

## Naval Weapons Station Yorktown Cheatham Annex

**Environmental Restoration Program Overview and Update** 

Restoration Advisory Board Meeting November 15, 2023

### **Program Overview**



#### **Cheatham Annex (CAX) Environmental Restoration Program (ERP)**

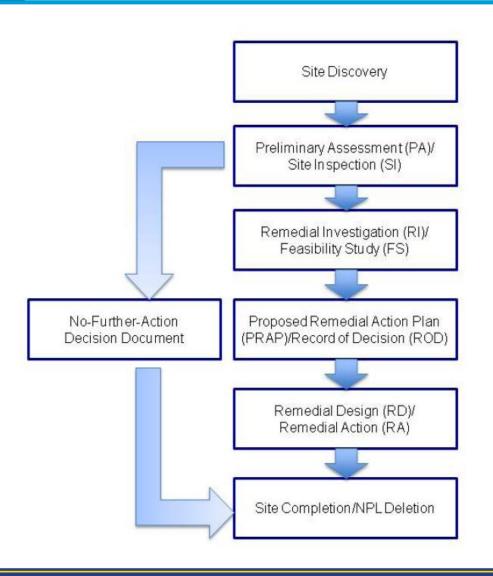
- **>22 Sites and Areas of Concern (AOC)** 
  - ➤ 7 sites/AOCs currently under investigation
  - > 15 sites/AOCs no further action required





### 22 ERP Sites





- SI (3 sites)
- RI/FS (2 sites)
- PRAP/ROD (1 site)
- RA (1 site)
- Closed (15 sites)

# CAX ERP – Site 4 Outdated Medical Supply Disposal Area



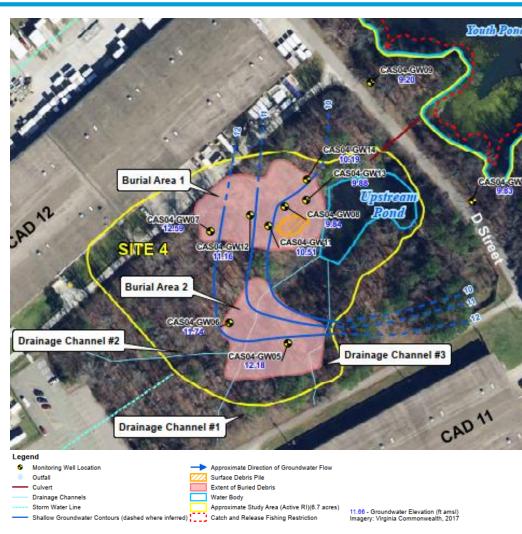


#### Work Completed since last RAB:

•Completed Preliminary Draft Feasibility Study (FS) for all site media

#### Work In Progress:

- •Regulatory Review and finalizing FS for all media
- •Initiated Draft Proposed Plan (PP)/Record of Decision (ROD) for all site media



# CAX ERP – Site 7 Old DuPont Disposal Area





#### Work Completed since last RAB:

Planning Phase 2 groundwater delineation field activities

#### Work In Progress:

- Coordinating land disturbing activities with the State Historic Preservation Office (SHPO)
- Continuing planning Phase 2 groundwater delineation field activities



# CAX ERP – Site 7 Old DuPont Disposal Area





# CAX ERP – Site 9 Transformer Storage Area



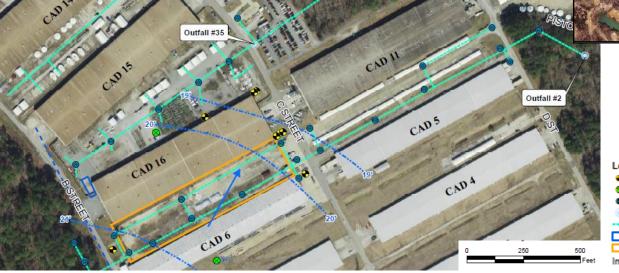
#### Work Completed since last RAB:

 Finalized Expanded Site Inspection (ESI) report documenting field investigations for soil, groundwater, and sediment

#### Work In Progress:

• Drafting the Remedial Investigation (RI) Sampling Plan (SAP) for proposed field investigations for soil, groundwater, and sediment





#### egend

- Monitoring Well
- Piezometer
- Drop Inlet
- Outfall
- --- Storm Water Line
- Original Site 9 Study Area Boundary (0.1 acres)
- Site 9 Study Area Boundary (Active SI site)(3.5 acres)

Imagery: Virginia Commonwealth, 2017

# CAX ERP – AOC 1 South Scrap Metal Dump



#### Work Completed since last RAB:

• Finalized RI report for all site media

#### Work In Progress:

· Draft FS report for all site media





### CAX ERP - AOC 6

### **Trinitrotoluene (TNT)/Ammonia Settling Pits Subareas**



#### Work Completed since last RAB:

 Continued Non-Time Critical Removal Action (NTCRA) for soil and groundwater

#### Work In Progress:

 Continue NTCRA field activities for soil and groundwater







## CAX ERP – AOC 8 Area South of Site 7



#### Work Completed since last RAB:

 Draft-Final RI Addendum report documenting groundwater delineation field activities

