

# Naval Weapons Station Yorktown Environmental Restoration Program, Restoration Advisory Board Meeting

**LOCATION:** Yorktown Library  
8500 George Washington Memorial Highway  
Yorktown, Virginia 23692

**DATE:** Tuesday, July 16, 2024; 1800-1915

## Attendees

Name	Organization/Role
Douglas Farrar	Naval Weapons Station (NWS) Yorktown/Public Works Officer (PWO)
Jeff Kissler	NWS Yorktown/Environmental Program Director
Melvin Acree	Naval Facilities Engineering Systems Command (NAVFAC) Mid-Atlantic/Remedial Project Manager (RPM) for NWS Yorktown
Vincent Grassi	U.S. Environmental Protection Agency (EPA)/RPM for NWS Yorktown
Wade Smith	Virginia Department of Environmental Quality (VDEQ)/RPM for NWS Yorktown
Nate Price	CH2M HILL, Inc. (CH2M) <sup>a</sup> /Activity Manager for NWS Yorktown
Victoria Kilbert	CH2M/Deputy Activity Manager for NWS Yorktown
Steve Oyer	Community Member and Restoration Advisory Board (RAB) Co-Chair
Mike Makin	NWS Yorktown/Cultural Resources Manager

<sup>a</sup> CH2M is a wholly owned subsidiary of Jacobs.

## Attachments

Attachment 1 is the Public Notice for the RAB Meeting.

## Welcome and Introductions

Mr. Price began the meeting at 6:05 p.m. with a discussion of the virtual meeting logistics and instructions for attendees participating by Microsoft Teams. Mr. Price stated that the meeting will be recorded for use in preparing the meeting minutes and the recording will not be distributed publicly. Mr. Price stated that the presentations are available on the public website.

Mr. Acree welcomed the attendees and provided an overview of the agenda, which included opening and closing remarks, and two technical presentations. Mr. Acree asked the representatives attending in person and virtually to introduce themselves.

Mr. Kissler reiterated the Department of the Navy (Navy)'s commitment to clean up through short-term and long-term goals. He pointed out that participation by key Base personnel, including PWO Farrar and Cultural Resources Manager Mike Makin, shows this commitment. He noted that tribal involvement is important to the Navy and that work is being done to support their involvement in the process.

Mr. Oyer requested that consideration be given to scheduling future meetings to avoid potential conflicts, including the Board of Directors meeting occurring at the same time. He asked that he be included in a Captain's tour of the Base and active sites.

Mr. Kissler asked how long it had been since Mr. Oyer had been on-Base. Mr. Oyer responded that it had been at least a year and a half. Mr. Kissler agreed to work with Mr. Oyer when scheduling the tour.

All presentation handouts were made available on the NWS Yorktown Environmental Restoration Program (ERP) public website.

## NWS Yorktown ERP Update

Mr. Price provided the agenda for the ERP Update as follows:

- Overview of the ERP at NWS Yorktown
- Update on select ERP sites that had a milestone achievement or significant work over the last fiscal year, which included the following: Site 1, Site 3, Site 6, Site 8, Site 22, Site 24, Site 25

Mr. Acree noted that Mr. Price has been doing this sort of work for a long time and that a lot of acronyms are used when discussing this work. He reminded the audience that a list of relevant acronyms can be found on the poster boards displayed in the room as well as at the NWS Yorktown ERP public website.

Mr. Price provided an overview of the ERP at NWS Yorktown and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process and identified where each of the NWS Yorktown sites are in the CERCLA process. Mr. Price discussed that there are two programs within the ERP—the Installation Restoration Program and the Munitions Response Program (MRP)—and identified that only one of the NWS Yorktown sites falls within the MRP (UXO 2). Mr. Price then provided the following individual site updates:

