







## **ENVIRONMENTAL INVESTIGATION AND RESTORATION**

Naval Weapons Station Yorktown Yorktown, Virginia

October 2022

Environmental investigation and restoration activities at Naval Weapons Station (NWS) Yorktown in Yorktown, Virginia have historically been completed through the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) process. In this process, engineers and scientists identify risks to human and ecological receptors, develop solutions to address those risks, and then implement those solutions (see CERCLA Process Overview, page 3). The success of the Environmental Restoration Program (ERP) relies on ongoing public awareness and engagement in cleanup milestones.



## **Site Description**

NWS Yorktown is an 8,881-acre federal facility located in York and James City Counties, and the City of Newport News Virginia (Figure 1). NWS Yorktown is bound on the northwest by Cheatham Annex; on the northeast by the York River and the Colonial National Historic Parkway; on the southwest by Route 143 and Interstate 64; and on the southeast by Route 238 and the town of Lackey.

Originally named the Naval Mine Depot, NWS Yorktown was established in 1918 to produce naval mines for the North Sea barrage during World War I. For 20 years after World War I, the depot continued to receive, reclaim, store, and

issue mines, depth charges, and other weapons. During World War II, the facility was expanded to include three TNT loading plants and new torpedo overhaul facilities. A research development laboratory and for experimentation with high explosives was established in 1944. In 1947, a quality evaluation laboratory was developed to monitor special tasks assigned to the facility which included the design and development of depth charges and advanced underwater weapons. August 7, 1959, the depot was renamed NWS Yorktown. Today, the primary mission of NWS Yorktown is to provide responsive, quality support for explosive ordnance storage, maintenance, logistics, support services; expeditionary logistics training and operations; warfare training for Sailors, Marines, and other Services; and to serve as a premier recreational destination for servicemembers and dependents.

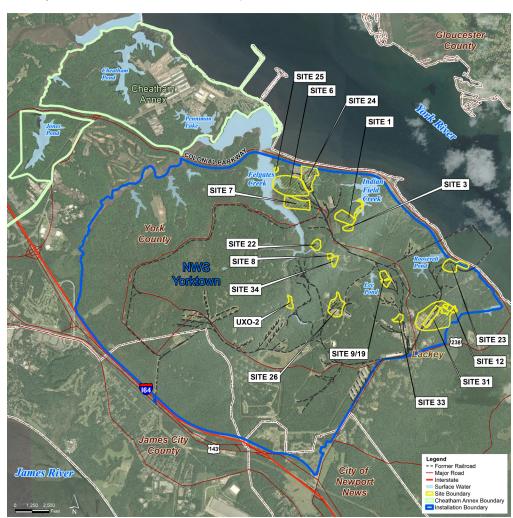


Figure 1. NWS Yorktown Site Map



### **Current Site Status**

In October 1992, NWS Yorktown was placed on the National Priorities List, which required all subsequent activities for Navy environmental restoration sites be conducted under CERCLA procedures. Currently, 12 sites at NWS Yorktown have been closed out with a No Further Action Final Record of Decision or Decision Document.

There are 17 active sites, including 12 under investigation, 2 at the decision stage (Sites 1 and 3), 1 in the remedial design phase (Site 22), 1 undergoing cleanup (Site 24), and 1 with the remedy in place that is being monitored (Site 12).

### Remedial Investigation/Feasibility Study:

- Site 6 Explosives Contaminated Wastewater Impoundment, Flume Area and Excavation Area (Plant 1) and Building 110 and Environs (Plant 2)
- Site 7 Plane 3 Explosives-Contaminated Wastewater Discharge Area
- Site 8 NEDED Explosives-Contaminated Wastewater Discharge Area
- Sites 9 and 19 Plant 1 Explosives-Contaminated Wastewater Discharge Area and Conveyor Belt Soils at Building 10
- Site 23 Building 428 Teague Road Disposal Area
- Site 25 Building 373 Rocket Plant
- Site 26 Building 1816 Mark 48 Waste Otto Fuel Tank
- Site 31 Barracks Road Landfill Industrial Area
- Site 33 Sand Blasting Grit Area
- Site 34 Building 537 Discharge to Felgates Creek
- UXO-2 Turkey Road Landfill

#### **Proposed Plan:**

Site 1 – Dudley Road Landfill

#### **Record of Decision:**

Site 3 – Group 16 Magazine Landfill

#### Remedial Design (Remedy Optimization):

Site 22 – Burn Pad

#### **Removal Action Ongoing:**

Site 24 – Aviation Field

## Remedial Action (Long-Term Monitoring):

Site 12 – Barracks Road Landfill

## **Restoration Advisory Board**

The Restoration Advisory Board (RAB) is an important part of the community relations program for NWS Yorktown. NWS Yorktown invites the community to participate in the RAB to ensure continued protection of public health and restoration of land and water. The RAB relies on ongoing public awareness and engagement in the ERP cleanup process, as public participation is critical to our ability to clean, protect, and restore the environment.

