FINAL

Site Management Plan
Fiscal Year 2023-2024

Environmental Restoration Program

Naval Support Facility Indian Head
Indian Head, Maryland

Naval Facilities Engineering Systems Command
Washington

October 2023

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EXECUTIVE SUMMARY

This Site Management Plan (SMP) was updated by NAVFAC Washington to present the activities that were conducted and those that are planned for sites at the Naval Support Facility Indian Head (NSFIH). This SMP addresses 51 Installation Restoration Program (IRP) sites,10 Munitions Response Program (MRP) sites, and 15 Areas of Concern (AOCs) at the Main Area , as well as 12 IRP sites, 21 MRP sites, and 10 AOCs at the Stump Neck Annex. There is one additional MRP site located off the installation. Table ES-1 provides a summary of site information.

Some of the previous SMPs for NSFIH did not include the Stump Neck Annex, because the Annex was being addressed by a separate program under a Resource Conservation and Recovery Act (RCRA) Corrective Action Permit. However, upon finalization of the Federal Facilities Agreement (FFA) between the Department of the Navy and United States Environmental Protection Agency (EPA), the RCRA sites at the Stump Neck Annex were included under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) program of the Main Area.

The schedules in this SMP were prepared to include the traditional steps for addressing contaminated sites under CERCLA. Existing documentation published in connection with past investigations and studies were used to describe completed activities and recommendations for future work. This SMP should be considered a “living document” because the information and schedules that are provided will be updated periodically as the work progresses at each site and more definitive information becomes available.

For the Main Area of NSFIH, 1 IRP sites is in Site Screening Investigation (SSI) phase while 7 IRP sites and 7 MRP sites currently are undergoing a Remedial Investigation (RI) / Feasibility Study (FS). No further action has been recommended for one MRP site. Five sites are RC and are in the Long-Term Monitoring (LTM) phase. Three sites are in the Remedial Action-Operation (RA-O) phase. Institutional Controls (ICs) are in place at the Lab Area (i.e., Sites 14, 15, 16, 49, 50, 53, 54, and 55), UXO 32, and Sites 11, 12, 17, 21, 28, 42, 47, and 57. In addition to periodic Land Use Control (LUC) inspections, these sites undergo Five-Year Reviews. No Further Action (NFA) is either required or recommended for the remaining 28 sites (IRP Sites 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 18, 19, 20, 23, 24, 25, 26, 27, 39, 40, 44, 45, 46, 48, 51, 52, and 56, and MRP Site UXO 29). One site (Site 68) is in the Interim Removal Action (IRA) phase. Fifteen AOCs have undergone a desktop audit. As a result of the desktop audit, two of the AOCs were incorporated into IRP Site 11 (currently RC in LTM phase), one became an MRP site and is in the RI/FS phase, and twelve were recommended as NFA.

For the Stump Neck Annex, four sites are active ranges and will not be addressed under the IRP. Two IRP sites are in the SSI phase while one IRP site and thirteen MRP sites are in the RI/FS phase. One MRP site (small arms/skeet range) is in the LTM phase following an IRA. Two sites (Site 36 and 38) are in the RC/LTM phase. Both of these sites have ICs in place and undergo periodic LUC inspections and Five-Year Reviews. NFA has been recommended for the remaining ten sites at the Annex (IRP Sites 32, 33, 34, 37, and 60, and MRP UXO 14, 16, 17, 22, and 25). The Stump Neck Annex also includes 13 AOCs. During a desktop audit, these AOCs were categorized to remain AOCs, remain RCRA facilities, be closed with an NFA decision document, or undergo a Site Screening Process (SSP) (as defined in the FFA) or an RI/FS. Currently, one AOC is managed under RCRA and six AOCs require NFA with a decision document. Solid Waste Management Unit (SWMU 14) now is considered an IRP site and is in the RI/FS phase (but it has not been assigned an IRP site number). One AOC is considered an active range (NFA under the IR), and the remaining four AOCs are undergoing an RI/FS.

In the Final Preliminary Assessment for PFAS (March 2023), it was determined and agreed upon by the Navy, USEPA and MDE that eight AOCs were recommended for further investigation and carried forward into the SI under Site 71. Based on the Draft Site Inspection Report for PFAS (July 2023), six PFAS AOCs were recommended to move forward to the RI (designated as new Sites 72-76, and re-opening of Site 21), Four of the PFAS RI sites are located at the Main Area and two are located at Stump Neck Annex. One site (Building 116) remains under Site 71 in the SI phase pending additional data gathering and one PFAS AOC was recommended for NFA.

Regulatory concurrence was not achieved on the following AOC sites where the Navy's PA recommended no additional evaluation at this time:

- Building 3153 – Wastewater Treatment Plant
- Sanitary Treatment Plant #2 – Building 1472
- Building 700 – Wash Rack/Hobby Shop
- Building 1420 – Hobby Shop
- Building 3034 – Vehicle Washdown Facility
- Wash Rack 1858
- Site 11 – Caffee Road Landfill
- Site 12 – Town Gut Landfill
- Site 16 – Laboratory Chemical Disposal
- Site 17 – Disposed Metal Parts Along Shoreline
- Site 42 – Olsen Road Landfill
- Site 14 – Old Waste Acid Disposal Pit
- Site 49 – Chemical Disposal Pit
- Site 66 – Turkey Run Disposal Area
- Building 859 – Storage Site
- SWMU 21 – Caffee Road Decontamination Burn Point (SWMU 38 – Caffee Road Waste Oil Storage Area)
- SWMU 20/UXO 20 – Safety Thermal Treatment Point
- SWMU 19 – Disposal Area No. 1 – Stump Neck Annex
- SWMU 20 – Disposal Area No. 2 – Stump Neck Annex
- Site 38/SWMU 1 – Rum Point Landfill – Stump Neck Annex
- SWMU 14 – Photographic Lab Septic Tank System – Stump Neck Annex
- Site 59/SWMU 3 – Chicamuxen Creek's Edge Dump Site A – Stump Neck Annex
- Site 60/SWMU 4 – Chicamuxen Creek's Edge Dump Site B – Stump Neck Annex
- SWMU 15 – Spent Photographic Solution Storage – Stump Neck Annex
- Site 31/SWMU 23/UXO 7 – Old Demolition Range – Stump Neck Annex

Additional documentation of the non-concurrence items is captured in comments and response to comments in the following document: Final Preliminary Assessment for Per- and Polyfluoroalkyl Substances, Naval Support Facility Indian Head, MD (March 2023). At a future date, these sites will need to be discussed by the team to determine a path forward and final disposition.

The fourth Five-Year Review for the installation is scheduled to be completed in 2023. The remedies for Site 11, Lab Area, 36, 38, 42, and UXO 32 were determined to be protective, while the remedies for Sites 12, 17, 21, 28, 47, and 57 were determined to be short-term-protective. The next Five-Year Review is scheduled for completion in 2027.

With the finalization of the FFA, these areas are addressed under the CERCLA Program, and the SMP provides the schedules for these areas.

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1.0 INTRODUCTION

NAVFAC Washington prepared this Site Management Plan (SMP) for the Naval Support Facility Indian Head (NSFIH), Maryland. The purpose of this SMP is to provide site-specific background information, present the activities that are currently being conducted or are planned at NSFIH during Fiscal Years 2023 through 2024, and project the long-term progress of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) program at the NSFIH in accordance with the Department of Navy (Navy) Installation Restoration Program (IRP) and Munitions Response Program (MRP) (collectively the Navy Environmental Restoration Program [ERP]).

1.1 DESCRIPTION OF THE INSTALLATION

NSFIH is located in Charles County, Maryland, 30 miles south of Washington, D.C. NSFIH has been active since 1890 and assumed its current name in 2005. Historical names of the facility (site) include the following: Naval District Washington-Indian Head (NDWIH); Indian Head Division, Naval Surface Warfare Center (IHDIV-NSWC); Naval Ordnance Station (NOS); Naval Propellant Plant; Naval Powder Factory; and Naval Proving Grounds. The site collectively measures 3,500 acres and is positioned along the Potomac River at the confluence of Mattawoman Creek, as shown on Figure 1-1. The Main Area, on the Cornwallis Neck Peninsula, is approximately 2,500 acres. The Stump Neck Annex, separated from the Main Area by Mattawoman Creek, is approximately 1,000 acres. Included as part of the Main Area are Marsh Island and Thoroughfare Island located in Mattawoman Creek. The Bullitt Neck Annex measures approximately 50 acres and is bounded by Mattawoman Creek to the north, east, and west and private property to the south. The two islands and Bullitt Neck Annex are not on the National Priorities List (NPL) with the Main Installation and Stump Neck Annex.

Operations are primarily located at the Main Area. The main tenant is IHDIV-NSWC. Their principal missions on the Main Area of the facility are as follows:

- Provide services in energetics for all warfare centers through engineering, fleet and operational support, manufacturing technology, limited production, and industrial base support.

- Provide research, development, testing, and evaluation of energetic materials, ordnance devices and components, and other related ordnance engineering standards including chemicals, propellants and their propulsion systems, explosives, pyrotechnics, warheads, and simulators.

- Provide support to all warfare centers, military departments, and the ordnance industry for special weapons, explosive safety, and ordnance environmental issues.

The Stump Neck Annex of NSFIH is occupied primarily by tenant commands. Until recently, the Stump Neck Annex was occupied by two tenant commands, the Naval School Explosive Ordnance Disposal (NAVSCOLEOD) and Naval Explosive Ordnance Disposal Technology Division (NAVEODTECHDIV). The mission of NAVSCOLEOD was the training of active military personnel in performing explosive ordnance disposal (EOD) operations. In 1998, most operations at NAVSCOLEOD were relocated to Pensacola, Florida. Currently, NAVEODTECHDIV is the primary tenant command at the Stump Neck Annex. Their missions are as follows:

- Provide EOD technology and logistics management.
- Develop war-essential elements of intelligence, equipment, and procedures to counter munitions, both United States and foreign, as required to support Department of Defense (DOD) components and the peacetime security needs of other agencies.

1.2 ENVIRONMENTAL HISTORY

Environmental studies at NSFIH and all other Navy facilities are conducted under the Navy IRP. The IRP was authorized by the Chief of Naval Operations under Instruction OPNAVINST 5090.1 dated May 2, 1983. Funding to pay for these environmental studies is allocated for Navy sites under the Environmental Restoration, Navy (ERN) Account.

The IRP parallels CERCLA (see Figure 1-2). Under CERCLA, abandoned waste sites that potentially contained hazardous constituents undergo several phases of environmental study that would ultimately determine the need for a remedy and, if necessary, the selection and implementation of the remedy for the site. The phases of investigation include the Preliminary Assessment (PA) / Site Inspection (SI), Remedial Investigation (RI) / Feasibility Study (FS), Record of Decision (ROD), and Remedial Design (RD) / Remedial Action (RA). CERCLA also provides for removal actions if a site poses an immediate threat to human health or the environment.

The NSFIH IRP includes a total list of 76 sites (see Table 1-1). Sites numbered 1 through 29, 39 through 57, and 66 through 74 are located on the Main Area of the facility. Sites numbered 30 through 38, 58 through 65, and 75 through 76 are located on the Stump Neck Annex. Site 71 initially included multiple per- and polyfluoroalkyl (PFAS) AOCs located on both the Main Area and Stump Neck Annex; however, as of the Draft PFAS SI Report (July 2023), Site 71 now is named Fire Training Areas-5 and includes only Building 116–Main Supply Building). SWMU 14 has become an IRP site, but has not been assigned an IRP site number.

Between 1990 and 2001, the sites at the Stump Neck Annex were managed under a Resource Conservation and Recovery Act (RCRA) Corrective Action Permit that provided for a process similar to

CERCLA for site investigation and remediation. However, in 1998 the United States Environmental Protection Agency (EPA) Region 3 made the determination that the Stump Neck Annex was included with NSFIH under the NPL. With this determination, and as a result of the finalization of the Federal Facilities Agreement (FFA) between the Navy and EPA, the RCRA sites at the Stump Neck Annex are now included under the CERCLA program of the Main Area. Section 1.2.1 below describes the environmental history of the IRP at the Main Area of the facility. Section 1.2.2 describes the environmental history of the Stump Neck Annex sites. Table 1-1 lists all IRP sites, MRP sites, and AOCs at the Main Area and the Stump Neck Annex.

1.2.1 NSFIH Main Area

1.2.1.1 Initial Assessment Study (IAS) (Sites 1-29)

The first IRP objective is the collection and evaluation of data and historical evidence of hazardous constituents that might have contaminated the facility or that pose an imminent health hazard on or off the facility. The Navy completed an IAS of NSFIH in May 1983 (NEESA, 1983). The IAS is equivalent to the PA in the CERCLA process. The IAS examined a total of 38 potentially contaminated sites. Sites numbered 1 through 29 are located on the Main Area of the facility. Sites numbered 30 through 38 are located on the Stump Neck Annex. The 29 identified Main Area sites are listed below. Stump Neck Sites 30 through 38 are discussed in Section 1.2.2.

Site 1 Thorium Spill
Site 2 Waste Crankcase Oil Applied to Torrence Road
Site 3 Nitroglycerin Explosion, Nitration Building Area
Site 4 Lloyd Road Oil Spill
Site 5 X-Ray Building, Building 731
Site 6 Hypo Spill, Radiographic Facility Accelerator
Site 7 HMX Spill, Slurry Mix Building
Site 8 Mercury Deposits, Building 766
Site 9 Patterson Avenue Oil Spill
Site 10 Single-Base Propellant Grains Spill Area
Site 11 Caffee Road Landfill
Site 12 Town Gut Landfill
Site 13 Paint Solvents Disposal Area
Site 14 Waste Acid Disposal Pit
Site 15 Mercury Deposits in Manhole, Fluorine Lab
Site 16 Laboratory Chemical Disposal
Site 17 Disposed Metal Parts along Shoreline
Site 18 Hog Island

Site 19 Catch Basins at Chip Collection Houses
Site 20 Single Base Powder Facilities
Site 21 Bronson Road Landfill
Site 22 NG Slums Burning Site
Site 23 Hydraulic Oil Discharges from Extrusion Plant
Site 24 Abandoned Drain Lines
Site 25 Hypo Discharges from X-Ray Building No. 2
Site 26 Thermal Destructor 2
Site 27 Thermal Destructor 1
Site 28 Original Burning Ground
Site 29 The Valley

Of the 38 sites, the IAS recommended further study at Sites 5, 8, and 12 based on the available historical information. Because historical operations at Sites 6 and 25 were similar to those at Site 5, the IAS also recommended additional study at these two sites if further investigation of Site 5 indicated a problem.

The Navy completed a Confirmation Study at NSFIH in September 1985. The Confirmation Study was designed to evaluate the presence or absence of contamination at Sites 5, 8, and 12. The results of the study are documented in the *Naval Assessment for the Control of Installation Pollutants (NACIP) Confirmation Study, Naval Ordnance Station, Indian Head, Maryland* (CH2M HILL, 1985). Sites 5 and 8 were determined to have extensive levels of silver and mercury, respectively. Contamination in the pond adjacent to Site 12, however, was not found to be attributable to the landfill and is suspected to be the result of contamination from farther upstream.

The Navy completed removal actions at Sites 5 and 8 and continued investigations at Site 12. The removal actions involved the excavation of contaminated soil to prevent further transport and migration of the contamination and risks to ecologically sensitive receptors. At Site 5, the Navy removed silver-contaminated soil from one swale on the site in 1992 and additional contaminated soil from another swale on the site in 1995. The soil from the first excavation was encapsulated and placed in the base of a large earthen explosion barrier expansion (the soil represents less than 4 percent of the total volume of the expansion). The soil from the second excavation was used to reclaim a gravel borrow pit on the Stump Neck Annex at NSFIH. At Site 8, the Navy removed mercury-contaminated soil in 1984 and 1995. The soil removed in 1984 was disposed offsite, and soil removed in 1995 was disposed by encapsulating it in the earthen berm of Building 606 and covering it with a 1-foot thick layer of clay.

For Site 12, the Navy conducted a 5-year biomonitoring program, which demonstrated that contamination was not migrating from the landfill to the adjacent pond. An RI was completed in 1999. The RI recommended the preparation of an FS to evaluate methods for mitigating environmental risks and to address regulatory concerns connected with landfill closure requirements. The FS for Site 12 was

completed in January 2001. Subsequently, a Proposed Plan and fact sheet were published for the installation of a 2-foot thick soil cover over the Town Gut Landfill, and a public meeting was held on January 23, 2001. The final design for the remediation of Site 12 was completed in February 2002, and construction was completed in August 2003. A ROD was completed and signed in September 2004.

In 1996, after further review of the original 29 IAS sites of the Main Area, the Navy, EPA, and the Maryland Department of the Environment (MDE) decided that Sites 6, 11, 13, 14, 15, 16, 17, 21, 25, and 28 should undergo RIs because of the potentially higher risks associated with these sites. RIs for all of these sites have since been completed. No further action (NFA) was recommended for Sites 2, 3, 4, 5, 7, 9, 13, 18, 20, 23, 24, 25, and 26. Sites 11, 12, 21, 28, and 42 are considered "Response Complete (RC)" and are in the long-term monitoring (LTM) phase. Sites 14, 15, and 16 are part of the Lab Area (along with Sites 49, 50, 53, 54, and 55) and are considered RC, with Institutional Controls (ICs; or land use controls [LUCs]), in place at the sites. Sites 10, 22, and 29 have been moved to the MRP. The remainder of the original 29 IAS sites entered the Site Screening Process (SSP) (as described in the FFA), which provided for a second evaluation following additional sampling if warranted to confirm the presence or absence of contamination at the sites and the need for further action. In 2010, Site 6 achieved "Site Closeout (SC)" with an NFA ROD following an interim removal action (IRA) (a non-time-critical removal action [NTCRA] in this case) . In 2012, Site 19 and Site 27 achieved SC with an NFA Decision Document following an IRA. In 2013, Site 8 achieved SC with an NFA Decision Document following an IRA. Site 21 achieved RC in 2013 and is currently in the LTM phase. Sites 17 is in the RA-O phase following remedial action implementation in 2015. A ROD was signed in 2014 for Site 28 following a successful IRA. Finally, in 2016, Site 1 achieved site closeout and an NFA Decision Document was signed.

1.2.1.2 Supplemental PA (Sites 39-55)

The Navy completed a Supplemental PA Report for NSFIH in January 1992. The PA was an addendum to the IAS and examined an additional 17 sites located on the Main Area. The 17 additional sites are listed below. All but Sites 51 and 52 were recommended for further action (e.g., additional investigation, contaminant removal, etc.).

Site 39 Silver Release to Sediments
Site 40 Palladium Catalyst in Sediment
Site 41 Scrap Yard
Site 42 Olsen Road Landfill
Site 43 Toluene Disposal
Site 44 Soak-Out Area
Site 45 Abandoned Drums
Site 46 Cadmium Sandblast Grit
Site 47 Mercuric Nitrate Disposal Area

Site 48 NG Plant Disposal Area
Site 49 Chemical Disposal Pit
Site 50 Building 103 Crawl Space
Site 51 Building 101 Dry Well
Site 52 Building 102 Dry Well
Site 53 Mercury Contamination of the Sewage System
Site 54 Building 101
Site 55 Building 102

As a follow-up to the Supplemental PA, the Navy conducted an SI on Sites 39 through 50 and Sites 53 through 55 in two phases. SI Phase I focused on Site 42, Olsen Road Landfill, and SI Phase II focused on the remainder of the sites. Based on the results of the SI, all the sites were recommended for further study to determine the nature and extent of contamination and to identify the appropriate remedial action, if any.

