



Naval Weapons Station Yorktown Per- and Polyfluoroalkyl Substances (PFAS) Update

Naval Weapons Station Yorktown
Restoration Advisory Board Meeting
July 16, 2024

Overview of PFAS



➤ What are PFAS?

- Family of manufactured chemicals that last a long time in the environment
- Found in the environment around the world (in air, water, soil, animals, plants, as well as in people)
- Used since the 1950s in many products including:



firefighting foam



water-resistant fabrics



stain-resistant carpets



some nonstick cookware



personal care products



food packaging

Analytical Method and Screening Levels

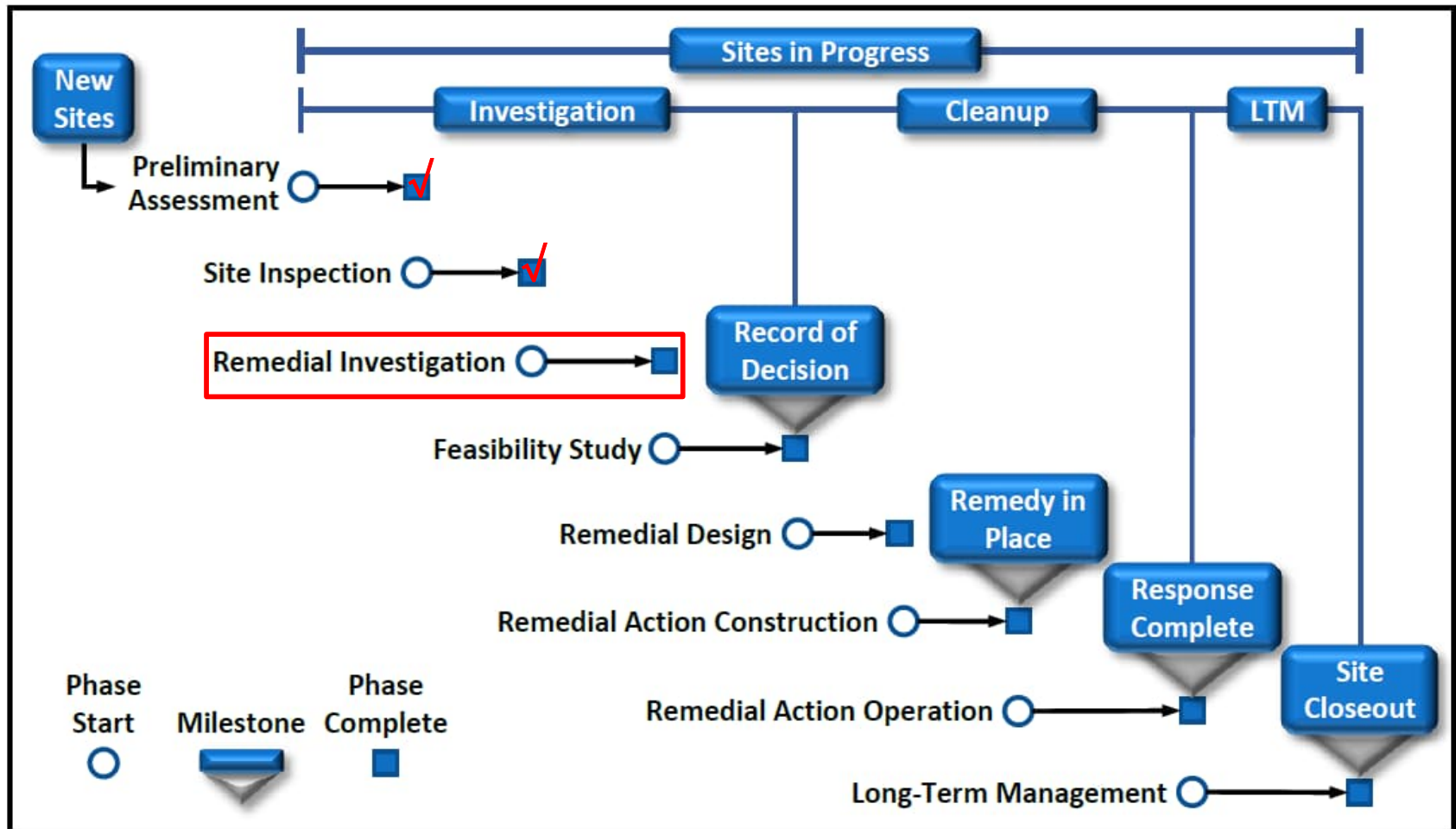


- Navy guidance to use the Environmental Protection Agency (EPA) analytical Method 1633 reporting 40 PFAS in environmental media
 - For use in soil, groundwater, sediment, and surface water
- Department of Defense (DoD) approved EPA human health screening levels are available for 8 compounds (November 2023 Regional Screening Level [RSL] Update)
 - PFOA, PFOS, PFBS, PFHxS, PFNA, PFHxA, PFBA, and HFPO-DA (see next slide)
 - EPA releases RSL table updates generally in May and November
- Navy approved ecological screening values (ESVs) available based on literature review and current state of science

Overview of CERCLA Process and Path Forward



- 5 sites at NWS Yorktown are recommended to be carried forward to the Remedial Investigation (RI) phase



Previous Investigations



- Preliminary Assessment (PA) finalized in October 2021
 - Desktop research phase to review site history, determine if potential source exists, and determine if investigation is warranted
 - 75 areas screened
 - 9 Areas of Interest (AOI) recommended for Site Inspection (SI): Site 1 Dudley Road Landfill, Site 4 Burn Pad Residue Landfill, Site 22 Burn Pad, Building 461 Fire Station No. 14, SSA 3 Fire Training Pits and Vicinity, Building 24 (Betty Warehouse), Building 27, Building 71 Former Fire Station, Building 703 Main Fire Station No. 13
- Basewide PFAS SI fieldwork was conducted between March and June 2022 with additional sampling at Site 1 in December 2022
 - Investigation to determine if PFAS are present at concentrations warranting further evaluation
 - Groundwater Investigation: 35 monitoring wells installed and 47 groundwater samples collected
 - Soil Investigation: 78 soil samples collected
- SI Report finalized in December 2023