- Site 1, Dudley Road Landfill: A Record of Decision (ROD) is in place for soil (1999) with a removal action (RA), including installation of a soil cover, removal of surface debris, and excavation and offsite disposal of impacted soils completed in 2000. Fieldwork associated with the pre-remedial design (RD) is ongoing this summer with the objectives of determining the extent of the source area for the RD (soil excavation) and determining groundwater chemicals of concern concentrations and assessing conditions for monitored natural attenuation (MNA). The Proposed Plan is in regulatory review. A ROD is in development, recommending no further action (NFA) for sediment and surface water and active remediation of groundwater through soil source removal, installation of a subgrade biogeochemical reactor, groundwater performance monitoring, and land use controls (LUCs). This site is also a part of the ongoing Basewide per- and polyfluoroalkyl substances (PFAS) remedial investigation (RI).
- Site 3, Group 16 Magazine Landfill: A NFA ROD is in place for soil and a groundwater pre-RD investigation was completed in 2021. A ROD for groundwater, surface water, and sediment was finalized in 2023. The ROD includes active remediation for groundwater through enhanced in situ bioremediation, which includes injection of emulsified vegetable oil (EVO), a food-grade oil substrate with associated groundwater monitoring and LUCs. The ROD includes NFA for surface water and sediment. The RD is in regulatory review and the contract for the groundwater RA was awarded in 2024, with the RA planned for 2025.
- Site 6, Explosives-Contaminated Wastewater Impoundment: A ROD is in place for soil, groundwater, surface water, and sediment within the three operational units consisting of the following: Impoundment Area – long-term monitoring of surface water, sediment, and groundwater (interim action); Flume Area – excavation and ex situ bioremediation of soil and sediment, pressure washing of the flume, and LUCs; Excavated Area – soil cover and LUCs. A Phase II RI Report was finalized in 2023 which included investigation of the Plant 2 Investigation Area following demolition of the site buildings/structures in 2012. The Excavated Area soil cover remedy was never implemented and the 2023 Five-Year Review identified an action item to perform measures to address potential unacceptable ecological risk for zinc in surface soil. To address the impacted soil in the Excavated Area a contract was awarded in 2024 for a non-time-critical removal action (NTCRA), and work is planned for 2025. This work will include excavation and offsite disposal of zinc-impacted surface soil to mitigate potential ecological risk. A Feasibility Study (FS) is being conducted to evaluate sitewide groundwater and soil within the Plant 2 Investigation Area. The objectives of this FS include evaluating remedial alternatives to mitigate potential risks to human and ecological receptors from exposure to

constituents of concern (COCs) in groundwater and soil and providing rationale for NFA for surface water and sediment outside of the Impoundment Area.

- Site 8, NEDED Explosives-Contaminated Wastewater Discharge Area: A Supplemental RI (SRI) was completed in 2020. This effort evaluated soil and groundwater in the previously inaccessible area of the site and identified potential unacceptable risks to future residents from exposure to metals in soil and metals, explosives, and volatile organic compounds in groundwater. Pre-FS groundwater sampling was completed in 2023 to evaluate the potential for natural attenuation of COCs in groundwater to determine whether MNA is a viable remedy for groundwater at the site. A pre-FS report is being developed for MNA evaluation. An FS is anticipated to be completed in 2025.
- Site 22, Burn Pad: A NFA ROD for soil was signed in 2003. A NFA ROD for surface water and sediment was signed in 2011. A ROD for groundwater was signed in 2012. This groundwater ROD included a remedial action objective of reducing trichloroethene (TCE), vinyl chloride (VC), and hexogen (RDX) and preventing exposure until remediated, selecting in situ bioremediation of RDX and MNA of TCE and VC. The Pre-RD Investigation in 2014 and 2017 recommended further delineation of COCs in groundwater and conducting a pilot study for TCE and VC, incorporating a technology that promotes treatment of perchlorate, 1,4-dioxane, and RDX and does not adversely affect concentrations of PFAS. A Remedy Optimization pilot study, including additional sampling (2022, 2023) and installation of the subgrade biogeochemical reactor (SBGR) (2023), is ongoing. Performance monitoring samples will be collected quarterly through August 2024 and a report for initial 12 months of SBGR operation will be submitted in 2025. The SBGR pilot study is planned for continued operation for 12 months after August 2024. This site is included in the ongoing Basewide PFAS RI.
- Site 24, Aviation Field: Groundwater was evaluated in a RI and the Navy initiated an NTCRA in 2016 to address waste and impacted soil. Munitions and radiological materials were discovered during the NTCRA, delaying the project. The Navy coordinated with the Joint Munitions Command to properly dispose of the radiologically impacted materials in 2023. A Data Gap RI is planned for 2025 to further investigation groundwater and soil.
- Site 25, Building 373 Rocket Plant: Soil, groundwater, surface water, and sediment were investigated under a RI in 2021 with only soil requiring further action. An FS was finalized in 2023 for soil excavation (three small hot-spot areas) and offsite disposal. The Proposed Plan is in regulatory review; the ROD for the soil remedial action is being developed.