The Navy completed work plans for the RI of these sites in 1997. RI Reports for Sites 41, 42, and 44 were completed in 1999. At Site 41, the RI recommended an FS to evaluate methods for mitigating human health and environmental risks posed by the contaminated surface soil at the site. The FS for Site 41 was completed in January 2001. Subsequently, a Proposed Plan and fact sheet were published for removing contaminated soil and removing polychlorinated biphenyl (PCB) contamination from the surface of the concrete slab within the Scrap Yard (Site 41), and a public meeting was held on February 20, 2001. The final design for the remediation of Site 41 was completed in mid-2002, and construction began in November 2002. Due to discovery of munitions items, Site 41 was transferred to the MRP as UXO 32 in March 2004. The remedial action was completed under removal action authority via an IRA. Following completion of the IRA, a UXO 32 ROD was signed in 2014 with a remedy of LUCs for soil. Groundwater at UXO 32 is being addressed under the Site 70 RI. At Site 42, the RI recommended an FS to evaluate methods to address regulatory concerns connected with landfill closure requirements. Additional field investigations were conducted during January and February 2002 to better define the extent of the landfill and to assess the possibility that groundwater contamination may have migrated downgradient from the landfill. Consequently, the FS was completed in June 2002. Later, a Proposed Plan and fact sheet were published for the installation of an impermeable landfill cap, and a public meeting was held on July 7, 2005. The final design for remediation of Site 42 was completed in March 2005, and construction was completed in May 2006. Site 42 is considered RC and is in the LTM phase. The RI for Site 44 recommended NFA, so no FS was prepared. A Proposed Plan and fact sheet for No Action were published, and a public meeting was held on February 20, 2001. The NFA ROD for Site 44 was signed in September 2002. At Site 49, the chemical disposal pit was removed in May 2001. Sites 49, 50, 53, 54, and 55 are considered part of the Lab Area (along with Sites 14, 15, and 16). These sites are considered RC and have LUCs in place at the sites. A ROD to address groundwater contamination at Site 47 was signed in 2013 and the Remedial Action has been completed. That site is currently in the RA-O phase.

SSP investigations, which recommended NFA, were conducted at Sites 51 and 52 during January and February 2002. Site 43 is undergoing an RI/FS. RIs have been completed for the remainder of the 1992 PA sites, and Sites 39, 40, 45, 46, and 48 were recommended for NFA.

1.2.1.3 Additional Sites (56, 57, 66, 67, 68, 69, and 70)

Since the 1992 PA, seven additional sites have been discovered on the Main Area of NSFIH.

Site 56 Lead Contamination from Industrial Wastewater Outfall (IW) 87
Site 57 Building 292 TCE Contamination
Site 66 Turkey Run Disposal Area
Site 67 Hog-Out Facility
Site 68 Former Building 259 Contamination
Site 69 Building 1018
Site 70 Groundwater Contamination Along Waterworks Way

Based on site sampling, the Navy performed Engineering Evaluations/Cost Analyses (EE/CAs) in 1994 and 1997, respectively, to evaluate the removal action options at Site 56 and Site 57. The Navy conducted a removal action at Site 56 in 1996 that involved the removal of lead-contaminated sediments at outfall IW–87 and from approximately 750 feet of outfall pipe. The sediment was properly disposed offsite. The pipe was then relined to prevent potential lead-contaminated shallow groundwater from infiltrating the pipe, which could deposit lead downgradient of the site. In 1998, the Navy completed a removal action at Site 57 to address infiltration of trichloroethene (TCE) contaminated groundwater into a storm sewer leading to outfall IW-80. Approximately 700 feet of storm sewer were lined to inhibit the accelerated migration of TCE. The Navy completed the RI at Site 57 in July 2000. During August 2001, a field investigation was conducted at Site 57 to collect field data to aid in the evaluation of remedial alternatives during the preparation of an FS. In May 2003, an HRC (hydrogen release compound) pilot study was performed at the site. Previously, a pilot-scale soil vapor extraction (SVE) study was conducted in 1997 to determine if SVE was an appropriate method for removing TCE from the site. The study is mentioned in the RI Report of July 2000 (Section 4.2.3, page 4-5) and states on page 4-6 that “Therefore, it was concluded that the subsurface conditions at Site 57, as experienced during this pilot study, are not well suited to the application of the SVE technology.” The results of the study are contained in the Findings Report Pilot-Scale Soil Vapor Extraction Study (B&R Environmental, 1997b). An EE/CA was finalized in August 2005, and an IRA to address soil contamination at the site was completed in July 2006. The FS was also completed in July 2006. The ROD to move to the RD/RA-O phase at Site 57 was signed in September 2007. A Proton Reduction Technology (PRT) system was installed at the site in May 2015 to enhance monitored natural attenuation (MNA) of groundwater. Site 57 is currently in the RA-O phase and is considered to have its Remedy in Place. Optimization of the remedy began in 2017 in an effort to reduce the amount of time to reach site remediation goals. Site 66 was identified as an unregulated dump site in 2004, and after an SSP was completed, a Site

Investigation began in February 2007 (based on the results of the SSP sampling, it was decided to change the status from an SSP to a Site Investigation). The Site Investigation Report was completed in November 2008. Site 66 is currently in the RI/FS phase. Groundwater contamination was verified at Site 67 in 2006 and has been the subject of various pilot studies, including in situ groundwater treatment and MNA, under the Environmental Security Technology Certification Program. In 2019, an EE/CA was finalized for Site 67 to address soil contamination. A non-time critical soil removal began in February 2021 and is still underway. The groundwater medium continues in the RI/FS phase. Site 68 (formerly AOC 31) was identified during pre-decontamination sampling efforts for Building 259 in January 2011 (elevated metals and energetics in soil). Site 68 underwent an SSP Investigation in 2013 and will be addressed by a non-time-critical removal action under an EE/CA. Site 69 was identified during pre-demolition sampling efforts for Building 1018 in January 2011 (elevated perchlorate in soil). Site 69 is currently in the RD phase after undergoing the SSP in 2013 and RI/FS in 2021. Additionally, following finalization of a Proposed Plan in 2022, a Record of Decision was signed in 2023. Site 70 is a result of groundwater contamination found upgradient of the Scrap Yard (Site 41/UXO 32) during the historical investigations and IRA at UXO 32. Site 70 is currently in the RI/FS phase.

1.2.1.4 Areas of Concern

Sixteen AOCs are being evaluated under the IRP in the Main Area. Fifteen AOCs originally were identified as RCRA solid waste management units (SWMUs), and they are currently inactive. These AOCs have undergone a desktop audit, which involves a thorough review and evaluation of all existing or easily obtainable documentation on the identified areas. Based on this evaluation, the Navy, EPA Region 3, and MDE decided which AOCs should proceed to the SSP and which AOCs will require no action and can be closed out. A summary of the results of the desktop audit appears in Table 1-2. Notations have been added to the table to indicate changes made on decisions to address the SWMUs since the desktop audit was conducted.

In the Final Preliminary Assessment for PFAS (March 2023), eight areas of concern were recommended for further investigation and carried forward into the SI under Site 71. Based on the Draft Site Inspection Report for PFAS (July 2023), six PFAS AOCs were recommended to move forward to the RI (designated as new Sites 72-76, and re-opening of Site 21), Four of the PFAS RI sites are located at the Main Area and two are located at Stump Neck Annex. One AOC site remains under Site 71 in the SI phase pending additional data gathering and one PFAS AOC was recommended for NFA.

1.2.2 Stump Neck Annex

In November 1980, NSFIH submitted a RCRA Part A permit application to the EPA for designation of specific Stump Neck operations as hazardous waste management facilities with interim status. On October 6, 1981, EPA advised Naval Explosive Ordnance Technology Center (now NAVEODTECHDIV) that,

pursuant to Section 3005 of RCRA regulations, the application did not demonstrate that the facility was required to have a permit under Section 3005 of the Act, and the application was returned. However, the EPA did issue an identification number (EPA I.D. No. MD4170090001), and the state of Maryland subsequently issued an interim permit (No. A223A).

The 1983 IAS identified nine sites (Sites 30 through 38) at Stump Neck Annex.

Site 30 Stump Neck Impact Area
Site 31 Old Demolition Range
Site 32 Suspected Tool Burial Site
Site 33 Scrap Metal Pit
Site 34 Tool Burial Site
Site 35 Torpedo Burial Site
Site 36 Closed Landfill
Site 37 Causeway
Site 38 Rum Point Landfill

Sites 36 and 38 were addressed as SSAs and continued under the SSP. The SSP provided for a second evaluation, including some additional sampling, to confirm the presence or absence of contamination at the sites and the need for further action. Final SSP Reports for both sites were completed in 2008. In 2011, Site 36 entered the ”Remedial Action (RA)” phase. Debris removal was completed in 2014 and the site is now in the RC/LTM phase. The RA at Site 38 was completed in 2017 and the site is currently in the RC/LTM phase. Sites 30 and 35 have been included in the MRP. Site 31 is an active range. The SSP fieldwork was completed at Site 37 in June 2011, and an NFA (i.e., No Action) Decision Document was signed in November 2011. NFA also has been recommended for Sites 32, 33, and 34.

Because the facility was identified as a RCRA operating facility, the 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA authorized EPA to require corrective action for releases of hazardous waste or hazardous constituents from SWMUs and other AOCs. The first phase of the corrective action program, as established by EPA, is to conduct a RCRA Facility Assessment (RFA). The RFA includes a preliminary review of all available relevant documents, and a Visual Site Inspection (VSI). The EPA Office of RCRA Programs conducted a RCRA SWMU Investigation of the NAVEODTECHDIV at the NSFIH and issued a final RFA in April 1990. The RFA identified the following 24 SWMUs at the Stump Neck Annex (some of which were already identified in the IAS as indicated below parenthetically):

SWMU 1 Rum Point Landfill (Site 38)
SWMU 2 Range 3 Burn Point
SWMU 3 Chicamuxen Creek's Edge Dump Site A
SWMU 4 Chicamuxen Creek's Edge Dump Site B

SWMU 5	Range 6
SWMU 6	Air Blast Pond
SWMU 7	Scrap Metal Pit (Site 33)
SWMU 8	Tool Burial Site (Site 34)
SWMU 9	Torpedo Burial Site (Site 35)
SWMU 10	Closed Landfill (Site 36)
SWMU 11	Suspected Tool Burial Site (Site 32)
SWMU 12	Waste Oil Storage Site
SWMU 13	Pink Water Treatment Tank
SWMU 14	Photographic Lab Septic Tank System
SWMU 15	Spent Photographic Solution Storage
SWMU 16	Thermal Treatment Tank
SWMU 17	Building 2015 – Chemistry Lab Accumulation Area
SWMU 18	Waste Pile
SWMU 19	Disposal Area No. 1
SWMU 20	Disposal Area No. 2
SWMU 21	Drum Storage Area
SWMU 22	Stump Neck Impact Area (Site 30)
SWMU 23	Old Demolition Range (Site 31)
SWMU 24	Causeway (Site 37)

In December 1990, EPA issued a RCRA Permit for Corrective Action (effective January 24, 1991 and expiring on January 23, 2001). Of the 24 SWMUs, the following six SWMUs were required by permit conditions to undergo further investigation. SWMU 1 had previously been designated as Site 38 during the IAS. SWMUs 2 through 6 were assigned IRP site numbers 58 through 62. The permit required Verification Investigations (VIs) at Sites 38, 60, and 62 and RCRA Facility Investigations (RFIs) at Sites 58, 59, and 61. A draft report for these investigations was completed in January 1998. More recently, Site 62 was moved to the MRP. Sites 58, 59, 60, and 61 have been designated as active ranges and will not be addressed under the IRP.

As indicated above, SWMU 10 (i.e., Site 36) entered the RA phase in 2011 and is undergoing LTM. A ROD for SWMU 1 (i.e., Site 38) was signed in 2014 and the site is currently in the RC/LTM phase. Site 30, Site 31, Site 35, and SWMU 19 have been transferred to the MRP. SWMU 14 is currently in the RI/FS phase. SWMU 13 will be managed under RCRA. SWMU 16 is an active range. Additionally, NFA is planned for the remaining SWMUs.

Pursuant to the requirements of the RCRA Corrective Action Permit, NSFIH notified the EPA Region 3 RCRA Programs Branch in 1991 of three additional SWMUs that were not originally identified in the RFA,

but warranted further investigation. These three sites are listed below. These SWMUs were associated with operations of the Naval School Explosive Ordnance Disposal. The three "school" sites included Sites 63, 64, and 65 (SWMUs 25, 26, and 27), which became inactive with the relocation of the school in 1998. The Navy completed a VI report on the three sites in June 1996. Currently, the Navy is addressing these three sites under the MRP.

Site 63 / SWMU 25	Area 8
Site 64 / SWMU 26	Improvised Explosive Devices (IED)
Site 65 / SWMU 27	Inert Ordnance Disposal (IOD)

1.2.2.1 Areas of Concern

In 1991, the Navy discovered a fourth SWMU (i.e., SWMU 30), which was associated with a dry well that was connected to a laboratory located in Building 2015. SWMU 30 and ten of the twenty-four SWMUs originally identified by the RFA were evaluated under the IRP as AOCs. These ten SWMUs are listed below.

SWMU 12	Waste Oil Storage Site
SWMU 14	Photographic Lab Septic Tank System (now an IRP site in the RI/FS stage)
SWMU 15	Spent Photographic Solution Storage
SWMU 16	Thermal Treatment Tank
SWMU 17	Building 2015 - Chemistry Lab Accumulation Area
SWMU 18	Waste Pile
SWMU 19	Disposal Area No. 1
SWMU 20	Disposal Area No. 2
SWMU 21	Drum Storage Area
SWMU 30	Building 2015 Dry Well

In 1992, NSFIH notified EPA of two additional sites at the Stump Neck Annex, which later became SWMUs 28 and 29. Both of these units have been included in the MRP.

SWMU 28	Old Skeet and Trap Range
SWMU 29	Small Arms Range (Pistol Range)

All twelve of the above AOCs were subjected to a desktop audit on November 28, 2001. The audit involved a thorough review of all existing or easily obtainable documentation/information on the identified areas. A total of thirteen Stump Neck AOCs were included in the desktop audit. Based on this evaluation, decisions were made by the Project Managers as to which AOCs will proceed to the SSP and which AOCs will require no action and can be closed out. Table 1-3 summarizes the audit results. Notations have been added to

the table to indicate changes made on decisions to address the SWMUs since the desktop audit was conducted.

The FFA officially incorporated the Stump Neck SWMUs from the RCRA Program into the NSFIH CERCLA Program. SWMUs have been evaluated under the IRP as AOCs.

1.2.3 Additional Munitions Response Program Sites

In 2005, the Navy completed a PA for MRP sites identified in a range inventory. This included 7 sites on the Main Area, 16 sites on the Stump Neck Annex, and 5 Water Area Munitions Study (WAMS) sites. For the water sites, two are located at the Main Area, two are at the Stump Neck Annex, and one is off-installation. Some sites already existed as IRP sites under the FFA, but were moved to the MRP. The seven sites evaluated in the PA for the Main Area are listed below.

UXO 6	NG Slums Burning Ground
UXO 9	Single Base Propellant Grains Spill Area
UXO 11	The Valley
UXO 13	FDR Skeet Range
UXO 20	Safety Thermal Treatment Point
UXO 29	Southwestern Pistol Range
UXO 30	Gate 3 Burning Ground

The 16 sites evaluated in the PA for the Stump Neck Annex are included below.

UXO 1	Air Blast Pond
UXO 2	Area 8
UXO 4	Basic IED Area
UXO 5	Advanced IED Area
UXO 10	Stump Neck Impact Area
UXO 12	Torpedo Burial Site
UXO 14	Marine Rifle Range
UXO 15	Old Skeet and Trap Range
UXO 16	Rum Point Skeet Range
UXO 17	Small Arms (Pistol) Range
UXO 21	Test Area 1
UXO 22	Test Area 2
UXO 23	Torpedo Casing Disposal Area
UXO 25	Roach Road Rifle Range
UXO 26	The Valley Impact Area

UXO 28 EOD School Demolition Area

The five water area sites include the Igniter Area (UXO 19) and Water Impact Area (UXO 33) at the Main Area, the Battle Range Firing Area (UXO 18) and Sonar Training Area (UXO 27) at the Stump Neck Annex, and the Pope's Creek site (UXO 31) located off the installation (see Figure 1-3).

The PA for the MRP sites concluded that an SI be performed for all of the MRP sites listed above. The subsequent SI was completed in 2010, recommending an RI/FS for all sites, except for recommending NFA for UXO 022 and UXO 029. An NFA Decision Document was signed for each site in February 2011 and October 2011, respectively. Following IRAs for soil, UXO 16, 17, and 25 were closed out in 2019 and UXO 14 was closed out in 2021. The remainder of the MRP sites are currently in the RI/FS phase with the exception of one small arms/skeet range (UXO 15) which is in the LTM phase.

1.3 FIVE-YEAR REVIEW

The latest Five-Year Review, which is the fourth review for the installation, is scheduled to be signed in late 2023. It included the Lab Area (consists of Sites 14, 15, 16, 49, 50, 53, 54, and 55), UXO 32, and Sites 11, 12, 17, 21, 28, 36, 38, 42, 47, and 57. In the Draft Report (December 2022), remedies for Site 11, Lab Area, 36, 38, 42, and UXO 32 were determined to be protective, while the remedies for Sites 12, 17, 21, 28, 47, and 57 were determined to be short-term-protective. The required signature date for the next Five-Year Review is September 27, 2027.

1.4 PURPOSE OF THE SITE MANAGEMENT PLAN

The SMP is intended to be a living document. It serves as a tool to support planning, scheduling, and budgeting future activities at sites located on NSFIH. The SMP will be updated annually, as required by the FFA.

In addition to providing a record of the milestones achieved in connection with each site, the SMP presents the anticipated milestones for the future work necessary to address the potential adverse impacts of contamination at each site.

1.5 FORMAT OF THE SITE MANAGEMENT PLAN

This SMP document is organized into four sections and three appendices. Section 1.0 presents a brief description of the NSFIH, a summary of the facility's overall environmental history, and a description of the purpose of this document. Section 2.0 provides fact sheets for each site and AOC in the program. Each of the fact sheets presents a compilation of historical information and summarized data extracted from previously prepared studies and reports. All the documents supplying information to this SMP are listed in the References section located at the end of this document. Section 3.0 includes two maps of the NSFIH

showing the approximate location of each of the sites discussed. Section 4.0 provides a schedule of future activities for the sites recommended for further action. The schedules present the sequence of activities anticipated to be necessary for the completion of critical steps in the IRP. Appendices A and B supplement the Site Location Map(s) by presenting figures for each of the sites. Appendix A includes sites at the Main Area and Appendix B includes sites at the Stump Neck Annex. These figures offer a more detailed view of site locations and features in the immediate vicinity of the respective sites. Appendix C provides site photographs organized by site number.