RAB meetings are typically held once a year. Meeting dates and times can be found in the Community Outreach tab of the NWS Yorktown Public Website: https://go.usa.gov/xJfZE.

## For More Information, Contact:

#### Navy

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#### **USEPA**

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### **VDEQ**

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## **Information Repository**

Information for NWS Yorktown is available to the community at the following location: York County Public Library – Yorktown 8500 George Washington Memorial Highway Yorktown, Virginia 23692 (757) 890-3377

Review the Administrative Record at the NWS Yorktown public website: <a href="https://go.usa.gov/xJfZE">https://go.usa.gov/xJfZE</a>



## **CERCLA Process Overview**

Law passed in 1980 to address releases, or potential releases, of hazardous substances into the environment. Provides the federal government authority to respond to sites that exist due to the improper disposal or management of waste. These sites include former military bases, manufacturing facilities, processing plants, landfills, and mining sites. CERCLA is the framework for the federal government to follow in order to assess and clean up contaminated sites.

### STAGE I: INVESTIGATION

## 1 DISCOVERY

(Site identified through the Federal Agency Hazardous Waste Compliance Docket)

Certain sites are identified as requiring evaluation. The evaluation determines if the site poses a risk to public health or the environment under CERCLA, and ensures this information is available to the public.

## 2 PRELIMINARY ASSESSMENT / SITE INSPECTION (PA/SI) ♦

(Is there a problem?)

PA/SI involves review of historical records, field visits, possible interviews with current or former employees, and limited sampling of soil and/or water to determine the likelihood of chemicals, and identify possible contamination sources. Some sites, based on results may be placed on the National Priorities List (NPL)\* by the United States Environmental Protection Agency (USEPA).

# 3 REMEDIAL INVESTIGATION (RI) ♦ / RISK ASSESSMENT (RA)

(What are the risks?)

Involves more intensive sampling and analysis of soil and water at the site. Once this data is collected, a Risk Assessment is conducted. These studies determine which wastes are present, where they are, whether they are moving into the groundwater, and whether there is a risk to public health and the environment. Sites that pose an imminent threat to public health are cleaned up immediately with removal actions.

## **4** FEASIBILITY STUDY

(How can it be cleaned up?)

This study determines the best technology for cleaning up a site. Project managers consider risk, compliance with federal and state regulations, ability to reduce the toxicity, mobility, and volume of the chemical(s), ability to implement a remedial alternative, long-term effectiveness, short-term effectiveness, cost, state acceptance, and community acceptance. Project managers plan strategies to reduce or prevent risk by limiting or stopping exposure to chemicals.

## STAGE II: CLEANUP

## 5 PROPOSED PLAN •

#### (Comment Period)

Identifies and explains the rationale for the preferred cleanup method. to address any threats to human health and the environment at the site. Describes all remedial alternatives that were evaluated, and the criteria used to conduct the evaluation and comparison. Solicits public review and comment on all alternatives presented. Written expressly for public review.

## 6 RECORD OF DECISION (ROD) •

(Legal Certification of Final Decision)

Identifies selected cleanup remedy. Provides a plan for site design and remediation, and documents the extent of human health or environmental risks posed by the site.

# STAGE III: SITE CLOSURE or LONG-TERM MANAGEMENT

## 7 REMEDIAL DESIGN/ACTION (RD/RA) ◆

(Detailed Plan and Cleanup Actions)

The design specifications for the selected cleanup remedy to approved environmental standards. Implementation of the cleanup remedy through construction.

# 8 OPERATION AND MAINTENANCE MONITORING

(Cleanup Goals Achieved; May Include Land Use Controls)

Ongoing monitoring requirements for post-remediation are based on the effectiveness of the Remedial Action. Sampling and analysis may be required to confirm the site chemicals are no longer present above acceptable action levels and to begin site closure activities.

#### Notes:

Each action item (numbers 1–7) can take anywhere from 1 to 5 years to complete, and action item number 8 may occur over an extended period of time.

- Action item where public involvement is key.
- \* The NPL, an information management tool, contains a list of the most serious sites identified for long-term cleanup. Sites receiving a Hazard Ranking System (HRS) score of 28.50 or greater are eligible for placement on the NPL. Sites are listed on the NPL only after, completion of the HRS, public solicitation of comments, and after all comments have been addressed.