Mr. Kissler asked whether the Radiological Affairs Support Office (RASO) was involved in addressing the radiological issues at Site 24, Mr. Acree confirmed RASO was involved.

Mr. Price provided contact information and the NWS Yorktown ERP public website for further information, and pointed out the public has 10 days to submit questions following the RAB meeting. Mr. Price also stated that the presentation is available on the website.

## PFAS Investigation Overview

Mr. Price presented the PFAS update for NWS Yorktown. Mr. Price began the presentation by providing background on PFAS, describing that these are a family of manufactured chemicals that are very persistent in the environment and that for naval installations the primary source is firefighting foam.

Mr. Price presented the current analytical method and screening levels used when evaluating environmental media. Navy guidance is to use EPA Analytical Method 1633, reporting 40 PFAS compounds in soil, groundwater, sediment and surface water. The Department of Defense-approved EPA human health screening levels are available for eight compounds (perfluorooctanoic acid [PFOA], perfluorooctanesulfonic acid [PFOS], perfluorobutanesulfonic acid [PFBS], perfluorohexanesulphonic acid [PFHxS], perfluorononanoic acid [PFNA], perfluorohexanoic acid [PFHxA], perfluorobutanoic acid [PFBA] and hexafluoropropylene oxide dimer acid [HFPO-DA]) citing the November 2023 Regional Screening Level update. The Navy-approved ecological screening values are available based on literature review and current state of science.

Mr. Price noted that five sites at NWS Yorktown are recommended to be carried forward to the RI phase of investigation and proceeded to review the previous investigations completed. The Preliminary Assessment was finalized in October 2021, including a desktop research phase to review site history, determining whether a potential source exists, and determining whether investigation is warranted. A total of 75 areas were screened with 9 areas of interest recommended for a Site Inspection (SI), including the following: Site 1 Dudley Road Landfill, Site 4 Burn Pad Residue Landfill, Site 22 Burn Pad, Building 461 Fire Station No. 14, SSA3 Fire Training Pits and Vicinity, Building 24 (Betty Warehouse), Building 27, Building 71 Former Fire Station, and 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. The investigation aimed to determine whether PFAS are present at concentrations warranting further evaluation and included installation of 35 monitoring wells and collection of 47 groundwater samples, and collection of 78 soil samples. The SI Report, detailing results of the work completed, was finalized in December 2023.

The results of the SI recommend the following for each site: Site 1 will proceed to the RI, Site 4 and Site 22 will proceed to the RI as a combined site, Building 461 and SSA3 will proceed to the RI as a combined site, Site 24 will proceed to the RI, and Building 703 will proceed to the RI. NFA is recommended for Building 27 and Building 71 at this time.

Mr. Price specified the use and limitation of an RI, stating that RIs are designed to collect enough data and information to make human health and ecological risk-based cleanup decisions that include delineating nature and extent of PFAS, identify Applicable or Relevant and Appropriate Requirements, identify constituents of potential concern (COPCs), assess potential for risk to human and ecological receptors, support the FS 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). Mr. Price noted that 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.

Mr. Price summarized the steps of an RI including development of a work plan (Uniform Federal Policy-Sampling and Analysis Plan [UFP-SAP]) estimated to take approximately 8 months, fieldwork and data collection estimated to take approximately 3 months, laboratory analysis and data management estimated to take approximately 2 months, data analysis and risk assessment estimated to take approximately 3 months, data gap fieldwork and data collection (if needed) estimated to take approximately 3 months, and reporting estimated to take approximately 10 months. Mr. Price noted that the timeline presented is a best-case scenario and as shown on the poster board outlining the CERCLA process, the RI phase can take up to 5 years to complete.