2.0 SITE DESCRIPTIONS

Section 2.0 contains a series of fact sheets addressing each site's history, current conditions, recent investigative activity, and recommended future action. Section 2.0 contains limited historical information representing a compilation of historical documents. References from which the fact sheets were developed are listed in the References section at the end of this SMP.

Section 2.1 contains descriptions of the sites and AOCs located on the Main Area of NSFIH. Section 2.2 contains descriptions of the sites and AOCs located at the Stump Neck Annex.

2.1 SITE DESCRIPTIONS – MAIN AREA

This section consists of fact sheets for the Main Area sites and AOCs.

SITE 1 – THORIUM SPILL

(OLD MAP GRID C27)
IRP Site 1
Fact Sheet

1. **Contamination:** Thorium.

2. **Location:** Special Weapons Disposal Building (Building 900).

3. **From:** Potential thorium contamination from ordnance training session near Building 900.

4. **When:** Date of training session is unknown.

5. **Generated By:** Thorium items were used for ordnance training on the ground near Building 900. If these items were not completely removed after the training session, then these items may have contaminated the ground near Building 900.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment portion of the IRP. The IAS recommended that a thorough survey and Confirmation Study be conducted prior to any excavation or change in land use.

   b. Site Screening Process Investigation started in April 2004. The final SSP Report was submitted in May 2009.

   c. Final EE/CA was submitted in September 2010 and Final Action Memorandum was issued by the Navy in February 2011.

   d. Navy Radiological Affairs Support Office (RASO) submitted the Final Removal Action Work Plan (RAWP) (including an Erosion and Sediment Control Plan [ESCP]) in December 2012.

   e. Interim removal action (IRA) started in February 2013, but suspended in March 2013 due to the uncertainty of the extent of contamination (based on verification results) and the presence of munitions and explosives of concern (MEC). The site was temporarily backfilled and stabilized in September 2013.

   f. Soil characterization to fully delineate limits of soil requiring removal was completed in March 2015.

   g. The final IRA phase was completed in December 2015.

8. **Current Status:** In September 2016, a Final Status Survey Report was finalized and a Decision Document, which recommended No Further Action (NFA), was signed.

SITE 2 – WASTE CRANK CASE OIL APPLIED TO TORRENCE ROAD

(OLD MAP GRID E17)
IRP Site 2
Fact Sheet

1. **Contamination:** Waste oil.

2. **Location:** Torrence Road behind Building 290 (Public Works Department maintenance garage).

3. **From:** Waste oil from Transportation Branch buildings was reportedly applied to unpaved roads for dust control.

4. **When:** Prior to 1965.

5. **Generated By:** Waste oils from the Transportation Branch buildings consisted of crankcase, hydraulic, transmission, and motor oils.

6. **Amount:** The Transportation Branch buildings generated approximately 7,700 gallons annually.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment portion of the IRP. The IAS recommended that a Confirmation Study not be conducted for Site 2.

8. **Current Status:** Site Screening Process (SSP) investigation started in April 2004. The final SSP Report was submitted in February 2006, and a Decision Document which recommended no further action (NFA) was signed in March 2006.

SITE 3 – NITROGLYCERIN EXPLOSION, NITRATION BUILDING AREA

(OLD MAP GRID E17)
IRP Site 3
Fact Sheet

1. **Contamination:** Residual nitroglycerin.

2. **Location:** Vicinity of Nitration Building, Building 1543.

3. **From:** Explosion in former Nitration Building, Building 675.

4. **When:** 1971.

5. **Generated By:** Explosion in former Nitration Building.

6. **Amount:** Unknown.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment portion of the IRP. The IAS recommended that a Confirmation Study not be conducted for Site 3.

8. **Current Status:** A Site Screening Process investigation was started in 2004. However, review of sample results obtained in this area in 2002 for Military Construction Project P161 led to the signing of a Decision Document in February 2005, which recommended no further action (NFA).

SITE 4 – LLOYD ROAD OIL SPILL SITES

(OLD MAP GRID E37)
IRP Site 4
Fact Sheet

1. **Contamination:** Waste oil.

2. **Location:** On Lloyd Road near the Public Works Department Maintenance garage area, Building 290.

3. **From:** Waste oil spilled from a dumpster that was used to store waste petroleum.

4. **When:** Prior to 1981.

5. **Generated By:** Waste oil from the Public Works maintenance operations was deposited in a dumpster. Waste oil consisted of fuel oil, motor oil, and kerosene.

6. **Amount:** Estimated to be 50 to 100 gallons.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment portion of the IRP. The IAS recommended that a Confirmation Study not be conducted for this site.

8. **Current Status:** Site Screening Process (SSP) investigation started in April 2004. The final SSP Report was submitted in February 2006, and a Decision Document which recommended no further action (NFA) was signed in March 2006.

SITE 5 – X-RAY BUILDING 731

(OLD MAP GRID F6, F7)
IRP Site 5
Fact Sheet

1. **Contamination:** Silver from spent fixer and developer.

2. **Location:** Drainage swales behind Building 731 that flow to Mattawoman Creek.

3. **From:** Discharge of spent fixer and developer for X-Ray film.

4. **When:** 1953 to 1965.

5. **Generated By:** Fixer and developer are used to develop X-Ray film. Some of the silver, which is on the film, becomes “fixed” to the X-Ray and the remainder of the silver is washed off. Both the spent fixer and wash water, which contain silver, were discharged behind Building 731 into two separate swales.

6. **Amount:** Up to 720 pounds of silver.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP.

   b. A Confirmation Study, the NACIP equivalent of an IRP Site Inspection (SI), was completed in 1985 to determine if silver was actually present in the sediment at the site.

   c. A removal action was performed on the eastern swale from November 1992 through January 1993. The silver-contaminated soil of the swale was removed, solidified, and stabilized and then placed in an earthen berm.

   d. A removal action was performed on the western swale from December 1994 through January 1995. The silver-contaminated soil of the swale was removed and placed in a borrow pit at Rum Point on Stump Neck Annex. The soil was covered with an impermeable layer of soil (clay), which was then covered with topsoil and reseeded.

   e. A Site Screening Process (SSP) field investigation was completed in 2001 and 2002. Groundwater monitoring wells were installed and sampled for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and Target Analyte List (TAL) metals. Sediment and surface water samples were collected in a portion of the western swale, which was previously not sampled, and analyzed for TAL metals.

8. **Current Status:** The Final SSP Report was completed in December 2003 and recommended no further action (NFA). A Concurrence Letter for NFA was signed by the Navy and EPA with concurrence from the MDE in January 2004.

SITE 6 – HYPO SPILL, RADIOGRAPHIC FACILITY ACCELERATOR CONTROL BUILDING AND OPEN DRAIN

(OLD MAP GRID G3)
IRP Site 6
Fact Sheet

1. **Contamination:** Silver from spent fixer.

2. **Location:** Drainage swales south of Buildings 1349 and 1140.

3. **From:** Spill of fixer for X-Ray film during transfer of storage tank contents.

4. **When:** Reportedly 1965 to 1977.

5. **Generated By:** Fixer and developer are used to develop X-Ray film. Some of the silver, which is on the film, becomes “fixed” to the X-Ray, and the remainder of the silver is washed off.

6. **Amount:** 10 gallons.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study should be conducted for Site 6 if the Site 5 study revealed a danger to aquatic life. Because Site 5 soil was determined to pose a threat to ecological receptors, it was determined that a remedial investigation (RI) should be conducted at Site 6.

   b. RI fieldwork was completed at Site 6 in 2001. Surface soil, shallow subsurface soil, surface water, and shallow groundwater samples were collected and analyzed for silver. The final RI report was completed in April 2004. The RI recommended further action to address health hazards and potential ecological risk posed by silver contamination.

   c. An additional investigation was conducted in October 2005 to identify the lateral extent of silver and to assess the need for a BERA or remediation outside the fenced area.

   d. An interim removal action (IRA) inside the fenced area was completed in September 2008.

   e. A Proposed Plan was completed in February 2009. A public meeting for the Proposed Plan was held on February 19, 2009.

   f. A Record of Decision (ROD) was signed in January 2010.

8. **Current Status:** The 2008 IRA resulted in no further action (NFA) for the site, which is documented in the ROD.

SITE 7 – HMX SPILL, SLURRY MIX BUILDING

(OLD MAP GRID G17)
IRP Site 7
Fact Sheet

1. **Contamination:** Lead, HMX, phthalate esters, nitrate esters, amines, oil, and grease.

2. **Location:** Slurry Mix Building, Building 682, and associated open drainage ditch, which flows to IW10.

3. **From:** Wastewater from dewatering HMX and building floor wash-down.

4. **When:** Between 1964 and 1968.

5. **Generated By:** Facility processing procedures included dewatering HMX, which was purchased in a slurry form and dewatered in an eductor vacuum filter. Wastewater was discharged into the floor drain and from there to an open storm ditch, which flows to IW10.

6. **Amount:** 168 pounds of HMX and 5 pounds of lead.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 7.

8. **Current Status:** A Site Screening Process (SSP) investigation started in August 2004. The Final SSP Report was submitted in December 2005, and a Decision Document, which recommended no further action (NFA), was signed at the same time.

SITE 8 – MERCURY CONTAMINATION FROM BUILDING 766

(OLD MAP GRID G-20)
IRP Site 8
Fact Sheet

1. **Contamination:** Mercury.

2. **Location:** The drainage system from Building 766, which included a stormwater manhole, a ditch, and a pond that discharges into Mattawoman Creek.

3. **From:** Lab operations.

4. **When:** 1958 to 1981.

5. **Generated By:** During sensitivity tests, nitrometer bulbs, which contained mercury, sometimes exploded under pressure. After testing, the spent mercury, which also contained sulfuric acid, was poured into a "slop jar." Tap water was run into the jar to remove the sulfuric acid from the mercury. Small spills from transferring mercury to the slop jar were common. Jars of mercury often broke during rinsing in the sink.

6. **Amount:** Estimates range from 23 to 500 pounds of elemental mercury.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP.

   b. A Confirmation Study, the NACIP equivalent of an IRP Site Inspection (SI), was completed in 1985 to determine if mercury was actually present in the sediment at the site.

   c. While construction work was being performed in the area of Building 766 in 1985, the contractor inadvertently broke the drain pipe leading from the building to a manhole. Mercury was discovered in the pipe and ground at the site of excavation. Approximately 200 drums of mercury-contaminated soil were removed from the area near the manhole and properly disposed.

   d. The floor drains were sealed shut with concrete, and sink drains were re-routed to the sewage treatment system. In addition, mercury traps were placed on the drains to collect any mercury that may inadvertently enter the drain.

   e. A Confirmation Study was performed in 1985 to determine the extent of mercury contamination throughout the ditch. The mercury in the soil was present in the highest concentration directly under the pipe which discharges into the ditch. The mercury concentrations then decreased downstream from the pipe. The Confirmation Study recommended monitoring mercury levels over a 5-year period. Water monitoring samples taken between the pond and Mattawoman Creek did not indicate any movement of the mercury.

   f. The U.S. Fish and Wildlife Service sampled fish in Mattawoman Creek for the 5-year period ending in 1991 to determine if fish were bioaccumulating mercury. Fish upstream from the entrance location to the creek have been sampled to determine background levels of mercury

within the fish. The background level is the amount of mercury that is normally found in the fish. The U.S. Fish and Wildlife Service has also sampled fish downstream from the entrance location to the Creek to determine if the levels are different. In the past, fish downstream were found to contain mercury at a level slightly higher than those upstream. The latest report from the U.S. Fish and Wildlife Service indicates that the mercury levels in both the fish upstream and downstream from IRP Site 8 contain equivalent levels of mercury. Mercury levels of the fish from both areas, however, have been within regulatory limits.

g. A potential problem with IRP Site 8 is the transport of mercury downstream through entrainment, especially during storm events, such as heavy rains. With the installation of a weir in June 1992, the tidal pond acts as a natural sediment basin. The weir provides additional settling time to ensure that any sediment that has flowed from the upper section of the stream into the pond will not exit into Mattawoman Creek.

h. Approximately 200 water and sediment samples were taken from the ditch, the pond, and Mattawoman Creek during the week of August 24, 1992 to better characterize the location and extent of mercury in the drainage system. Based on the sample results, an Engineering Evaluation and Cost Analysis (EE/CA) was prepared to determine the best alternative to be taken to ensure protection of human health and the environment. The alternative recommended in the EE/CA was to remove the area of highest mercury contamination. This area, the upper section of the stream, could be considered a source to the receptor (tidal pond) downstream, it was approximately 300 feet in length, and it contained mercury at concentrations above 10 parts per million (ppm).

i. In October 1992, a biomonitoring program was initiated to determine the effect of mercury on the biota (plant and animal life) in the tidal pond. The results of the study did not show any adverse effects on the biota of the pond due to the mercury.

j. In June 1994, the removal action was begun to remove the mercury-contaminated sediment in the first 300 feet of the ditch, as recommended in the EE/CA. The soil that was removed was placed in the soil cover of an explosives storage magazine, Building 606. The soil was capped with clay and then topsoil and was reseeded. This work was completed in December 1994.

k. A Site Screening Process investigation started in April 2004. Additional investigation of lead and mercury in the middle and lower stream sections was completed in September 2005.

l. A Desktop Evaluation of existing data was completed in September 2006, which recommended additional sampling since most of the existing data used in the evaluation are more than 10 years old. The additional investigation was completed in September 2006 and recommended no further action (NFA) for the site, with the exception of the lower stream and upper pond.

m. Additional sampling to determine the horizontal and vertical extent of lead and mercury in soil and sediment in the lower stream and pond area was completed in October 2008 and May 2009. The subsequent Technical Memorandum discussing the results and preliminary remediation goals for a future excavation was finalized in January 2011.

n. A Final EE/CA evaluating removal options was submitted in December 2011 and a Final Action Memorandum documenting the decision to perform an interim removal action (IRA) was issued by the Navy in June 2012.

o. The IRA was completed in November 2012.

8. **Current Status:** A Construction Completion Report and Decision Document which recommended NFA were finalized in December 2013.

SITE 9 – PATTERSON AVENUE OIL SPILL

(OLD MAP GRID G37)
IRP Site 9
Fact Sheet

1. **Contamination:** Fuel oil.

2. **Location:** South of Building 320.

3. **From:** Spill of fuel oil from a tanker truck.

4. **When:** Circa 1958.

5. **Generated By:** Spill of fuel oil from a tanker truck.

6. **Amount:** 10,000 gallons.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 9.

8. **Current Status:** A Site Screening Process investigation started in April 2004. However, review of sample results obtained for the closure of nearby underground storage tanks (USTs) led to the signing of a Decision Document in October 2004, which recommended no further action (NFA).

SITE 10 / UXO 9 – SINGLE-BASE PROPELLANT GRAINS SPILL AREA

(OLD MAP GRID I37 TO I39; O37 TO O39)
IRP Site 10 / MRP Site UXO 9
Fact Sheet

1. **Contamination:** Nitrocellulose (NC) propellant grains.

2. **Location:** 14-acre site near the Powder Dry Houses.

3. **From:** Spill of NC grains during railroad transportation.

4. **When:** Estimated between 1900 and 1957.

5. **Generated By:** Spill of NC grains during railroad transportation.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 10.

   b. The site was moved to the Munitions Response Program (MRP) and designated as UXO 09.

   c. The final Preliminary Assessment Report, which recommended that a Site Inspection be performed, was completed in September 2005.

   d. The Site Inspection was completed in September 2010 and recommended a Remedial Investigation (RI) for munitions constituents (MC) in soil and groundwater.

   e. The Final RI UFP-SAP Work Plan (along with the Explosive Safety Submission [ESS] Determination Request) was submitted in November 2012.

   f. The initial phase of RI fieldwork was completed in August 2013.

   f. The Arsenic Study along the railroad tracks at UXO 9 began in 2020. The ESS-DR was submitted in February 2021 and the Final UFP-SAP Work Plan (along with ESS-DR) was submitted in April 2021. The fieldwork was completed in December 2021.

8. **Current Status:** Included in the MRP as Site UXO 009. The Draft RI Report was submitted in March 2014 and is currently on hold pending the results of several interim studies to support the RI. Fieldwork for an arsenic study along railroad tracks was completed in 2021 and the report is currently under regulatory review. Additionally, fieldwork for off-base sampling is scheduled for late 2023.

SITE 11 – CAFFEE ROAD LANDFILL

(OLD MAP GRID K6, L6)
IRP Site 11
Fact Sheet

1. **Contamination:** Metals and polycyclic aromatic hydrocarbons (PAHs) from disposal and burning of bulk metals items.

2. **Location:** Terminus of Caffee Road, from east of Building 1608 to the unnamed creek discharging to the Mattawoman Creek on the west side of the site.

3. **From:** Disposal of building debris, open burning residues, and bulk metal items.

4. **When:** Unknown.

5. **Generated By:** Disposal and open burning of various wastes.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP.

   b. In late 1980, NSFIH removed approximately 5,000 to 6,000 cubic yards of deposited material. This material was primarily flashed metal parts and dunnage, which were removed by a private contractor for off-station disposal.

   c. Initial Remedial Investigation (RI) fieldwork was completed in 2000. Surface soil, subsurface soil, sediment, surface water, and groundwater samples were collected in the area of waste disposal and analyzed for Target Compound List (TCL), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and Target Analyte List (TAL) metals.

   d. Further historical information was obtained indicating the presence of four open burning pits on the eastern side of the area initially investigated. Additional RI sampling of surface and subsurface soils, sediment, surface water, and groundwater for TCL VOCs, TCL SVOCs, and TAL metals was conducted on the eastern side of the site in 2002.

   e. The Final RI report was completed in April 2004. The RI recommended a Feasibility Study (FS).

   f. A wetland delineation was completed in February 2005.

   g. The Baseline Ecological Risk Assessment (BERA) Report was finalized in July 2005.

   h. The Draft FS Report was submitted in December 2005, and a third party optimization review of the document was completed in March 2006.

i. A geophysical survey was completed in May 2006 to provide a better delineation of the horizontal and vertical extent of waste and to identify subsurface anomalies. A hydrographic survey was completed in November 2007. Design of living shoreline stabilization and sediment remediation alternatives are under review.

j. The FS Report was finalized in July 2008.

k. A Proposed Plan was completed in August 2008 recommending a protective soil cover, Institutional Controls (ICs), and groundwater long-term monitoring (LTM) for the soil, solid waste, and near-shore sediment in Area A; and an in situ cap and ICs for the near-shore sediment adjacent to Area B along Mattawoman Creek. A public meeting was held on September 18, 2008.

l. The Record of Decision (ROD) was signed in September 2009.

m. The 100% Remedial Design (RD) was submitted in November 2010.

n. The Remedial Action Work Plan was finalized in May 2011 and the Remedial Action was completed in January 2012.

o. The Final Land Use Control (LUC) RD and LTM Plan were completed in January 2012.

p. The Final Construction Completion Report was submitted in July 2012. The Remedial Action Completion Report (RACR) was finalized in 2014.