#### Work In Progress:

 Preparing RI Addendum report documenting groundwater delineation field activities





- Permanent Monitoring Well
- Removed/Abandoned Monitoring Well
- Elevation Contour prior to Removal Action (feet)
- Inferred Groundwater Contour (feet)
- Groundwater Contour (feet)
- Approximate Direction of Groundwater Flow
- Approximate Study Area (Active RI)(2.5 acres)
- Final Excavation Limits

5.34 - Groundwater Elevation Imagery: Virginia Commonwealth, 2017

### CAX ERP – AOC 9

### **Penniman Lake Historical Industrial Areas**



#### Work Completed since last RAB:

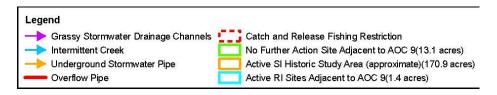
 Draft-Review ESI Report to document field investigation activities for all site media.

#### Work In Progress:

- Continue collaboration with USEPA and VDEQ discussions to determine a path forward for the site
- Began preparing Remedial Investigation (RI)

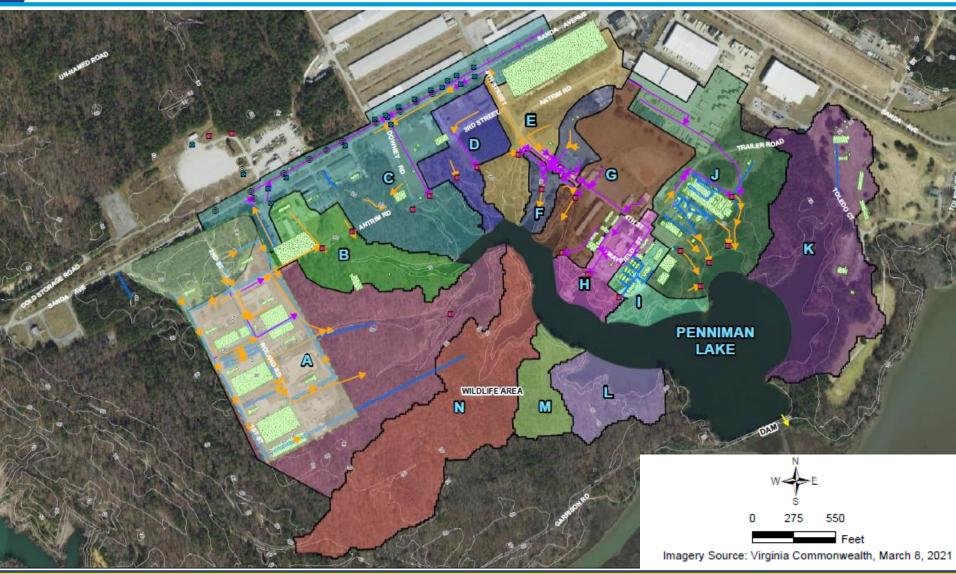






# **CAX ERP – AOC 9 Penniman Lake Watersheds**





### **Emerging Chemical (PFAS)**



#### **Background** (Polyfluoroalkyl PFAS):

- •Has been identified by the Department of Defense as an emerging chemical.
- •Concern due to their:
  - ➤ Persistence in the environment and in organisms
  - ➤ Migration potential (example, groundwater)
  - Widespread use in commercial products
  - > Potential health effects due to exposure

#### **General Use:**

- Aqueous Fire Fighting Foam
  - Non-Stick cookware
  - Fiber and fabric stain protection
  - Food packaging
  - Personal care products

#### **Preliminary Assessment (PA):**

- •Identify and document all potential or actual PFAS sources
- •Identify areas requiring further PFAS investigation
- •Identify receptors and migration pathways (both on- and off base)
- •Determine whether an expedited response is warranted
- •Set priorities for a facility wide Site Inspection (Including investigative fieldwork)

### CAX ERP – Site 24 Fire Station



#### **History**:

- •Basewide PFAS Preliminary Assessment (PA) identified one site (Fire Station) for further investigation.
  - Storage of AFFF on fire trucks.
  - All inventory of AFFF concentrate was removed in 2016.
  - Through interviews with fire department personnel, the grassy areas surrounding the fire station were potentially used to test and clear hose nozzles.

#### **Current Status:**

•All SI field work (soil groundwater, surface water & sediment) and reporting has been completed. (COC(s) - PFAS)

#### **Work In Progress:**

•Preparation of the RI sampling and analysis plan (SAP) in support of future RI fieldwork.





### **Questions or Comments?**



For additional Information regarding the Naval Weapons Station Yorktown ERP at CAX, please contact:

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Visit CAX's ERP Public Web Page at:

https://www.navfac.navy.mil/Divisions/Environmental/Products
-and-Services/Environmental-Restoration/MidAtlantic/Cheatham-Annex/