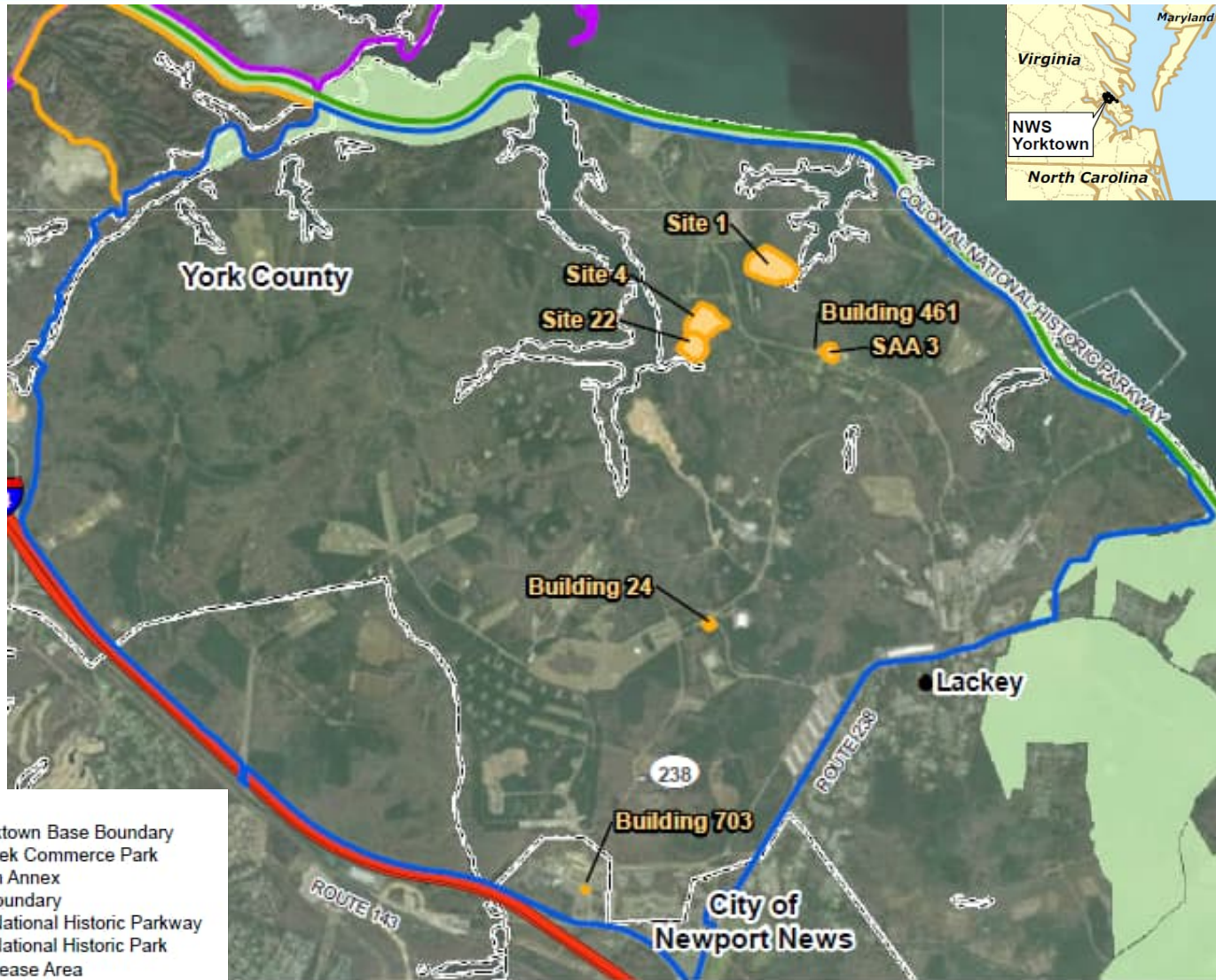
SI Results



➤ Summary of SI Results and Recommendations:

Site	Recommendation
Site 1 – Dudley Road Landfill	Proceed to RI
Site 4 – Burn Pad Residue Landfill	Proceed to RI as a combined single site (Sites 4 and 22)
Site 22 – Burn Pad	
Building 461 Fire Station No. 14	Proceed to RI as a combined single site (Building 461 and SSA 3)
Site Screening Area 3 (SSA 3) – Fire Training pits and Vicinity	
Building 24 (Betty Warehouse)	Proceed to RI
Building 27	No further PFAS Investigations at this time
Building 71 – Former Fire Station	No further PFAS Investigations at this time
Building 703 – Main Fire Station No. 13	Proceed to RI

PFAS RI Sites



Remedial Investigation



- RIs are designed to:
 - Collect enough data and information to make human health and ecological risk-based cleanup decisions that include:
 - Delineate nature and extent of PFAS
 - Identify Applicable or Relevant and Appropriate Requirements (ARARs)
 - Identify constituents of potential concern (COPCs)
 - Assess potential for risk to human and ecological receptors
 - Support the feasibility study that looks at applicable cleanup technologies and cost estimates to remediate (soil, groundwater, surface water, and sediment that represent risk to human health and the environment)
- RIs are not designed to:
 - Conduct remediation/cleanup through investigation: not every square inch requires investigation
 - RI objectives help guide the investigation team (both Navy and Regulators) and define how much data is required and how the data will be used to make human health and ecological risk-based cleanup decisions

Remedial Investigation Process



- RI phase consists of the following steps:
 - Work plan (Uniform Federal Policy-Sampling and Analysis Plan [UFP-SAP]) (~8 months)
 - Fieldwork and data collection (~3 months)
 - Laboratory analysis and data management (~2 months)
 - Data analysis and risk assessment (~3 months)
 - Data gap fieldwork and data collection (if needed) (~3 months)
 - Reporting (~10 months)

Questions or Comments?



For additional information regarding the ERP at Naval Weapons Station (NWS) Yorktown, please contact:

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Visit NWS Yorktown’s ERP Public Web Page at:
<https://www.navfac.navy.mil/Business-Lines/Environmental/Products-and-Services/Environmental-Restoration/Mid-Atlantic/Yorktown-NWS/>

Have questions after the meeting?

If so, you can submit your questions for up to 10 calendar days after the meeting to the NAVFAC PAO officer at [NAVFAC ML PAO@navy.mil](mailto:NAVFAC_ML_PAO@navy.mil) or leave a message at 757-341-1410/11