8. Current Status: Site 11 groundwater is in the LTM phase currently on a semiannual sampling frequency. Groundwater samples are analyzed in accordance with *Maryland Solid Waste Tables 1 and 2*. The landfill cover/conditions and ICs are inspected during each LTM sampling event.

SITE 12 – TOWN GUT LANDFILL

(OLD MAP GRID K-22)
IRP Site 12
Fact Sheet

1. **Contamination:** Construction debris, including scrap metal, empty cans, and drums containing paint and varnish residue, demolition debris, such as asphalt, concrete, and rubble, possible chemical waste

2. **Location:** Approximately 4 acres bisected by Atkins Road extension (northwest of Building 471).

3. **From:** Disposal of landscaping waste, fill material, rubble, and construction debris.

4. **When:** 1968 to 1980.

5. **Generated By:** Disposal of various wastes.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP.

   b. A Confirmation Study, the NACIP equivalent of an IRP Site Inspection (SI), was completed in 1985 to determine if contamination was actually present at the site. Low levels of metals were found in the sediment at this site. The Confirmation Study recommended monitoring the site for 5 years to ensure that no contamination is migrating from the landfill.

   c. The 5-year monitoring results did not show that any contamination is migrating from this area.

   d. A remedial investigation report for Site 12 was completed in July 1999. The report determined that the human health risk for non-residential scenarios is within acceptable limits. The document identified a potential ecological risk in connection with surface soil contamination. The document recommended a feasibility study report to evaluate alternatives that would address the ecological risk, as well as the State of Maryland requirements for closing landfills.

   e. A feasibility study was completed in January 2001. The study developed several potential remedial alternatives, including one requiring total landfill removal and others involving various capping scenarios combined with institutional controls.

   f. A Proposed Plan was completed in January 2001. The preferred remedial alternative presented in the document provided for covering the landfill with a 2-foot-thick soil cover.

   g. A public meeting was held on January 23, 2001 to present the Proposed Plan to the public.

   h. Completion of the final design documents occurred in February 2002.

   i. Due to unresolved issues related to Land Use Controls between the EPA and the Navy with respect to Records of Decision (RODs), an Engineering Evaluation and Cost Analysis was

prepared in June 2002. On June 27, 2002 an Action Memorandum was signed describing a Removal Action to be performed at this site, which consists of covering the landfill with a 2-foot thick soil cover.

j. Construction of the Removal Action began in September 2002 and was completed in August 2003.

k. Long-Term Monitoring (LTM) contract awarded in September 2003. The first Long-Term Monitoring quarterly sampling event was conducted in March 2004.

l. The Final Record of Decision was signed in September 2004. The ROD was modified to state that the Removal Action was completed and incorporated any changes required by the resolution of the LUC issue between the EPA and the Navy.

8. Current Status: The site is currently in the LTM Phase (beginning in 2004). Surface water monitoring was discontinued after the October 2007 sampling event, as per IHIRT decision. In 2011, the IHIRT determined that a sufficient amount of groundwater sampling at Site 12 had been completed and the data showed stabilization of COC concentrations. Groundwater LTM sampling frequency was reduced from quarterly to once every 15 months. In addition, groundwater sample analyses were reduced from the *Maryland Solid Waste Tables 1 and 2* analytes to only [total and dissolved] arsenic, cobalt, iron, and manganese. Naphthalene analysis will continue in one well (MW10) to confirm previous detections. The landfill cover/conditions and institutional controls are inspected during each LTM sampling event.

SITE 13 – PAINT SOLVENTS DISPOSAL GROUND

(OLD MAP GRID K31)
IRP Site 13
Fact Sheet

1. **Contamination:** Kerosene, mineral spirits, lacquer thinners, and solvents.

2. **Location:** 200-square-foot depressed area located 50 feet behind the Paint Shop, Building 870.

3. **From:** Dumping of thinners, solvents, and spent paint behind the building.

4. **When:** Between 1953 and 1979.

5. **Generated By:** Shop activities included painting various items by hand, using aerosol sprays, or in paint spray booths, and wastes were generated during paint equipment cleaning operations.

6. **Amount:** Up to 20,000 pounds of waste.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 13.

   b. Fieldwork for a Remedial Investigation (RI) was completed in 2000. Surface and subsurface soil samples were collected and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and Target Analyte List (TAL) metals. The Final RI report was completed in April 2004.

8. **Current Status:** A Record of Decision (ROD), which recommended no further action (NFA), was signed in September 2004.

SITE 14 – WASTE ACID DISPOSAL PIT

(OLD MAP GRID L33)
IRP Site 14
Fact Sheet

1. **Contamination:** Waste acids and other chemicals.

2. **Location:** 15- to 20-foot-deep disposal pit located 50 feet northeast of the Solvent Storehouse (Building 881) and 75 feet northwest of the Test Paper Manufacturing building (Building 444).

3. **From:** Dumping of waste acids and other chemicals.

4. **When:** Until 1975.

5. **Generated By:** Waste acids and other chemicals were collected from these and other buildings.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 14.

   b. The acid pit was believed to be found under the chemical disposal pit during the investigation of the Lab Area. In order to obtain samples from under the chemical disposal pit, it had to be removed, which revealed a concrete and brick structure resembling descriptions of the waste acid pit.

   c. The final Remedial Investigation Report for the Lab Area was completed in January 2004. No human health or ecological risks that require remediation were identified for Site 14; therefore, no further action (NFA) is planned for this site. A wetland delineation was completed in April 2006, and the final Baseline Ecological Risk Assessment Report was submitted in May 2006.

   d. A Focused Feasibility Study was completed in December 2009.

   e. A Proposed Plan was completed in April 2010, recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

   f. The Record of Decision (ROD) was signed in September 2011.

   g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities finished in May 2012. The Construction Completion Report was finalized in May 2013.

8. **Current Status:** ICs are in place due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 15 – MERCURY DEPOSITS IN MANHOLE, FLUORINE LAB

(OLD MAP GRID L34)
IRP Site 15
Fact Sheet

1. **Contamination:** Mercury, lead, and oil/grease.

2. **Location:** Manhole located 100 feet from Building 502.

3. **From:** Disposal of laboratory wastewater into storm sewer.

4. **When:** 1942 to 1981.

5. **Generated By:** Wastewater from laboratory activities in Buildings 502 and 103.

6. **Amount:** Up to 1 pound of mercury and 64 pounds of lead.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 15.

   b. This site is included in the "Lab Area" grouping of sites. Remedial investigation (RI) fieldwork was completed at the Lab Area in 2001. Surface and shallow subsurface soil, sediment, and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   c. The Final RI Report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006, and the Final Baseline Ecological Risk Assessment (BERA) Report was submitted in May 2006.

   d. A Focused Feasibility Study (FS) was completed in December 2009.

   e. A Proposed Plan was completed in April 2010, recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

   f. The Record of Decision (ROD) was signed in September 2011.

   g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities finished in May 2012. The Construction Completion Report was finalized in May 2013.

8. **Current Status:** ICs are in place due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 16 – LABORATORY CHEMICAL DISPOSAL

(OLD MAP GRID K34)
IRP Site 16
Fact Sheet

1. **Contamination:** Acids, amines (RNH_3), cyanide compounds, metals, and chlorinated and nonchlorinated solvents.

2. **Location:** Wastewater collection system within the Research and Development Building (Building 600).

3. **From:** Disposal of laboratory chemicals into wastewater system.

4. **When:** 1944 to present.

5. **Generated By:** Wastewater from laboratory activities in Building 600.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 16.

   b. This site is included in the "Lab Area" grouping of sites. Remedial investigation (RI) field work was completed at the Lab Area in 2001. Surface and shallow subsurface soil, sediment, and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   c. The Final RI report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006, and the final Baseline Ecological Risk Assessment report was submitted in May 2006.

   d. A Focused Feasibility Study (FS) was completed in December 2009.

   e. A Proposed Plan was completed in April 2010, recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

   f. The Record of Decision (ROD) was signed in September 2011.

   g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities finished in May 2012. The Construction Completion Report was finalized in May 2013.

8. **Current Status:** ICs are in place due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 17 – DISPOSED METAL PARTS ALONG SHORELINE

(OLD MAP GRID M 6, 7, 8 and L 5)
IRP Site 17
Fact Sheet

1. **Contamination:** Rocket motor casings, shipping containers, empty drums, solvents, and various metal parts.

2. **Location:** A 1,000-foot stretch of shoreline east of the Decontamination Burning Point, along Mattawoman Creek and extending back approximately 100 feet from the shoreline in the wooded area near Building 1569.

3. **From:** Disposal of metal parts and drums in the adjacent wooded area.

4. **When:** From 1960 to about 1980.

5. **Generated By:** Disposal of metal parts and drums in the adjacent wooded area.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 17.

   b. Initial Remedial Investigation (RI) fieldwork was completed in 2000. Surface soil, subsurface soil, sediment, surface water, and groundwater samples were collected in the metal parts and drum disposal areas and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   c. Pre-Feasibility Study (FS) field investigation activities were conducted in 2002. Groundwater and surface water samples were collected and analyzed for TCL VOCs.

   d. Exposed drums located throughout the site were removed in April 2003.

   e. The RI Report was finalized in January 2004. The RI recommended an FS for groundwater.

   f. An Engineering Evaluation and Cost Analysis (EE/CA), which discussed source removal options, was completed in August 2004.

   g. A revised final Work Plan for additional investigation of groundwater was completed in February 2005, and sampling was conducted in March 2005.

   h. The Baseline Ecological Risk Assessment (BERA) Report was finalized in June 2005.

   i. A soil interim removal action (IRA) was completed in February 2006.

   j. The FS was completed in October 2008.

k. A Proposed Plan was completed in February 2009, and recommended removal of munitions items, groundwater treatment, long-term monitoring for groundwater, and institutional controls. A public meeting was held on February 19, 2009.

l. The Final Record of Decision (ROD) was signed in January 2010.

m. The remedial action activities to clear munitions and explosives of concern (MEC) and remove non-MEC debris along the shoreline were completed in October 2012. The Completion Report for this phase of the remedial action was finalized in June 2013.

n. The remedial action Pilot Study (zero-valent iron [ZVI] soil mixing) was completed in December 2012. Additional ZVI soil mixing may not be needed (to be determined by groundwater long-term monitoring [LTM]). The Pilot Study Completion Report (i.e., Soil Mixing Completion Report) was completed in June 2013. The Final Annual Monitoring Report was completed in June 2014. The Remedial Action Completion Report (RACR) for the soil mixing remedy component was finalized in May 2015.

8. Current Status: The site is currently in the RA-O phase. Post-ZVI soil mixing groundwater LTM began following the Pilot Study completed in December 2012. Sampling has been conducted quarterly since that time. Groundwater LTM results will be used to determine if additional ZVI soil mixing (or an alternative treatment) is necessary. Institutional Controls (ICs) have been implemented as part of the remedial action. An ESTCP demonstration project using groundwater injection technology was completed in the summer of 2017. Additional monitoring and optimization of the groundwater remedy continued through 2023.

SITE 18 – HOG ISLAND

(OLD MAP GRID M20)
IRP Site 18
Fact Sheet

1. **Contamination:** Grit and sludge.

2. **Location:** 1.8-acre site situated 600 feet southwest of Building 474, near Atkins Road.

3. **From:** Depositing grit/sludge in the marshy area near Hog Island.

4. **When:** Unknown.

5. **Generated By:** Sewage treatment plant grit chambers, primary tanks, or sludge drying beds.

6. **Amount:** Unknown.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 18.

8. **Current Status:** A Site Screening Process (SSP) investigation started in September 2004. The final SSP Report was submitted in August 2006, and a Decision Document which recommended no further action (NFA) was signed at the same time.

SITE 19 – CATCH BASINS AT CHIP COLLECTION HOUSES

(OLD MAP GRID M26 AND M28)
IRP Site 19
Fact Sheet

1. **Contamination:** Wastewater contaminated with lead and copper salts.

2. **Location:** Catch basins of the Chip Collection Houses (Buildings 1051 and 785).

3. **From:** Wastewater contaminated with lead and copper salts.

4. **When:** Unknown.

5. **Generated By:** Wastewater generated from the Chip Collection Houses (Building 1051 and 785).

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 19.

   b. Site Screening Process (SSP) investigation started in April 2004. Additional sampling was completed in July 2007, July 2008, and December 2008. The final SSP Report was submitted in June 2009 and recommended a surface and subsurface removal.

   c. The Final Engineering Evaluation and Cost Analysis (EE/CA), which evaluated potential removal options, was finalized in September 2010. The Final Action Memorandum documenting the decision to perform a Removal Action was issued by the Navy in January 2011.

   d. The Final Removal Action Work Plan was submitted in February 2011.

   e. The removal of contaminated soil was completed in April 2011 and final restoration of the site was completed in October 2011.

   f. The final Construction Completion Report was submitted in September 2012.

8. **Current Status:** A Decision Document recommending No further action (NFA) at the site was finalized and signed by the Navy and EPA, with concurrence from MDE, in October 2012.

SITE 20 – SINGLE-BASE POWDER FACILITIES

(OLD MAP GRID M35 to N33)
IRP Site 20
Fact Sheet

1. **Contamination:** Suspected polychlorinated biphenyls (PCBs).

2. **Location:** Single-base Powder Facilities.

3. **From:** Leaks from PCBs from transformer switches.

4. **When:** Circa 1940s.

5. **Generated By:** PCBs from transformer switches.

6. **Amount:** Unknown.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 20.

8. **Current Status:** A Site Screening Process investigation was started in 2004. However, review of existing information led to the signing of a Decision Document in February 2005, which recommended no further action (NFA).

SITE 21 – BRONSON ROAD LANDFILL

(OLD MAP GRID N21 AND O21)
IRP Site 21
Fact Sheet

1. **Contamination:** Solid waste including various quantities of paint sludges, asbestos, barium sulfate, zinc, and lead.

2. **Location:** 2-acre abandoned borrow pit located near the terminus of Bronson Road, directly across the street from Building 1384.

3. **From:** Dumping of solid waste from facilities in the explosives manufacturing area.

4. **When:** Between 1975 and 1982.

5. **Generated By:** Solid waste from facilities in the explosives manufacturing area.

6. **Amount:** Up to 1500 tons of solid waste, 2.5 tons of barium sludge, 3.3 tons of asbestos, and 3 tons of paint sludge.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 21.

   b. Initial remedial investigation (RI) fieldwork was completed in 2000. Surface soil and groundwater samples were collected and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   c. An additional pre-feasibility study field investigation was conducted in 2002. Groundwater samples were collected and analyzed for TCL VOCs, TAL metals, and explosives.

   d. The installation and sampling of monitoring wells was completed in January 2003. High detections of perchlorate were found in MW 04. It was later determined that the perchlorate is not associated with the landfill based on probable groundwater flow direction and that the source is off site.

   e. The final RI Report was completed in April 2004, and the final Baseline Ecological Risk Assessment Report was submitted in July 2005.

   f. Fieldwork for a groundwater manganese investigation was completed in June 2006. The results of the investigation were incorporated into the final Feasibility Study report which was submitted in September 2006.

   g. Additional investigation was performed in 2008 to determine whether manganese in groundwater occurs from a natural source. Results were documented in a Technical Memorandum that was submitted in March 2009.

h. The Proposed Plan, which recommended the installation of a soil cover, was finalized in June 2010. The public meeting was held on July 1, 2010.

i. The Record of Decisions (ROD) was signed in September 2011.

j. A 100% Remedial Design was submitted in January 2012.

k. A final Remedial Action Work Plan was submitted in June 2012.

l. A final LUC Remedial Design and Long Term Monitoring (LTM) Plan were submitted in June 2012. The Remedial Action field work was completed in January 2013. A Final Construction Closeout Report was completed in February 2014. A Remedial Action Completion Report (RACR) was completed in June 2014.

8. Current Status: Site 21 groundwater is in the LTM phase currently on a semiannual sampling frequency. Groundwater samples are analyzed in accordance with *Maryland Solid Waste Tables 1 and 2*. The landfill cover/conditions and ICs are inspected during each LTM sampling event.

A Preliminary Assessment Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report is expected by September 2023. Based on the SI Results, Site 21 is being re-opened to perform an RI/FS for PFAS.

SITE 22 / UXO 6 – NG SLUMS BURNING SITE

(OLD MAP GRID O12)
IRP Site 22 / MRP Site UXO 6
Fact Sheet

1. **Contamination:** Nitroglycerin slums.

2. **Location:** 50-foot-wide strip along the shoreline of the Greenslade Road Peninsula and Mattawoman Creek.

3. **From:** Spills of nitroglycerin slums during burning.

4. **When:** Late 1940s until 1953.

5. **Generated By:** Nitroglycerin slums from nitroglycerin plant production.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 22.

   b. The final PA report was completed in September 2005.

   c. The Site Inspection was completed in September 2010 and recommended no further action (NFA) in surface soil and subsurface soil. However, due to the presence of explosives (specifically NG) in groundwater, it was recommended that a Remedial Investigation for groundwater be performed.

8. **Current Status:** Currently designated as MRP Site UXO 006. A UFP-SAP/Work Plan was finalized in April 2021. Initial RI sampling fieldwork was completed in 2023. A SAP Addendum and additional sampling are expected in the future to address data gaps.

SITE 23 – HYDRAULIC OIL DISCHARGES FROM EXTRUSION PLANT

(OLD MAP GRID P24)
IRP Site 23
Fact Sheet

1. **Contamination:** Hydraulic oil.

2. **Location:** Press lines (Buildings 561 and 564).

3. **From:** Discharge of wastewater containing hydraulic oil to the Mattawoman Creek via IW18.

4. **When:** 1943 until 1981.

5. **Generated By:** Wastewater used to cool pumps and press dies**.**

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP) and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 23.

   b. Site Screening Process (SSP) investigation started in April 2004. The final Work Plan was completed in February 2005, and sampling was completed in May 2005.

8. **Current Status:** The final SSP Report was submitted in February 2006, and a Decision Document, which recommended no further action (NFA), was signed in March 2006.

SITE 24 – ABANDONED DRAIN LINES

(OLD MAP GRID O35, 37, 38)
IRP Site 24
Fact Sheet

1. **Contamination:** Acid water and nitrocellulose (NC) white water.

2. **Location:** Abandoned drain lines from former NC production facilities.

3. **From:** Discharge of neutralized acid water and NC white water to Mattawoman Creek.

4. **When:** Unknown.

5. **Generated By:** Production of NC, which used cotton liners, nitric acid, and sulfuric acid. NC, which is practically insoluble in water, may have deposited in abandoned drain lines located near the old NC Plant site.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 24.

   b. A Site Screening Process (SSP) investigation started in September 2004. In 2005 through 2007, IHIRT recognized physical explosive hazards from residues versus toxicity issues from site contaminants. A Decision Document, which recommended no further action (NFA) under CERCLA, but included safety controls via the NSFIH work permit process (already in place), was signed in April 2007.

   c. A Desktop Audit was prepared in 2014. The review suggested updating the Site 57 Long-Term Monitoring Plan to include diphenylamine, which now has toxicity values. IRP Site 24 should be transferred to the Munitions Response Program (MRP) and undergo a PA or Site Investigation (SI), per Navy MRP policy.

