – GW Treatment - 2009
Site 39 – GW Treatment - 2015
Site 39 – GW Treatment - 2015

Area of residual cis-1,2-DCE and VC contamination in LS
Site 39 - Conditions Under Hangar

- Restoration planned this year to address residual contaminant sources under Building.
Vapor Intrusion Investigation

• Data indicate VI is not a significant concern for commercial use of Building.

• TCE detected above EPA and DES indoor air screening level in one out of three testing events – Tower D

• Planned SVE in 2017 to address sub slab vapors
Site 39 - New Wells Installations

- New Shallow GW Wells
- Proposed SVE Well
- New Sub Slab Vapor Wells
Site 39- SVE Well Installation
Air Force has been conducting restoration activities at Site 39 since the Base was closed in 1991.

Cleanup is almost Complete
- Low level groundwater contamination – small plume
- Isolated, low level shallow soil contamination under building

Unrestricted Site Closure anticipated by 2020.
Update on PFCs at Pease

• PFC-Related Quick Updates
  – Wildlife
  – Old water
  – Coakley Landfill

• Portsmouth Drinking Water Treatment System Update

• Air Force PFC Response Update
Site 8 Interim Mitigation System

- System Concept: Reduce further impacts to private wells downgradient of the former FTA
  - Intercept PFOS and PFOA-impacted groundwater before it enters the bedrock groundwater
  - Cut off overburden groundwater flow to the north
  - Treat water using sorbent resin media
  - Discharge treated water back into the ground at the FTA
Site 8 Interim Mitigation System

• System Facts
  – Design Flow: 200 gallons per minute
  – Number of extraction wells: 11
  – Treatment process: Particle filters, granular activated carbon, sorbent media, in place regeneration of media
Site 8 Interim Mitigation System

- Filters for Solids
- GAC for Organic Material
- Resin for PFCs
- Effluent Tank
- Extraction Wells
- Regeneration
- Distillation
- Solution Recovery
- PFC Waste
- Injection Trenches
System Concept: Protect the Haven Well and Smith and Harrison Wells from further impacts

- Intercept PFOS and PFOA-impacted groundwater upgradient of Haven Well
- Use a high-capacity well near the Haven Well to control flow towards the Smith and Harrison Wells
- Treat water using granular activate carbon
- Discharge treated water back to the aquifer to flush clean water to the Haven Well
Airfield Interim Mitigation System

• **System Facts**
  - Design Flow: 700 gallons per minute
  - Number of extraction wells: 6
  - Treatment process: Particle filters, granular activated carbon
Airfield Interim Mitigation System

- Influent Tank
- Filters for Solids
- GAC for Organic Material
- GAC for PFCs
- Effluent Tank
- Extraction Wells
- Injection Wells
Update on PFCs at Pease

- Air Force has continued to sample the Smith, Harrison, Portsmouth, and Collins Wells
  - 117 sampling events and 773 samples (supply wells, sentry wells, and distribution points)
  - Concentrations are very stable – no changes
  - Data posted to City website
  - Sentry Monitoring performed in November 2016 - no changes

![Graphs of PFC concentrations for Harrison and Smith wells with EPA HA marked on the graph]
Update on PFCs at Pease

- 2017 Planned Activities
  - Test the groundwater injection field
  - Construct interim mitigation systems
  - Continue sentry well monitoring
  - Install wells and sample soil and groundwater to better understand distribution of PFOS and PFOA at Pease
RAB Discussion

Questions?
**Goal:** Provide opportunity for members of the public to comment.

**Process:** Public members fill out a comment card indicating they wish to speak. Statements are timed and are limited to 3 minutes for each speaker. The timer will notify the speaker when they have 30 seconds remaining and when they have reached 3 minutes.

**Outcome:** Questions will be answered in writing in Meeting Minutes and individually, if you leave us an email address.
RAB Recap

• Meeting Recap
• Next Steps
• Upcoming Meeting Dates
Adjournment