## Questions and Comments

Mr. Acree presented a slide with contact information and stated that questions can be submitted 10 calendar days after the RAB meeting via email or phone to the NWS Yorktown Public Affairs Office or Mr. Kissler.

Mr. Acree opened the floor for any questions or comments. No questions or comments were received.

## Closing Remarks

Mr. Kissler expressed his appreciation for the attendance and participation of attendees. He confirmed that he would work to organize a Base visit and additional information will be shared when it becomes available.

Mr. Acree thanked attendees and adjourned the meeting. The meeting concluded at 6:50 p.m.

## Next RAB Meeting

Date and Time: June 2025 (exact date and time to be determined; the meeting will be advertised on the public website, NWS Yorktown social media, *WYDaily* (Williamsburg Yorktown Daily online news publication), and in the *Daily Press* and *Virginia Gazette* newspapers)

Location: To be determined (the meeting will be advertised on the public website, NWS Yorktown social media, *WYDaily* (Williamsburg Yorktown Daily online news publication), and in the *Daily Press* and *Virginia Gazette* newspapers)

## Points of Contact for Questions and Comments, or to Request Additional Information

Mr. Melvin Acree, NAVFAC Mid-Atlantic RPM for NWS Yorktown, [melvin.l.acree.civ@us.navy.mil](mailto:melvin.l.acree.civ@us.navy.mil) or (757) 341-1597

Mr. Jeff Kissler, Environmental Program Director for NWS Yorktown, [john.j.kissler.civ@us.navy.mil](mailto:john.j.kissler.civ@us.navy.mil) or (757) 887-4086

NWS Yorktown Public Affairs Officer, (757) 887-4939

NAVFAC Public Affairs Officer, [NAVFAC\\_ML\\_PAO@navy.mil](mailto:NAVFAC_ML_PAO@navy.mil) or (757) 341-1410 or 1411

## Public Website

<https://www.navfac.navy.mil/Business-Lines/Environmental/Products-and-Services/Environmental-Restoration/Mid-Atlantic/Yorktown-NWS/>



Attachment 1  
Public Notice



**PUBLIC NOTICE**  
**RESTORATION ADVISORY BOARD (RAB) MEETING**  
**Naval Weapons Station (NWS) Yorktown**

Tuesday, July 16, 2024  
6:00 – 7:15 P.M.

**Yorktown Library**  
8500 George Washington Memorial Highway  
Yorktown, VA 23692

**The Public is Invited to Attend**

NWS Yorktown is inviting the community to participate in the RAB meeting to be informed of Environmental Restoration Program (ERP) issues, investigations, and cleanups. The ERP addresses past contamination to protect human health and the environment and relies on public awareness and engagement in the process. This is your opportunity to participate by providing direct input during this meeting. NWS Yorktown, the Virginia Department of Environmental Quality, and the U.S. Environmental Protection Agency are committed to the RAB, which symbolizes our commitment to maintaining open dialog with impacted communities as we work together to clean, protect, and restore the environment. ***Please note: Although the RAB is open to the public, there will only be a limited amount of time for public questions following the scheduled RAB presentations.***

This meeting will be held in-person and online. The public is welcomed to attend the RAB in-person, by phone, or virtually through the free webinar tool Microsoft (MS) Teams. Virtual attendees will be able to join the webinar up to 30 minutes prior to the start of the meeting. For those using the MS Teams application, please allow time for downloading to your computer or mobile device. If you do not wish to download the application, attendees may also choose "Continue in Browser" to access the meeting.

**Virtual Meeting:** <https://tinyurl.com/NWSY-July-2024-RAB>

**Meeting ID:** 284 209 694 653

**Passcode:** AGsTgc

**Call in Phone Number:** (469) 214-8538

**Phone Conference ID:** 504 010 263#

A link to the virtual meeting and presentations for the meeting will be posted to the public website under Community Outreach. For additional information regarding the RAB Meeting or the ERP at NWS Yorktown visit our website:

<https://www.navfac.navy.mil/Business-Lines/Environmental/Products-and-Services/Environmental-Restoration/Mid-Atlantic/Yorktown-NWS/>

or contact the Installation Public Affairs Officer  
Phone: (757) 887-4939