8. **Current Status:** The Desktop Audit Tech Memo in 2014 recommended a PA/SI after the IRP Site 24 is transitioned to the MRP. When funding is available, Navy will proceed with a PA/SI per Navy MRP policy. In the meantime, the work permitting process at NSFIH provides worker notification and safety checks prior to any work in the area.

SITE 25 – HYPO DISCHARGES FROM X-RAY BUILDING NO. 2

(OLD MAP GRID P27)
IRP Site 25
Fact Sheet

1. **Contamination:** Silver from spent fixer and developer.

2. **Location:** Drainage swales behind Building 588, which flow to the Mattawoman Creek.

3. **From:** Discharge of spent fixer and developer for X-Ray film.

4. **When:** 1944 to 1964.

5. **Generated By:** Fixer and developer are used to develop X-Ray film. Some of the silver, which is on the film, becomes "fixed" to the X-Ray, and the remainder of the silver is washed off. Both the spent fixer and washwater, which contain silver, were discharged behind Building 588 and into IW46.

6. **Amount:** Estimated 864 pounds of silver.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a confirmation study be conducted at Site 25 if the study at Site 5 indicated a danger to aquatic life.

   b. Initial Remedial Investigation (RI) fieldwork was completed in 2000. Surface soil, shallow subsurface soil, and groundwater samples were collected and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and nitroglycerin.

   c. Additional RI sampling was conducted in 2002. Groundwater samples were collected and analyzed for TAL metals.

8. **Current Status:** The final RI Report was completed in April 2004. A Record of Decision, which recommended no further action (NFA), was signed in September 2004.

SITE 26 – THERMAL DESTRUCTOR 2

(OLD MAP GRID P30)
IRP Site 26
Fact Sheet

1. **Contamination:** Hydrazine fuel and unsymmetrical dimethyl hydrazine (UDMH)-contaminated water.

2. **Location:** Thermal Destructor 2 facility (Building 1595).

3. **From:** Spills of hydrazine- and UDMH-contaminated water at the incinerator.

4. **When:** 1976 until 1978.

5. **Generated By:** Thermal destruction of hydrazine- and UDMH-contaminated water.

6. **Amount:** 1.3 million pounds per year of hydrazine- and UDMH-contaminated water was treated in the incinerator. An unknown quantity of this wastewater may have spilled in the vicinity of the site.

7. **Work Completed:** The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP) and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 26. Site Screening Process (SSP) investigation started in April 2004. Sampling was completed in October 2005. The SSP Report was submitted in September 2006

8. **Current Status:** A Decision Document, which recommended no further action (NFA), was signed in September 2006.

SITE 27 – THERMAL DESTRUCTOR 1

(OLD MAP GRID S32)
IRP Site 27
Fact Sheet

1. **Contamination:** Hydrazine-contaminated water.

2. **Location:** Thermal Destructor 1 facility (Building 1584).

3. **From:** Spills of hydrazine-contaminated water at the incinerator.

4. **When:** 1976 until 1979.

5. **Generated By:** Thermal destruction of hydrazine-contaminated water.

6. **Amount:** 1.3 million pounds per year of hydrazine-contaminated water was treated in the incinerator. An unknown quantity of this wastewater may have spilled in the vicinity of the site.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 27.

   b. Site Screening Process (SSP) investigation started in April 2004. Sampling was completed in October 2005. Additional sampling was completed in July 2007 and August 2008. The final SSP Report was submitted in June 2009

   c. The EE/CA was finalized in September 2010. The Final Action Memorandum was issued by the Navy in January 2011.

   d. The Final Removal Action Work Plan was submitted in February 2011, and the Removal Action was completed in November 2011.

   e. The final Construction Completion Report was submitted in September 2012.

8. **Current Status:** A Decision Document recommending No further action (NFA) at the site was finalized and signed by the Navy and EPA, with concurrence from MDE, in October 2012.

SITE 28 / UXO 8 – ORIGINAL BURNING GROUND

(OLD MAP GRID S36, 37)
IRP Site 28 / MRP Site UXO 8
Fact Sheet

1. **Contamination:** Smokeless powder and zinc.

2. **Location:** 1.8-acre site on southeastern corner of base along Mattawoman Creek.

3. **From:** Open burning of materials and operation of a zinc recovery furnace.

4. **When:** Burning estimated between 1890 and 1942; zinc recovery estimated between 1928 and the mid-1950s.

5. **Generated By:** Burning of waste materials from base manufacturing, and residual contamination from the zinc recovery process.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 28.

   b. Soil samples were collected at the site in 1993 and analyzed for soil texture, pH, and fertility. Elevated levels of zinc were detected.

   c. Sampling off shore of this site was performed during the Toxicity Identification Evaluation Study in 2000 and the Mattawoman Creek Study in 2001. Both studies confirmed elevated levels of zinc in the sediment.

   d. The Remedial Investigation (RI) fieldwork began in May 2003. Additional monitoring wells were installed in August 2003.

   e. The RI Report for the zinc recovery furnace area was completed in April 2005. The zinc recovery furnace area remained under the IRP as Site 28, whereas the original burning area was transferred to the Munitions Response Program (MRP) as Site UXO 008.

   f. A pilot study evaluating the use of apatite (a natural form of calcium phosphate mineral) to stabilize metals in Site 28 [Mattawoman Creek] sediment began in June 2004.

   g. . A Preliminary Assessment (PA) Report was completed in September 2005 under the MRP for the original burning ground (UXO 008). The report recommended no further action (NFA) for UXO 008.

   h. The Final Baseline Ecological Risk Assessment Report and Final Engineering Evaluation and Cost Analysis (EE/CA) both were submitted in September 2006.

i. An interim removal action (IRA) for soil at the zinc recovery furnace area (Site 28) was completed in November 2008.

j. A Focused Feasibility Study for groundwater was finalized in March 2010.

k. The Final Proposed Plan for Site 28 was finalized in August 2013. No further action (NFA) was proposed for surface soil, subsurface soil, sediment, and surface water. The Preferred Remedy for groundwater is long-term monitoring (LTM) and land use controls (LUCs). A public meeting was held on August 21, 2013. The Final Record of Decision (ROD) was signed in June 2014.

8. Current Status: The Land Use Control Remedial Design was finalized in May 2015. The Long-Term Monitoring Plan was finalized in March 2016. A Remedial Action Closeout Report (RACR) was finalized in September 2016. The site remains in the LTM phase.

SITE 29 / UXO 11 – THE VALLEY

(OLD MAP GRID A37, B37, C37)
IRP Site 29 / MRP Site UXO 11
Fact Sheet

1. **Contamination:** Exploded ordnance.

2. **Location:** Naturally occurring valley along Torrence Road for 0.5 mile beginning at the Potomac River, northwest of Building 54.

3. **From:** Firing of shells into butts in the valley walls.

4. **When:** From 1891 to 1921.

5. **Generated By:** Firing of shells into butts in the valley walls.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. NACIP is the former name of the Navy Installation Restoration Program (IRP), and the IAS is equivalent to the Preliminary Assessment (PA) portion of the IRP. The IAS recommended that a Confirmation Study not be performed for Site 29.

   b. A preliminary assessment was started in June 2003. The final PA Report was completed in September 2005.

   c. A Site Inspection was completed in September 2010 and recommended the site move forward to a Remedial Investigation (RI) for munitions and explosives of concern (MEC) and munitions constituents (MC) in soil and groundwater.

   d. A final RI UFP-SAP Work Plan (and Explosive Safety Submission [ESS] Determination Request) for DGM survey fieldwork was completed in November 2012. An ESS for intrusive investigation of anomalies was finalized in October 2013.

   e. Remedial Investigation fieldwork (intrusive investigation of anomalies) was completed in June 2014. A Remedial Investigation Report and BERA Report were finalized in August 2018. A FS was finalized in July 2020.

8. **Current Status:** Currently designated as MRP Site UXO 0011. A geochemical investigation for groundwater is underway. Sampling fieldwork has been completed and an Aquifer Tech Memo was submitted for regulatory review in September 2023.

SITE 39 – SILVER RELEASE TO SEDIMENTS

(OLD MAP GRID P29)
IRP Site 39
Fact Sheet

1. **Contamination:** Elemental silver and possibly silver nitrate, dinitropropanol, ethylene dichloride, methyl chloride, formaldehyde, unsymmetrical dimethylhydrazine (UDMH), and nitroguanidine (NQ).

2. **Location:** Area surrounding Building 497.

3. **From:** Production of bis-2,2-dinitropropyl acetal/formal and explosives.

4. **When:** Releases to Mattawoman Creek 1961 to 1965; stack emissions 1942 to 1994.

5. **Generated By:** Release of silver and silver nitrate during production of acetal/formal. Silver nitrate was used as a catalyst in the production of acetal/formal, a plasticizer, or propellant binder, used in Polaris rocket motors. In the reaction, the silver nitrate catalyst was converted to elemental silver. The silver was recovered from the reaction vessel and returned to the supplier to undergo nitration back to silver nitrate. However, interviews with Navy personnel revealed that a significant amount of silver, as well as the other chemicals listed above, may have entered the creek through spills and human error, such as valves mistakenly left open. Additional releases may have occurred from the stacks on Buildings 497 and 498. Emissions from these stacks may have contaminated surface soil in the surrounding areas, however the quantity of contaminants that may have been discharged is unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Site Inspection (SI) under the Navy Installation Restoration Program (IRP) was conducted as recommended by the Preliminary Assessment (PA) to determine if contamination is actually present. This inspection included taking four ponar grab samples from the top sediment of Mattawoman Creek and two sediment samples in the creek near Industrial Wastewater Outfall 05 (IW05). These samples were analyzed for acetal/formal, pelletized nitrocellulose, unsymmetrical dimethyl hydrazine, high bulk density nitroguanidine, Target Compound List (TCL) volatile organic compounds, and TCL semivolatile organic compounds (SVOCs). Subsequent investigation of the sediments near IW05 was conducted under the Mattawoman Creek study.

   b. Because the site inspection did not address potential stack emissions, a Remedial Investigation (RI) began at Site 39. RI fieldwork was completed in 2001. Surface and shallow subsurface soil samples were collected and analyzed for TCL SVOCs, Target Analyte List (TAL) metals, and an expanded list of explosives.

   c. The final RI report was completed in April 2004 and recommended no further action (NFA) for this site.

8. **Current Status:** A Record of Decision (ROD), which recommended NFA, was signed in September 2005.

SITE 40 – PALLADIUM CATALYST IN SEDIMENT

(OLD MAP GRID P29)
IRP Site 40
Fact Sheet

1. **Contamination:** Palladium.

2. **Location:** Mattawoman Creek southeast of Building 497.

3. **From:** Production of Unsymmetrical-Dimethylhydrazine (UDMH).

4. **When:** 1974 and 1975.

5. **Generated By:** Release of palladium, a catalyst used in the production of UDMH. Forty percent of the catalyst purchased was lost and cannot be accounted for. Therefore, it is possible that this catalyst entered Mattawoman Creek.

6. **Amount:** Based on the 40 percent estimated loss of the total palladium purchased, the total amount of palladium that may have entered the creek is 88 pounds.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed ,but a Site Inspection (SI) was not recommended under the Navy Installation Restoration Program (IRP), because palladium is not a regulated hazardous substance. However, the SI was performed to ensure that a problem does not exist. This inspection included taking four ponar grab samples from the top sediment of Mattawoman Creek and two sediment samples in the Creek near the wastewater outfall, which is no longer in use. These samples were analyzed for palladium.

   b. In January 2004, the site was re-assigned as a Site Screening Area (SSA).

8. **Current Status:** In April 2004, a Desktop Evaluation was signed by the Navy and EPA with concurrence from MDE, which recommended no further action (NFA).

SITE 41 / UXO 32 – SCRAP YARD

(OLD MAP GRID R31, S31)
IRP Site 41 / MRP Site UXO 32
Fact Sheet

1. **Contamination:** Arsenic, iron, lead, and polychlorinated biphenyls (PCBs).

2. **Location:** Scrap yard west of Building 436.

3. **From:** Storage of coal, scrap / discarded materials, lead-acid batteries, and PCB and PCB-contaminated transformers. By definition, PCB transformers contain oil with greater than 500 parts per million (ppm) of PCBs, and PCB-contaminated transformers contain oil within 50 to 500 ppm PCBs.

4. **When:** From the 1960s to 1988.

5. **Generated By:** Before Building 1440 was dedicated to the storage of removed PCB equipment, transformers containing PCBs were stored at the Scrap Yard. Transformers, some in poor condition, which leaked PCB oil on the ground, were stored at the northwestern end of the Scrap Yard near Mattawoman Creek. Coal and lead-acid batteries also were stored in the Scrap Yard, along with various scrap materials.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Site Inspection (SI) under the Navy Installation Restoration Program (IRP) was conducted as recommended in the Preliminary Assessment (PA) to determine if contamination is actually present. Soil and groundwater samples along with sediment samples from Mattawoman Creek were collected and analyzed for Target Compound List (TCL) organics, Target Analyte List (TAL) metals, and total petroleum hydrocarbons (TPH).

   b. A Remedial Investigation (RI) Report for Site 41 was completed in July 1999. The report determined that the human health risk for non-residential scenarios is within acceptable limits, with the exception of the full-time worker. The document identified a potential ecological risk in connection with surface soil contamination. The document recommended a feasibility study report to evaluate alternatives to address the full-time worker and ecological risks.

   c. A Feasibility Study (FS) was completed in January 2001. The study developed a potential remedial alternative requiring removal of contaminated soil from areas adjacent to the Scrap Yard, the removal of contaminated soil from within the Scrap Yard, and the remediation of contamination on the concrete slab within the Scrap Yard, all in combination with institutional controls.

   d. A Proposed Plan was completed in February 2001. The preferred remedial alternative presented in the document provided for the removal of contaminated soil from areas adjacent to the Scrap Yard, the removal of contaminated soil from within the Scrap Yard, and the remediation of contamination on the concrete slab within the Scrap Yard, all in combination with institutional controls.

   e. A public meeting was held on February 20, 2001 to present the Proposed Plan to the public.

f. Completion of the final design documents occurred in August 2002. The RD, intended for the anticipated Selected Remedy, was used to implement a CERCLA response under the Navy's removal action authority (see below).

g. Due to unresolved issues related to Land Use Controls (LUCs) between the EPA and the Navy with respect to Records of Decision (RODs), an Engineering Evaluation and Cost Analysis (EE/CA) was prepared in June 2002. On June 27, 2002, an Action Memorandum was signed describing an Interim Removal Action (IRA) to be performed at this site, which consists of removing contaminated soil from within the Scrap Yard as well as from outside the Scrap Yard.

h. Construction of the IRA began in November 2002, but was halted due to an incident involving scrap metal at the site.

i. Due to the discovery of numerous ordnance and explosive (OE) items, the site was transferred to the MRP in March 2004 and designated as Site UXO 032.

i. The first phase of the removal action and remediation began in September 2006. Removal of all large potentially explosive items was completed in March 2007.

j. A final Remedial Action Work Plan (including a final Explosive Safety Submission) was completed in April 2010.

k. The second phase of the removal action was completed in May 2011, closing out the soil medium for the site. Additional monitoring wells were installed to continue groundwater characterization.

l. The RI UFP-SAP Work Plan for groundwater was finalized in June 2011. Groundwater samples were collected from new and existing monitoring wells in June 2011.

m. The final Construction Completion Report for the IRA was submitted in August 2011

n. A revised baseline Human Health Risk Assessment (HHRA) was finalized in February 2012. It incorporated the June 2011 groundwater data and post-removal action soil data considerations. The results indicated no risks to current industrial users from exposure to soil. Potential unacceptable risks remain from residential and construction worker exposure to soil. Groundwater contamination also poses a potential risk to future receptors. The groundwater results from 2011 showed elevated contaminant concentrations upgradient of the Scrap Yard.

o. Following submittal of a new Draft Proposed Plan (for both groundwater and soil at UXO 32) in December 2011, the IHIRT further evaluated the revised HHRA results and the elevated upgradient groundwater contaminant (e.g., TCE) concentrations. Because the groundwater contamination appears to originate upgradient (offsite), the IHIRT determined additional groundwater investigation was necessary. In order for the Proposed Plan for the soil medium at IRP Site 41 / MRP Site UXO 32 to move forward, the IHIRT agreed that groundwater would be addressed separately by additional investigation as a new site. The groundwater operable unit has been assigned as new IRP Site 70.

p. A Focused FS was submitted in July 2013 to summarize the site history, action(s), and decision(s) since the 2001 FS. The Focused FS evaluated a Land Use Control (LUC) alternative, considering the IRA mitigated risks at the site under current industrial exposure conditions.

q. The Final Proposed Plan was completed in August 2013. No action is proposed for sediment and surface water. The Preferred Remedy for soil is LUCs. A public meeting was held on August 21, 2013. The Final Record of Decision (ROD) was signed in June 2014.

r. The Final Remedial Action Completion Report (RACR) and LUC Remedial Design were completed in January 2015.

8. Current Status: LUCs are in place at the site for soil. Groundwater is being addressed as new IRP Site 70.

SITE 42 – OLSEN ROAD LANDFILL

(OLD MAP GRID G5, G6)
IRP Site 42
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** Near Building 1866.

3. **From:** Disposal of various solid wastes from all over the base.

4. **When:** A period of approximately 5 years ending in 1987.

5. **Generated By:** Normal operations. Whether hazardous wastes were disposed at the landfill cannot be confirmed or denied by activity records or personnel. Analysis of the former topography suggests that earth-moving equipment was used to fill the area.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Site Inspection (SI) was performed under the Navy Installation Restoration Program (IRP), as recommended in the Preliminary Assessment (PA). Soil, groundwater, sediment, and surface water samples were collected and analyzed for volatile organic compounds (VOCs), Target Compound List (TCL) organics, Target Analyte List (TAL) metals, and total petroleum hydrocarbons (TPH).

   b. A Remedial Investigation (RI) Report for Site 42 was completed in July 1999. The report determined that the human health risk for non-residential scenarios is within acceptable limits. The potential for ecological risks was identified in connection with a small creek running along the downgradient, southwestern edge of the site. An additional issue focused on the need to close the landfill in accordance with Maryland regulations.

   c. In December 1999, a toxicity study of the sediments in the above-described creek was completed. Sediment contaminants detected during the RI were found to not exhibit toxicity.

   d. The Feasibility Study (FS) was completed in June 2002. The study developed several potential remedial alternatives, including one requiring total landfill removal and others involving various capping scenarios combined with institutional controls.

   e. The final Remedial Design was completed in March 2005.

   f. The Record of Decision (ROD) was signed by the Navy and EPA in September 2005.

   g. The remedial action, construction of a landfill cap, was completed in June 2006.

   h. Surface water monitoring was discontinued after the October 2007 sampling event, as per IHIRT decision.

8. **Current Status:** This site is currently in the Long-term Monitoring Phase. In 2012, the IHIRT determined that a sufficient amount of groundwater sampling at Site 42 has been completed and the

COCs have stabilized. Groundwater sampling was reduced from quarterly to once every 9 months. Groundwater is tested for all the *Maryland Solid Waste Tables 1 and 2* analytes.

SITE 43 – TOLUENE DISPOSAL

(OLD MAP GRID D8)
IRP Site 43
Fact Sheet

1. **Contamination:** Acetone and toluene.

2. **Location:** a) Near utility pole across the street from Building 1041 and b) the northern corner of Building 1040.

3. **From:** Disposal of acetone and toluene used for propellant removal at Building 1041 and disposal of acetone used for propellant removal at Building 1040.

4. **When:** Parts cleaning operations took place from the late 1950s through November 1989 at Building 1041 and from 1960 to 1989 at Building 1040. It is estimated that, for a period of more than two years during the operation, spent solvent was improperly disposed at the base of the pole by Building 1041 and in the drainage ditch outside the door of Building 1040.

5. **Generated By:** After parts were cleaned within Buildings 1040 and 1041, the spent solvent was normally combined or "slummed" with sawdust in a 55-gallon drum for treatment at the Strauss Avenue Thermal Treatment Point. Occasionally, however, the spent solvent was carried across the street from Building 1041 to the utility pole and poured on the ground at the base of the pole and in the ditch outside the door of Building 1040.

6. **Amount:** One report estimated that 15 to 20 gallons per week of spent solvent were disposed at the base of the pole. It was not possible to determine the amount of solvent disposed at this site. In addition, acetone was reportedly sometimes poured in the ditch outside the door of Building 1040.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed and a Site Inspection (SI) was recommended under the Navy Installation Restoration Program (IRP) to determine if contamination is actually present.

   b. An SI under the Navy IRP was conducted at the base of the utility pole across the street from Building 1041. This inspection included obtaining 10 soil-gas samples from 10 borings and analyzing for volatile organic compounds (VOCs). In addition, four soil samples were taken using a hand auger at a depth not greater than 3 feet for analysis VOCs, base-neutral acids (BNAs), and total petroleum hydrocarbons (TPH).

   c. Additional sampling was recommended in the SI. The Site Screening Process (SSP) investigation started in April 2004 and included taking samples from both the Building 1040 and 1041 areas. The Draft SSP report was submitted in December 2005. Additional sampling was planned prior to finalizing the report.

   d. The Phase 1 Supplemental SSP investigation was completed in November 2007. Additional (Phase 1A) sampling was completed in February 2009. Rather than continuing with Phase 2 Supplemental SSP, IHIRT decided that the site should enter the RI/FS phase. Therefore, SSP results through Phase 1A were documented in a final SSP Report in October 2009.

   e. The RI UFP-SAP Work Plan was finalized in March 2011. The initial RI fieldwork was completed in June 2011; however, data gaps were identified, necessitating an additional

phase of RI fieldwork. The Phase 2 RI UFP-SAP Work Plan Addendum was submitted in April 2012.

f. An Interim Summary Report for the Phase 1 RI Results was submitted in April 2012 along with the SAP addendum. The Phase 2 RI field work was completed in July 2013. The RI Report was finalized in October 2014.

g. Multiple phases of Pre-Design Investigation (PDI) fieldwork for cobalt in groundwater and soil, as well as VOCs in the soil source area, were completed from 2017 through 2021.

8. Current Status: An EE/CA to address source area soil contamination via a NTCRA was finalized in July 2021 and a Final Action Memo was signed in October 2021. Removal action construction work for source area soils is anticipated to begin in late 2023. A Draft SAP to complete a cobalt groundwater pilot study was submitted in late 2023 and is currently under regulatory review. The Revised Draft FS is scheduled for submission in fall 2023.

SITE 44 – SOAK OUT AREA

(OLD MAP GRID F18)
IRP Site 44
Fact Sheet

1. **Contamination:** An unknown nonflammable solvent, believed to be Pennchem 901B, a polysulfide solvent containing mercaptan.

2. **Location:** Area approximately 75 feet east of Building 1363 and 40 feet south of Building 907.

3. **From:** Removal of propellant from rocket motor catapult tubes.

4. **When:** Late 1960s to early 1970s.

5. **Generated By:** Rocket motor catapult tubes were allowed to soak in the solvent contained in two 55-gallon drums that were welded together. The tubes soaked for 2 to 3 days and were then removed without regard to solvent spillage. However, a smaller catch tank was placed in the larger tank to collect pieces of propellant that fell out of the tubes. Reports indicated that the solvent drums (less than ten 55-gallon) were taken into the woods for storage until a disposal method was found. These drums could not be located.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Site Inspection (SI) under the Navy Installation Restoration Program (IRP) was conducted as recommended in the Preliminary Assessment (PA) to determine if contamination is actually present. Soil and groundwater samples were collected and analyzed for volatile organic compounds (VOCs), base-neutral acids (BNAs), and total petroleum hydrocarbons (TPH).

   b. A Remedial Investigation (RI) Report for Site 44 was completed in July 1999. The report determined that the human health risk for all receptors is within acceptable levels. Ecological risks were not evaluated since it had previously been determined that the site did not offer any suitable habitat.

   c. A Proposed Plan was completed in February 2001. The plan presented a no further action (NFA) approach to the site.

   d. A public meeting was held on February 20, 2001 to present the Proposed Plan to the public.

   e. The Record of Decision (ROD), which recommends NFA, was signed in September 2002.

8. **Current Status:** The site was removed from the IR Program based on the signed NFA ROD.

SITE 45 – ABANDONED DRUMS

(OLD MAP GRID E18)
IRP Site 45
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** 250 feet west of Building 1363.

3. **From:** Unknown.

4. **When:** Circa 1980.

5. **Generated By:** Unknown. Possibly the same solvent that was used in the Soak Out Area.

6. **Amount:** Assuming the twenty-one 55-gallon drums and two over-pack drums were full, a total of 1,295 gallons of solvent would have leaked onto the ground.

7. **Work Completed:**

   a. A Site Inspection (SI) under the Navy Installation Restoration Program (IRP) was conducted as recommended in the Preliminary Assessment (PA) to determine if contamination is actually present. Three soil samples were taken from three soil borings with a hand auger. The borings were obtained at a depth not greater than three feet. These samples were analyzed for volatile organic compounds (VOCs), base-neutral acids (BNAs), and Target Analyte List (TAL) metals. In addition, four soil-gas samples were taken and analyzed for VOCs.

   b. Remedial investigation (RI) fieldwork was completed in 2001. Surface soil, subsurface soil, shallow groundwater, and sediment samples were collected and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), TAL metals, and an expanded list of explosives.

   c. The Final RI Report was completed in April 2004, which recommended no further action (NFA) for this site.

8. **Current Status:** The Final Record of Decision (ROD), which recommended NFA, was signed in September 2005. In addition, the wetlands area downgradient of the site was addressed separately by a Site Screening Process (SSP) investigation that started in April 2004. A Decision Document, which recommended NFA, was signed in September 2006.

SITE 46 – CADMIUM SANDBLAST GRIT

(OLD MAP GRID E20)
IRP Site 46
Fact Sheet

1. **Contamination:** Cadmium.

2. **Location:** Gravel area behind Building 855.

3. **From:** Sandblast grit disposal.

4. **When:** Mid-1960s to possibly early 1980s.

5. **Generated By:** Rocket catapult tubes plated with cadmium were sandblasted at Building 855 as part of a resurfacing operation. Often, the cadmium-contaminated grit was dumped in the gravel area behind Building 855.

6. **Amount:** Estimates as to the amount, frequency, and time period over which the grit was disposed near the building could not be confirmed.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed and a Site Inspection (SI) was recommended under the Navy Installation Restoration Program (IRP) to determine if contamination is actually present.

   b. The SI was conducted under the Navy IRP. It included collecting nine soil samples using a hand auger and analyzing them for Target Analyte List (TAL) metals.

8. **Current Status:** A Site Screening Process (SSP) investigation started in April 2004. However, review of the data in the SI Report for this site led to the signing of a Decision Document in October 2004, which recommended no further action (NFA).

SITE 47 – MERCURIC NITRATE DISPOSAL AREA

(OLD MAP GRID F21)
IRP Site 47
Fact Sheet

1. **Contamination:** Mercuric nitrate, barium sludge, and solvents.

2. **Location:** South of the concrete pad behind Building 856.

3. **From:** Disposal of mercuric nitrate dissolved in nitric acid, disposal of barium sludge, and storage of solvents.

4. **When:** Mercuric nitrate disposal from 1957 through 1965, barium sludge disposal between 1969 and 1974.

5. **Generated By:** Mercuric nitrate is a catalyst that was used to produce hydrazinium nitroformate, an oxidizer used in the propellants for the Polaris missile. The spent solution, 1 ounce of mercuric nitrate dissolved in 98 percent nitric acid, was poured from 55-gallon drums onto a 6-foot by 4-foot bed of limestone chips. Additionally, a slurry of particulate barium sulfate used in the manufacturing process was pumped to a pit located approximately 50 feet to the east of Building 856.

6. **Amount:** Assuming enough limestone was present to neutralize the nitric acid, up to 274 pounds of mercuric nitrate (equivalent to 169 pounds of elemental mercury) would have precipitated out as a salt. An estimated 2,000 pounds of barium sulfate may have been disposed of in the barium pit.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed and a Site Inspection (SI) was recommended under the Navy Installation Restoration Program (IRP) to determine if contamination is actually present.

   b. An SI was conducted under the Navy IRP. It included collecting two soil samples with a hand auger in the ditch where the mercuric nitrate may have settled and analyzing for volatile organic compounds (VOCs), base-neutral organic acids (BNAs), and Target Analyte List (TAL) metals. In addition, 10 soil samples were collected with a hand auger at the south edge of the concrete pad. The samples were collected at various depths from 0 to 1 foot and were analyzed for VOCs, BNAs, and TAL metals. No limestone was found during the sampling.

   c. Remedial investigation (RI) fieldwork was conducted in several phases at Site 47. Groundwater, concrete chips, surface soil, and sediment samples were collected and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives during the initial field investigation in 1999. In 2001, membrane interface probe/electrical conductivity (MIP/EC) technology was used to further define the extent of VOC contamination, and six monitoring wells were installed and sampled for TCL VOCs. Further delineation of the VOC plume, as well as investigation of the reported barium sludge pit, was completed in 2002.

   d. The Final RI report was completed in December 2003.

e. A Baseline Ecological Risk Assessment (BERA) was conducted in 2004. Additional sampling in support of the BERA was completed in March 2006. The final BERA Report was submitted in September 2006.

f. A third-party optimization review of the pre-draft Feasibility Study (FS), which was completed in July 2005, recommended bench-scale tests and a pilot study to evaluate alternatives prior to finalizing the FS. The bench-scale tests were completed in May 2007, and the FS was completed in October 2008.

g. A Pilot Study Work Plan was submitted in May 2008. Field work consisting of monitoring well and gas vent installation was completed in May 2009. The first treatment injection began in October 2009, with a post-injection sampling event being completed in February 2010 and June 2010. Based on the February and June 2010 post-injection sample data, a second injection event for the pilot study was not needed.

h. A Proposed Plan was submitted in April 2012. The public meeting for the Proposed Plan was held on April 12, 2012. The Proposed Plan was finalized in April 2012.

i. The Record of Decision (ROD) was signed in February 2013. The selected remedy consists of in situ Chemical Oxidation in the source zone area, monitored natural attenuation in areas where the Site Remediation Goals (SRGs) are exceeded, and Institutional Controls (ICs) restricting residential development and use of shallow groundwater at the site until SRGs are met.

j. The final Remedial Design was submitted in February 2013

k. The final Remedial Action Work Plan was completed in March 2013

l. The Phase I fieldwork (well installation) for the remedial action was completed in June 2013. Phase II of the remedial action fieldwork was completed in November 2013. A LUC RD was completed in December 2013. The Final RACR was completed in May 2015.

8. Current Status: The site is currently in the RA-O phase.

SITE 48 – NITROGLYCERIN PLANT DISPOSAL AREA

(OLD MAP GRID H20)
IRP Site 48
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** On the hill behind Building 766.

3. **From:** Unknown, possibly laboratory samples.

4. **When:** Unknown.

5. **Generated By:** Unknown. Bottles, metal scrap, solvent containers, and refuse, possibly generated at Building 766, are visible on the hill. Most containers appear to be old and empty.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed and a Site Inspection (SI) was recommended under the Navy Installation Restoration Program (IRP) to determine if contamination is actually present.

   b. Two soil samples were taken on the hillside where the bottles and scrap are located in 1991. The samples were analyzed for mercury to determine if this site could be a source of mercury at the Building 766 ditch. No mercury was detected in the samples.

   c. A Site Investigation (SI) was conducted under the IRP. This SI included obtaining nine soil samples from three borings, three per boring at approximately 5-foot intervals. These samples were analyzed for volatile organic compounds (VOCs), base-neutral acids (BNAs), and total petroleum hydrocarbons (TPH).

8. **Current Status:** A Site Screening Process (SSP) investigation was started in April 2004. However, review of the data in the SI Report for this site led to the signing of a Decision Document in October 2004, which recommended no further action (NFA).

SITE 49 – CHEMICAL DISPOSAL PIT

(OLD MAP GRID L33)
IRP Site 49
Fact Sheet

1. **Contamination:** Waste chemicals, solvents, and mercury.

2. **Location:** Northeast of Building 444.

3. **From:** Lab operations.

4. **When:** Limited use up to the early 1970s.

5. **Generated By:** Bottles containing wastes were placed on a steel grate in the pit, and the drop plate was dropped. The plate then crushed the bottles containing waste chemicals. The glass fell into a wire basket, and the contents of the bottles were allowed to soak into the bottom of the pit.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed, and a Site Inspection was not recommended under the Navy Installation Restoration Program (IRP). According to Navy personnel, the pit received little, if any, use. No visible signs of disposal can be seen, such as chemical stains or broken glass.

   b. Five soil samples were taken at one soil boring and analyzed for volatile organic compounds (VOCs), base-neutral acids (BNAs), Target Analyte List (TAL) metals, and nitrate esters. One soil sample from inside the pit was obtained and was analyzed for VOCs, BNAs, TAL metals, and nitrate esters.

   c. This site is included in the "Lab Area" grouping of sites. Remedial Investigation (RI) field work was completed at the Lab Area in 2001. Surface and shallow subsurface soil, sediment, and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   d. The RI Report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006 and the Final Baseline Ecological Risk Assessment (BERA) Report was submitted in May 2006.

   e. During the RI, the chemical disposal pit (Site 49) was removed (excavated) and disposed offsite. Confirmatory samples were collected around and beneath the chemical disposal pit before the excavation was backfilled with clean imported fill.

   f. A Focused Feasibility Study (FS) for the Lab Area was completed in December 2009.

   g. A Proposed Plan for the Lab Area was completed in April 2010, recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

   f. The Record of Decision (ROD) was signed in September 2011.

g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities for other portions of the Lab Area finished in May 2012. The Construction Completion Report was finalized in May 2013.

8. Current Status: ICs are in place at the Lab Area due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 50 – BUILDING 103 CRAWL SPACE

(OLD MAP GRID L34)
IRP Site 50
Fact Sheet

1. **Contamination:** Elemental mercury and possibly other chemicals.

2. **Location:** Crawl space of Building 103.

3. **From:** Sinks in Building 103.

4. **When:** From 1902 to 1985. During construction in 1985, it was discovered that the sinks did not drain to either the sanitary or storm sewer system. Instead, the sinks discharged directly to the soil under Building 103.

5. **Generated By:** Laboratory equipment containing mercury was used in Building 103 at various times. During sensitivity tests, nitrometer bulbs, which contained mercury, sometimes exploded under pressure. After testing, the spent mercury, which also contained sulfuric acid, was poured into a "slop jar." Tap water was run into the jar to remove the sulfuric acid from the mercury. Small spills from the transfer of mercury to the "slop jar" were common. Jars of mercury often broke during rinsing in the sink. Other chemicals were also placed in the sinks. A visual inspection of the crawl space revealed possible asbestos insulation covering the pipes. The insulation appeared to be in good condition.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The sinks were re-routed to the sanitary sewer system. In addition, chemicals are no longer put down the sink.

   b. A Site Inspection under the Navy Installation Restoration Program (IRP) was conducted as recommended in the Preliminary Assessment to determine if contamination is actually present. This inspection included taking soil-boring samples from the crawl space under Building 103 and analyzing for volatile organic compounds (VOCs), base-neutral acids (BNAs), Target Analyte List (TAL) metals, and nitrate esters.

   c. This site is included in the "Lab Area" grouping of sites. Remedial Investigation (RI) field work was completed at the Lab Area in 2001. Surface and shallow subsurface soil, sediment, and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   d. The RI Report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006 and the Final Baseline Ecological Risk Assessment (BERA) Report was submitted in May 2006.

   e. A Focused Feasibility Study (FS) was completed in December 2009.

   f. A Proposed Plan was completed in April 2010, recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

f. The Final Record of Decision (ROD) was signed in September 2011.

g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities finished in May 2012. The Construction Completion Report was finalized in May 2013.

8. Current Status: ICs are in place due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 51 – BUILDING 101 DRY WELL

(OLD MAP GRID L34)
IRP Site 51
Fact Sheet

1. **Contamination:** None.

2. **Location:** Dry well by Building 101.

3. **From:** N/A.

4. **When:** N/A.

5. **Generated By:** Initially, it was believed that a laboratory waste stream was separated for disposal purposes. The volatile component was evaporated in a flash tank while the remaining liquid wastes were discharged into a dry well. However, inspection of Department of the Navy, Bureau of Yards and Docks drawings revealed that the flash tank did not discharge to the dry well.

6. **Amount:** None.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) was performed, and a Site Inspection (SI) was not recommended under the Navy Installation Restoration Program (IRP).

   b. This site was subjected to a Site Screening Process (SSP) during 2002. The field investigation included a geophysical survey and the collection of subsurface soil samples for analysis of Target Compound List (TCL) volatile organic compounds (VOCs).

   c. The SSP Report was completed in March 2003. The report recommended no action.

8. **Current Status:** A No Action Decision Document was signed by the Navy and EPA with concurrence from the MDE in June 2003.

SITE 52 – BUILDING 102 DRY WELL

(OLD MAP GRID L34)
IRP Site 52
Fact Sheet

1. **Contamination:** None.

2. **Location:** Dry well by Building 102.

3. **From:** N/A.

4. **When:** N/A.

5. **Generated By:** Initially, it was believed that a laboratory waste stream was separated for disposal purposes. The volatile component was evaporated in a flash tank while the remaining liquid wastes were discharged into a dry well. However, inspection of Department of the Navy, Bureau of Yards and Docks drawings revealed that the flash tank did not discharge to the dry well.

6. **Amount:** None.

7. **Work Completed:**

   a. A Preliminary Assessment was performed, and a Site Inspection was not recommended under the Navy Installation Restoration Program (IRP).

   b. This site was subjected to a Site Screening Process (SSP) during 2002. A visual of the physical conditions at the site as well as available drawings of the site did not indicate the presence of a dry well in the area separate from the Site 51 dry well (which is located nearby). No further investigation of the Site 51 was conducted.

   c. The Site Screening Process (SSP) Report was completed in March 2003. The report recommended no action.

8. **Current Status:** A No Action Decision Document was signed by the Navy and EPA with concurrence from the MDE in June 2003.

SITE 53 – MERCURY CONTAMINATION OF THE SEWAGE SYSTEM

(OLD MAP GRID L34)
IRP Site 53
Fact Sheet

1. **Contamination:** Mercury.

2. **Location:** Storm and sanitary sewer pipes.

3. **From:** Building 102.

4. **When:** 1909 through 1986.

5. **Generated By:** In 1969, approximately 10 pounds of mercury were discovered in a storm sewer manhole and, in 1989, approximately 1 pound of mercury was discovered in a sanitary sewer manhole. Both manholes have drain line connections to Building 102. Laboratory equipment that contained mercury, such as nitrometers, was used extensively in Building 102. Mercury often entered drains during the cleaning of laboratory equipment. In 1986, when mercury traps were placed on all sinks in Building 102, mercury was discovered in the U-joints of the sinks.

6. **Amount:** The Draft Preliminary Assessment Report states that only about 10 percent of the mercury sent to Building 102 was returned to the Building 444 storage vault for reclamation. Laboratory workers estimated that approximately 1 liter of mercury was lost per month. Therefore, it is possible that 28,000 pounds of mercury could have been discharged to the drain lines over the 77-year period that the building operated without mercury traps on the sinks.

7. **Work Completed:**

   a. Ten pounds of mercury discharged in the storm sewer manhole in 1969 were recovered.

   b. One pound of mercury discharged in the sanitary sewer manhole in 1989 was recovered.

   c. A television inspection of the gravity sewer lines was conducted in late 1988. The vitrified clay and terra cotta pipes were broken, cracked, sagging, separated, and, in some cases, collapsed. Mercury contamination of the sewage sludge rose to 150 parts per million while the television inspection was being conducted. This suggests that the sewer cleaning, which was done prior to the television inspection, washed mercury down to the Sewage Treatment Plant. Mercury levels have since dropped to levels acceptable for sending the sludge to an approved landfill.

   d. A Site Inspection (SI) was conducted under the Navy Installation Restoration Program (IRP) and included:

      1) Taking 26 soil samples from 13 borings. One sample per boring was located below the level of the sewer line. These samples were analyzed for mercury and nitrate esters. In addition, some samples were analyzed for volatile organic compounds (VOCs), base-neutral acids (BNAs), Target Analyte List (TAL) metals, and total petroleum hydrocarbon (TPH).

      2) Obtaining four sediment samples from sanitary and storm sewer manholes and analyzing for mercury and nitrate esters.

e. During the SI, six monitoring wells were to be installed. However, at a depth of approximately 41 feet, a marker bed was encountered that was subsequently identified as a unit of the Tertiary Brandywine Formation that is on top of the Patapsco Formation. The Upper Patapsco Formation is a confining unit, which is estimated to be 100 feet thick. Therefore, no shallow water-bearing zones were present.

f. This site is included in the "Lab Area" grouping of sites. Remedial Investigation (RI) field work was completed at the Lab area in 2001. Surface and shallow subsurface soil, sediment and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) VOCs, TCL semivolatile organic compounds (SVOCs), TAL metals, and an expanded list of explosives.

g. The RI Report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006 and the Final Baseline Ecological Risk Assessment (BERA) Report was submitted in May 2006.

h. A Focused Feasibility Study (FS) was completed in December 2009.

i. A Proposed Plan was completed in April 2010, recommending soil excavation, Institutional Controls, and wetland restoration. A public meeting was held on April 15, 2010.

f. The Final Record of Decision (ROD) was signed in September 2011.

g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities finished in May 2012. The Final Construction Completion Report was submitted in May 2013.

8. Current Status: ICs are in place due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 54 – BUILDING 101

(OLD MAP GRID L34)
IRP Site 54
Fact Sheet

1. **Contamination:** Mercury and asbestos.

2. **Location:** Basement of Building 101.

3. **From:** Use of laboratory equipment that contained mercury and possibly leaking pipes.

4. **When:** From building construction in 1909 to mid-1980s.

5. **Generated By:** In January 1990, several droplets of mercury were discovered on the insulation of a steam pipe located in the southeastern corner room of the basement in Building 101. In addition, in the mid-1980s, an employee noticed solvent odors in the basement when solvent was flushed down the sink in the room above, indicating a leaky pipe.

   Laboratory equipment that contained mercury was used in the room above the basement where mercury was discovered. A 1918 blueprint shows four nitrometers located in this room. During sensitivity tests, nitrometer bulbs, which contained mercury, sometimes exploded under pressure. After testing, the spent mercury, which also contained sulfuric acid, was poured into a "slop jar." Tap water was run into the jar to remove the sulfuric acid from the mercury. Small spills were common from transferring mercury to the "slop jar." Jars of mercury often broke during rinsing in the sink.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Site Inspection was conducted under the Navy Installation Restoration Program (IRP), as recommended in the Preliminary Assessment, to determine the extent of contamination. This inspection included:

      1) Taking five wipe samples within the building and analyzing for mercury.

      2) Taking five media samples from within the building and analyzing for mercury.

      3) Obtaining five soil boring samples from beneath the building and analyzing for mercury and nitrate esters.

   b. This site is included in the "Lab Area" grouping of sites. Remedial Investigation (RI) field work was completed at the Lab Area in 2001. Surface and shallow subsurface soil, sediment, and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) volatile organic compounds, TCL semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

   c. The RI Report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006 and the Final Baseline Ecological Risk Assessment (BERA) Report was submitted in May 2006.

   d. A Focused Feasibility Study (FS) was completed in December 2009.

e. A Proposed Plan was completed in April 2010 recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

f. The Final Record of Decision (ROD) was signed in September 2011.

g. The Remedial Action Work Plan was completed in November 2011 and remedial action activities finished in May 2012. All CERCLA-related work was limited to discharges from Building 101 and not the contamination inside of the building. The Construction Completion Report for the Lab Area was finalized in May 2013.

8. Current Status: ICs remain onsite due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 55 – BUILDING 102

(OLD MAP GRID L34)
IRP Site 55
Fact Sheet

1. **Contamination:** Mercury and asbestos.

2. **Location:** Building 102.

3. **From:** Use of laboratory equipment that contained mercury.

4. **When:** From building construction in 1909 to 1963 when renovations to the building were made.

5. **Generated By:** On October 6, 1987, metallic mercury was discovered dripping from the ceiling onto the sink table top of the coffee mess, located in the northern end of the basement of Building 102. Review of Department of the Navy, Bureau of Yards and Docks drawings indicates that a nitrometer was once located in the room directly above the area were the metallic mercury was discovered.

   While installing mercury traps in the sinks of Building 102 in 1986, the plumber reported approximately a teaspoon of mercury in each of the U-joints.

   During sensitivity tests, nitrometer bulbs, which contained mercury, sometimes exploded under pressure. After testing, the spent mercury, which also contained sulfuric acid, was poured into a "slop jar." Tap water was run into the jar to remove the sulfuric acid from the mercury. Small spills from transferring mercury to the "slop jar" were common. Jars of mercury often broke during rinsing in the sink.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During building renovations in 1963, the nitrometer operation was moved to the southern room on the first floor of Building 102, and the floor was sealed with a 2-inch layer of concrete.

   b. In the mid-1970s, the nitrometer was moved to the southern room in the basement of Building 102 and, in the early 1980s, the floor drains were sealed to prevent mercury release in case of a spill.

   c. Cleanup of the mercury began after the mercury was found dripping from the ceiling but promptly ceased after asbestos was discovered.

   d. Plastic sheeting was placed under the ceiling to encapsulate the leaking mercury, and the northern end of the building was closed to protect the health of the employees.

   e. In February 1989, the building was abandoned. In June 1991, the water supply to the building was disconnected to eliminate the potential for mercury contamination of the sludge generated from sewage treatment.

   f. A Site Inspection was conducted under the Navy Installation Restoration Program (IRP). This inspection included:

      1) Taking five wipe samples within the building and analyzing for mercury.

2) Taking five media samples from within the building and analyzing for mercury.

3) Obtaining five soil boring samples from beneath the building and analyzing for mercury and nitrate esters.

g. This site is included in the "Lab Area" grouping of sites. Remedial Investigation (RI) field work was completed at the Lab Area in 2001. Surface and shallow subsurface soil, sediment, and surface water samples were collected in the Lab Area and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), Target Analyte List (TAL) metals, and an expanded list of explosives.

h. The RI Report for the Lab Area was completed in January 2004. A wetland delineation was completed in April 2006 and the Final Baseline Ecological Risk Assessment (BERA) Report was submitted in May 2006.

i. A Focused Feasibility Study (FS) was completed in December 2009.

j. A Proposed Plan was completed in April 2010 recommending soil excavation, Institutional Controls (ICs), and wetland restoration. A public meeting was held on April 15, 2010.

f. The Record of Decision (ROD) was signed in September 2011.

g. The Remedial Action Work Plan was finalized in November 2011 and remedial action activities finished in May 2012. All CERCLA-related work was limited to discharges from Building 101 and not the contamination inside of the building. The Construction Completion Report for the Lab Area was finalized in May 2013.

8. Current Status: ICs are in place due to the unknown network of underground pipes that may contain mercury. The Remedial Action Completion Report (RACR) was finalized in July 2014.

SITE 56 – LEAD CONTAMINATION AT INDUSTRIAL WASTEWATER OUTFALL (IW) 87

(OLD MAP GRID H19)
IRP Site 56
Fact Sheet

1. **Contamination:** Lead.

2. **Location:** Pit, pipe, and sediment leading to IW87 from Building 790.

3. **From:** Washdown of lead-lined floor.

4. **When:** 1953 to October 1992.

5. **Generated By:** Building 790 contains a tank of nitric acid and a tank of sulfuric acid. The fumes from these acids get on the walls and floor inside the building, requiring a periodic wash-down of the walls and floor. The fumes from the strong acids dissolved the lead from the flooring, and the wash-down provided a route for the dissolved lead to discharge from the building to IW87.

6. **Amount:** Unknown.

7. **Work Completed:** An Engineering Evaluation/Cost Analysis (EE/CA) was prepared to determine the best method for cleaning this lead from the pit, pipe, and sediment.

   A removal action conducted in late 1996 included removal and cleaning of the pipe leading to IW87, excavation of the outfall area, treatment of contaminated water on the site, and relining of the pipe.

8. **Current Status:** A Site Screening Process (SSP) investigation for this site started in April 2004. A Decision Document, which recommended no further action (NFA), was signed in September 2006.

SITE 57 – BUILDING 292 TCE CONTAMINATION

(OLD MAP GRID P33)
IRP Site 57
Fact Sheet

1. **Contamination:** Trichloroethylene (TCE).

2. **Location:** Building 292.

3. **From:** Possible discharges and spills from drainage of the vapor-degreasing tank.

4. **When:** 1964 to 1989.

5. **Generated By:** Emptying of a 2000-gallon vapor-degreasing tank. The cleaning system used TCE vapors to clean metal parts. The 2000-gallon tank of TCE was emptied and refilled approximately every 6 months.

6. **Amount:** Unknown. Extent of contamination to be determined.

7. **Work Completed:**

   a. A limited subsurface investigation was conducted in March 1996. This investigation indicated elevated levels of TCE in the soil and groundwater in the area south of Building 292.

   b. A draft Engineering Evaluation/Cost Analysis (EE/CA) was completed in October 1996. Before the EE/CA was completed, a treatability study was conducted to determine if Soil Vapor Extraction (SVE) was an effective remedy. The results of the treatability study indicated that SVE would not work at the site due to the geology and location of the groundwater table.

   c. In 1998, the Navy completed an interim removal action (IRA) at Site 57 to address infiltration of TCE-contaminated groundwater into a storm sewer leading to outfall IW-80. Approximately 700 feet of storm sewer were lined to inhibit the accelerated migration of TCE.

   d. The Navy completed a remedial investigation at Site 57 in July 2000.

   e. During August 2001, a field investigation was conducted at Site 57 to collect data to aid in the evaluation of remedial alternatives during the preparation of an FS.

   f. A pilot study, which includes injecting Hydrogen Release Compound (HRC) in shallow groundwater to facilitate in situ bioremediation, began in May 2003.

   g. An EE/CA for contaminated soil was completed in August 2005.

   h. The final Feasibility Study (FS) was submitted in July 2006. A third party optimization review of the FS was completed in April 2006.

   i. An interim removal action for soil was completed in July 2006.

   j. The final Record of Decision was signed in September 2007.

   k. The 65% Remedial Design and draft Long-Term Monitoring (LTM) Plan were submitted in October and November 2007. An optimization review was completed and recommended

additional investigation to better delineate the contaminant source area. The final Design Investigation Work Plan and investigation field work was completed in February and April 2009 respectively. The final RD was submitted in December 2009 and the final LTM Plan was submitted in March 2010.

l. The Final Remedial Action Work Plan was submitted in October 2010. Complications using the preferred Remedial Alternative of emulsified vegetable oil via permanent injection wells arose during implementation, which led to a decision of altering the remedial technology. The new remedial technology to be used at the site is A-SOX and Proton Reduction Technology (PRT).

m. The PRT Work Plan was finalized in October 2012, along with the installation of the A-SOX system.

n. The PRT demonstration work plan was completed in January 2013 and the Final PRT Evaluation Report to assess impacts to nearby buildings was submitted in March 2013.

o. PRT demonstration fieldwork was completed in July 2013. A Final full-scale PRT design was completed in November 2013. Fieldwork and installation of the PRT system was completed in May 2015. Operation of the PRT system was evaluated via quarterly groundwater performance monitoring. A revised LTM Plan was finalized in September 2016.

8. Current Status: Fieldwork to delineate the contaminated clay layer was completed in 2022 and a report is planned to be submitted for review in late 2023. A UFP/SAP Work Plan for a vapor intrusion evaluation is expected to be submitted for regulatory review in late 2023 and fieldwork is planned for winter 2024. The site remains in the RA-O phase.

SITE 66 – TURKEY RUN DISPOSAL AREA

(OLD MAP GRID H8, I8, J8)
IRP Site 66
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** Woods and streambed behind Building 1440.

3. **From:** Disposal of various items, including lead flooring, clinker from Powerhouse, glass bottles, etc., based on visual inspection of the area.

4. **When:** Exact dates unknown.

5. **Generated By:** Disposal of various items.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. Site was visually inspected and included in the Installation Restoration Program (IRP) in 2004.

   b. The final Work Plan for the Site Screening Assessment investigation was completed in July 2007. Field work which included sampling was conducted at the site in April 2007. Based on the results of the field work, the IHIRT decided to change the investigation from a Site Screening Process to a Site Inspection (SI).

   c. A final SI Report was completed in November 2008 and recommended that a Remedial Investigation (RI) be performed..

   d. The Final RI Report was submitted in February 2012. It recommended that an additional investigation, a Baseline Ecological Risk Assessment (BERA), and a Wetland Delineation be completed to fill data gaps prior to the start of the Feasibility Study.

8. **Current Status:** Additional RI phase fieldwork began in spring 2023 to better define the conceptual site model and limits of waste. Excavation of test pits is planned for late 2023 and an RI Report is expected to be submitted for regulatory review in 2024

SITE 67 – HOG-OUT FACILITY

IRP Site 67
Fact Sheet

1. **Contamination:** Perchlorate.

2. **Location:** Building 1419.

3. **From:** Cleaning out solid propellant containing ammonium perchlorate from various devices.

4. **When:** 1960s to mid-1990s.

5. **Generated By:** Cleanout or "hog-out" of various devices, including rockets and ejection seat motors that have exceeded their useful life span.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A field demonstration of in situ bioremediation of perchlorate was conducted in 2002.

   b. Additional sampling of the area was completed as part of additional pilot study and demonstration efforts in 2005, and perchlorate was identified in shallow groundwater.

   c. Site was added to the Navy Installation Restoration Program (IRP) in 2006.

   d. A desktop audit technical memorandum was finalized in March 2011. The document summarized previous data and investigative efforts at the site and recommended an Remedial Investigation (RI).

   e. The Final RI UFP-SAP Work Plan was submitted in July 2013. Multiple phases of RI fieldwork were completed in August 2013 and December 2015.

   f. An EE/CA and Action Memo for upland soil and Mattawoman Creek sediment were finalized in July 2019 and September 2019, respectively.

8. **Current Status:** An IRA for soil and sediment began in spring 2021 and is currently underway to address hot spots. The IRA also included rehabilitation of some of the storm water utility system lines, manholes, and/or drop inlets (migration pathways). Groundwater and remaining risks will be evaluated in a RI and BERA Report which are expected to be submitted for regulatory review at a later date.

SITE 68 – FORMER BUILDING 259 CONTAMINATION

IRP Site 68 (Formerly AOC 31)
Fact Sheet

1. **Contamination:** Metals and energetics

2. **Location:** Building 259 – Old Storehouse / Detonator Production

3. **From:** Detonator production activities.

4. **When:** Building 259 is a former inert storehouse constructed in 1917. Detonator production activities occurred during World War I timeframe.

5. **Generated By:** Detonator production outside building. Lead azide was produced outside the building and cooled by water that ran through the trench.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. Pre-decontamination sampling results in January 2011 revealed elevated metals and energetics in soil outside the building. Subsequently, the team created new AOC 31 in the Navy Installation Restoration Program (IRP) to evaluate the new site.

   b. The Final Site Screening Process (SSP) UFP-SAP Work Plan was submitted in July 2013. The SSP fieldwork was completed at AOC 31 along with IRP Site 69 in July 2013 and the SSP Report was finalized in July 2015.

   c. AOC 31 was designated as IR Site 68 in April 2017.

   d. The Final Expanded SSP UFP-SAP Work Plan was submitted in July 2020. An addendum was completed in February 2021. The Expanded SSP fieldwork was completed in April 2021.

   e. The Expanded SSP Report and EE/CA were finalized in August 2023.

8. **Current Status:** Additional action is recommended at Site 68 to address mercury and lead in soil in the form of a non-time-critical removal action. The Draft Action Memo was submitted for Navy and regulatory review in August 2023. The Action Memo will be signed and NTCRA fieldwork will begin in late 2023.

SITE 69 – BUILDING 1018

IRP Site 69
Fact Sheet

1. **Contamination:** Perchlorate.

2. **Location:** Building 1018 – Oxidizer Process Building.

3. **From:** Unloading/transferring ammonium perchlorate at Building 1018 for processing.

4. **When:** 1960s to 2000s.

5. **Generated By:** Spillage during unloading/transferring activities at Building 1018 for perchlorate processing.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. Pre-demolition sampling identified elevated perchlorate in soil surrounding Building 1018 in January 2011.

   b. Site was added to the Navy Installation Restoration Program (IRP) in 2011.

   c. The Final Site Screening Process (SSP) UFP-SAP Work Plan was submitted in July 2013. The SSP fieldwork was completed at Site 69 along with AOC 31 in July 2013.

   d. The Final RI UFP-SAP work plan was submitted in September 2016. The RI fieldwork was completed in April 2017. The RI Report was finalized in June 2020.

   e. The FS was finalized in January 2021.

8. **Current Status:** The FS was finalized in January 2021. A Proposed Plan was finalized in January 2022. A ROD was signed in May 2023 and a Remedial Design is being prepared.

SITE 70 – GROUNDWATER CONTAMINATION ALONG WATER WORKS WAY

IRP Site 70
Fact Sheet

1. **Contamination:** TCE, lead, and arsenic in groundwater

2. **Location:** North/West (upgradient) of and within Scrap Yard (IRP Site 41 / MRP Site UXO 32), near Building 1470.

3. **From:** Scrap and discarded materials disposal and staging in the Scrap Yard, and unknown (to be determined) upgradient source(s). The site was discovered (i.e., assigned) as a result of attempting to find the source of groundwater contamination located at the Scrap Yard during the Remedial Investigation (RI) / Feasibility (FS) and Interim Removal Action (IRA) at Site 41 / UXO 32.

4. **When:** From the 1960s to 1988.

5. **Generated By:** Release(s) from historical storage of coal and lead-acid batteries (along with various scrap materials) and unknown upgradient release(s).

6. **Amount:** Unknown.

7. **Work Completed:** Sampling conducted while determining the extent of groundwater contamination during Site 41/UXO 32 RIs determined some groundwater contamination originates upgradient of the Scrap Yard.

8. **Current Status:** The groundwater medium at the Scrap Yard was assigned as new IRP Site 70 in 2013. The RI Report is delayed until supplemental fieldwork to delineate upgradient cobalt in groundwater is completed. A UFP-SAP addendum is expected to be submitted in late 2023 for regulatory review.

SITE 71 – FIRE TRAINING AREAS-5

IRP Site 71
Fact Sheet

1. **Contamination:** PFAS

2. **Location:** Numerous areas of concern located throughout the main installation and Stump Neck Annex. Currently the site includes Building 116 which is between S. Patterson Road and McMahon Road.

3. **From:** Unknown.

4. **When:** Unknown, but likely after 1970.

5. **Generated By:** Potential use of foam containing PFAS in fire training exercises and fire responses.

6. **Amount:** Unknown.

7. **Work Completed:** Site added to program in 2017.

8. **Current Status:** A PA Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report for PFAS is expected by September 2023.

SITE 72 – MAIN FIREHOUSE

IRP Site 72
Fact Sheet

1. **Contamination:** PFAS

2. **Location:** Behind Building 878 (S. Patterson Road) in the northern portion of the Main Area.

3. **From:** Fire-fighting training activities.

4. **When:** From 2006-2016.

5. **Generated By:** Potential use of foam containing PFAS in fire training exercises.

6. **Amount:** Unknown.

7. **Work Completed:** Site added to program in 2023.

8. **Current Status:** A Preliminary Assessment Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report for PFAS is expected by September 2023.

SITE 73 – OPEN FIELD BY TRACKS

IRP Site 73
Fact Sheet

1. **Contamination:** PFAS

2. **Location:** Intersection of W. Farnum Road and S. Dashiell Road in north portion of the Main Area.

3. **From:** Spraying AFFF into the field without containment.

4. **When:** Unknown.

5. **Generated By:** Potential use of foam containing PFAS in fire training exercises.

6. **Amount:** Unknown.

7. **Work Completed:** Site added to program in 2023.

8. **Current Status:** A Preliminary Assessment Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report for PFAS is expected by September 2023.

SITE 74 – SANITARY TREATMENT PLANT #1

IRP Site 74
Fact Sheet

1. **Contamination:** PFAS

2. **Location:** Vicinity of Building 1469 in the northern portion of the Main Area.

3. **From:** Potential releases of AFFF into the sanitary sewer system during fire-fighting training activities. Sludge drying beds may have received runoff that contained PFAS.

4. **When:** 1983-present.

5. **Generated By:** Potential use of foam containing PFAS in fire training exercises at the Main Firehouse that could have migrated to the treatment plant through the sanitary sewer system.

6. **Amount:** Unknown.

7. **Work Completed:** Site added to program in 2023.

8. **Current Status:** A Preliminary Assessment Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report for PFAS is expected by September 2023.

SWMUS 4 AND 5 – UNDERGROUND STORAGE TANKS AT TRANSPORTATION DEPARTMENT

(OLD MAP GRID E37)
IRP AOC
Main Area SWMUs 4 and 5
Fact Sheet

1. **Contamination:** Waste oil from equipment maintenance.

2. **Location:** These units consist of one 550-gallon underground storage tank (UST) (SWMU 4) behind the automotive shop (Building 290) and a second 1,000-gallon UST (SWMU 5) behind the heavy equipment shop (Building 525).

3. **From:** Waste oil from equipment maintenance is placed in a basin, which is approximately 36 inches by 18 inches by 12 inches deep, inside the shops. The waste oil drains through a pipe to the USTs. A contractor pumps the waste oil from the tanks to a truck for off-site disposal.

4. **When:** Facility personnel indicated that the units have been in operation since 1978.

5. **Generated By:** The wastes managed at this unit include waste oils from the transportation equipment maintenance branch.

6. **Amount:** One 550-gallon underground storage tank (SWMU 4) and a second 1,000-gallon UST (SWMU 5).

7. **Work Completed:**

   a. During the visual site inspection (VSI), stained soil was observed in the vicinity of the standpipe from the UST behind Building 525 (SWMU 5). No evidence of release was observed in the vicinity of SWMU 4.

   b. These units were included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with these units.

SWMU 6 – USED BATTERY ACCUMULATION AREA (BUILDING 290)

(OLD MAP GRID R27)
IRP AOC
Main Area SWMU 6
Fact Sheet

1. **Contamination:** Unit is used for storage of used batteries.

2. **Location:** Automotive shop (Building 290).

3. **From:** The Transportation Department automotive shop (Bldg. 290) uses an area outside the building for accumulation of used batteries. The batteries are stored on wooden pallets over a concrete driveway. The area is uncovered and measures approximately 6 feet wide by 10 feet long.

4. **When:** According to facility representatives, the date the area was first used for storage is not known. However, the area has been used for several years.

5. **Generated By:** The Transportation Department automotive shop (Building 290) uses an area outside the building for accumulation of used batteries.

6. **Amount:** Unknown

7. **Work Completed:**

   a. Staining was observed on the concrete pad during the visual site inspection (VSI). However, no visible signs of release to soils were noted, and no releases were noted in available file information.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 27 – WASTE OIL STORAGE AREA (GOODARD POWER PLANT)

(OLD MAP GRID N31)
IRP AOC
Main Area SWMU 27
Fact Sheet

1. **Contamination:** The area is approximately 150 feet long by 50 feet wide and includes metal drums of waste oil sitting on the soil surface. At the time of the visual site inspection (VSI), the unit contained eight drums of waste oil from the oil/water separator, five empty drums labeled pelletized nitrocellulose, and a pile of oily soil that was approximately 12 feet by 10 feet by 3 feet high. The pile appeared to contain waste oil and absorbent collected from spills inside the power plant.

   Remediation activities included the removal of the empty drums and the partial removal of the empty waste oil and absorbent. The remaining stained soil was drummed for off-site disposal.

2. **Location:** Fuel storage area at Goddard Power Plant.

3. **From:** Goddard Power Plant.

4. **When:** Area had been used for storage of this type since the start-up of the power plant in 1957.

5. **Generated By:** This unit is used for storage of waste oil collected from the power plant. The drums of waste oil are taken to the Caffee Road thermal treatment unit (SWMU 21) for burning or to Building 455 (SWMU 2) for off-site disposal.

6. **Amount:** At the time of the visual site inspection (VSI), the unit contained eight drums of waste oil from the oil/water separator, five empty drums labeled pelletized nitrocellulose, and a pile of oily soil approximately 12 feet by 10 feet by 3 feet high.

7. **Work Completed:**

   a. On the second day of the VSI, a pile of stained soil was observed in the area. During the fifth day of the VSI, the unit was revisited, and it was observed that the waste pile had been partially removed and that an area of stained soil remained.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 38 – CAFFEE ROAD WASTE OIL STORAGE AREA

(OLD MAP GRID L6)
IRP AOC
Main Area SWMU 38
Fact Sheet

1. **Contamination:** This unit is a storage area for drums of waste oil used at the Decontamination Burn Point (SWMU 21).

2. **Location:** Decontamination Burn Point (SWMU 21).

3. **From:** The oil is used to start and maintain the fire at the burn point. The fire is initiated to flash explosive residue from discarded metal parts generated on-base.

4. **When:** Oil has been stored at this location since approximately 1986.

5. **Generated By:** The unit is used for storage of waste oil from vehicles and machinery in drums. The oil is used to start and maintain the fire at the Decontamination Burn Point.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. There was no known history of release at the unit, and no signs of release were observed during the visual site inspection.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that this unit would be handled with Site 11. The remedial action at Site 11 also addresses this SWMU. See the fact sheet for Main Area IRP Site 11.

SWMUs 40-46 – WASTEWATER COLLECTION TREATMENT TANKS (MOSER PLANT)

(OLD MAP GRID E17)
IRP AOC
Main Area SWMUs 40 through 46
Fact Sheet

1. **Contamination:** These seven units are used for the collection and treatment of wastewater generated from the production of nitrate esters (e.g., nitroglycerin, nitrocellulose, etc.) at the Moser Plant. The wastewater contains concentrations of slightly acidic explosive residue.

2. **Location:** Moser Plant.

3. **From:** The tanks are used to collect the wastewater, settle the explosive residue, and neutralize the acidity, if necessary.

4. **When:** The units were installed and began operation in the mid-1970s.

5. **Generated By:** The units are used for collection and treatment of wastewater containing explosive residue, which is slightly acidic. The settled explosive residue from the wastewaters is adsorbed onto wood chips and burned at the Cast Plant Burn Point (SWMU 19). The water is discharged to an NPDES outfall after settling.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The tanks observed during the visual site inspection included two 300-gallon tanks, one 1,000-gallon tank, and one 200-gallon tank. The tanks were all constructed of steel, were located indoors on concrete floors, and were each covered. Three additional tanks of the same design and construction are located in the process area.

   b. These units were included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with these units.

SWMUs 47-51 – SPENT ACID STORAGE TREATMENT TANKS (MOSER PLANT)

(OLD MAP GRID E17)
IRP AOC
Main Area SWMUs 47 through 51
Fact Sheet

1. **Contamination:** These five units are used for the collection and treatment of spent acid generated during production of nitrated esters at the Moser Plant.

2. **Location:** Moser Plant.

3. **From:** The tanks include three spent acid tanks, including one 150-gallon and two 553-gallon tanks, one 200-gallon slum recovery tank, and one 6,000-gallon neutralization tank (divided into two compartments). The tanks are constructed of steel, are located indoors, and are covered. The level in the tanks is controlled by batch flow to the units.

4. **When:** Tanks were installed and began operation in the mid-1970s.

5. **Generated By:** The units are used for collection and treatment of spent acid from the production of nitrated esters. The wastewater from neutralization is discharged to an NPDES outfall. The facility representative stated that no sludge was generated by the neutralization process.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. There is no history of release from the units, and there were no visible signs of release during the visual site inspection.

   b. These units were included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with these units.

SWMUs 64-66 – WASTEWATER STORAGE TANKS (BUILDING 1596)

(OLD MAP GRID P30)
IRP AOC
Main Area SWMUs 64 through 66
Fact Sheet

1. **Contamination:** The units were used for storage of water contaminated with hydrazine fuel.

2. **Location:** Building 1596.

3. **From:** The wastewater storage tanks located in Building 1596 were used for storage of water contaminated with hydrazine fuel. The water was incinerated in Thermal Destructor 2 (SWMU 63). The tanks are located indoors over concrete flooring. They are constructed of polyurethane and are approximately 10,000-gallon each in capacity.

4. **When:** The exact date of installation of the tanks is not certain; however, it is assumed the tanks were installed circa 1976 [i.e. the same time as construction of Thermal Destructor 2 (SWMU 63)].

5. **Generated By:** The tanks are located indoors on a concrete floor and have been empty for a number of years. No details were available on the control of flow to the tanks.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. There is no known history of release from the units, and no visible signs of release were observed during the visual site inspection.

   b. These units were included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with these units.

SWMU 69 – TEMPORARY ACCUMULATION DUMPSTERS FOR EXPLOSIVE SCRAP

IRP AOC
Main Area SWMU 69
Fact Sheet

1. **Contamination:** The dumpsters are used for storage of explosive scrap from processes throughout the facility.

2. **Location:** Throughout the base.

3. **From:** NSFIH uses metal dumpsters for collection of explosive scrap from manufacturing and associated operations throughout the base.

4. **When:** The practice of storing explosive scrap in dumpsters was used at the base from the late 1950s until 1992.

5. **Generated By:** The dumpsters are color coded (blue or yellow) for use only as storage for explosive scrap. They are constructed of metal, measure approximately 5 feet long by 4 feet wide by 4 feet deep, and are typically located over concrete or asphalt. The explosive scrap contained in a water bath is in the dumpster. Water must be present in the dumpsters for safety reasons: dry propellant scrap is an explosive hazard. When filled, the dumpster is transported to the burn point (SWMU 19), the water is filtered and discharged through an NPDES outfall, and the explosive scrap is burned at the burn point.

   The dumpsters are filled to fill-lines marked on the dumpster. The fill-line leaves ample freeboard to prevent overflow or spilling from the dumpster.

6. **Amount:** 50 to 60 dumpsters

7. **Work Completed:**

   a. There is no known history of release from the dumpsters. Visual inspection of several units during the visual site inspection found no signs of release. All inspected units were found to be in good condition.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 70 – TEMPORARY ACCUMULATION BUILDINGS FOR DRUMMED EXPLOSIVE SCRAP

IRP AOC
Main Area SWMU 70
Fact Sheet

1. **Contamination:** The buildings are used for temporary storage of explosive scrap generated at process areas throughout the facility.

2. **Location:** The storage locations are wooden sheds, all of similar design, constructed over concrete pads. The sheds are covered and typically measure approximately 6 feet by 6 feet.

3. **From:** NSFIH has 51 storage buildings for accumulation of explosive scrap in metal cans. The metal cans (commonly called G.I. cans) are about 30 gallons in size and are color coded blue or yellow for use only as storage for explosive scrap.

4. **When:** There are 51 temporary accumulation areas that have been constructed at various times during the facility operation.

5. **Generated By:** Explosive scrap is typically adsorbed (i.e., liquid) onto wood chips and collected in non-conductive rubber bags, placed in the metal cans, and stored in the accumulation area. Cans were removed daily to the burn point (SWMU 19) for safety reasons.

   The explosive scrap is collected in non-conductive rubber bags, placed in the metal cans, and stored in the building. The buildings have concrete floors but no curbs.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. There is no known history of release from the units, and the visual inspection found no signs of release.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 72 – OIL/WATER SEPARATORS

IRP AOC
Main Area SWMU 72
Fact Sheet

1. **Contamination:** Several wastewater discharge lines at NSFIH include an oil/water separator for removal of floating oil from the wastewater prior to discharge through an NPDES outfall.

2. **Location:** Various process areas on-base.

3. **From:** The unit separates floating oil from wastewater generated by various process areas on-base. Waste oil is collected at the units and either used on site or disposed of offsite. The units are typically constructed of concrete and are generally covered with a metal lid. Many of the units overflow to NPDES discharge points.

4. **When:** It is assumed that the separators were typically constructed at the time of building construction

5. **Generated By:** The waste oil is either used on site (e.g., such as the waste oil used for starting fires at the Decontamination Burn Point) or disposed of offsite.

6. **Amount**: The Industrial Wastewater Treatment Study listed at least 15 separators associated with various buildings and process lines.

7. **Work Completed:**

   a. There is no known history of release from the units, and visual inspection of two units found no signs of release.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with these units.

SWMU 74 – UNLINED OVERLAND DRAINAGE DITCHES

IRP AOC
Main Area SWMU 74
Fact Sheet

1. **Contamination:** Process wastewater containing various contaminants.

2. **Location:** Drainage ditches throughout the Activity.

3. **From:** Discharge of process wastewater to unlined overland drainage ditches.

4. **When:** Startup varies with each ditch. However, the practice of discharge in unlined ditches has been used since the beginning of production at the Activity.

5. **Generated By:** Various processes throughout the Activity.

6. **Amount**: Unknown

7. **Work Completed:** This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002. The decision reached was this SWMU will remain an AOC, and additional work is needed to identify and verify ditches with potential contamination.

8. **Current Status:** A concurrence letter for no further action (NFA) was signed in February 2004 for this unit. The team agreed to administratively close out SWMU 74. Drainage ditches considered problematic have been addressed during investigations of them specifically or along with adjacent sites. Any ditches found to be a potential concern during future site investigations will be addressed by those investigations.

AOC G – SAND BLASTING SAND STORAGE AREA

(OLD MAP GRID B8)
IRP AOC
Main Area RCRA AOC G
Fact Sheet

1. **Contamination:** Sand blasting is used to remove paint from rocket motor casings. Sand blasting sand commonly contains heavy metals.

2. **Location:** The equipment is located indoors on a floor and containment area constructed of steel and concrete (Building 1134).

3. **From:** The sand is collected and continuously recycled to the sand blast equipment, resulting in no waste sand.

4. **When:** Unknown.

5. **Generated By:** The process is currently being converted to use a plastic medium (i.e., to replace the sand) for removal of the paint.

6. **Amount:** Unknown.

7. **Work Completed:** This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

AOC H – DRUM AT FUEL STORAGE AREA

(OLD MAP GRID C8)
IRP AOC
Main Area RCRA AOC H
Fact Sheet

1. **Contamination:** During visual inspection of the vehicle maintenance area (Building 290), a single drum containing an unidentified liquid was observed adjacent to the nearby fuel storage area. There was no indication, however, that the contents of the drum were a waste (i.e., no signs that activities in the area would generate a waste). The drum was located outdoors on an asphalt roadway. There was no apparent leakage from the drum, and visual inspection found no signs indicating that the area was routinely used for storage of drums.

2. **Location:** Unknown.

3. **From:** Unknown.

4. **When:** Unknown.

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:** This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 20 / UXO 20 – SAFETY THERMAL TREATMENT POINT

(OLD MAP GRID F1)
IRP AOC
Main Area SWMU 20 / MRP Site UXO 20
Fact Sheet

1. **Contamination:** The Safety Thermal Treatment Point was an open burning area that operated in a manner similar to the Cast Plant Burn Point (SWMU 19). The unit was used for thermal treatment of explosive and flammable waste.

2. **Location:** The Safety Thermal Treatment Point is located west of the Cast Plant Burn Point on a small peninsula extending into the Potomac River (south of Building 1248).

3. **From:** The treatment point is an area of bare soil on the end of the peninsula where various explosive and flammable materials were burned. The Safety Thermal Treatment Point was used for burning of pyrotechnics including igniters, detonators, and other explosive devices.

   Like the Cast Plant Burn Point, the state of Maryland determined that the unit would require a RCRA permit under Subpart X regulations.

4. **When:** The start-up date of the unit is estimated to be the late 1940s or early 1950s.

5. **Generated By:** The unit was used for thermal treatment of explosive and flammable waste. The unit is an area of bare soil with no secondary containment preventing runoff into the river. The unit is designed to release to air. Some residue may remain from incomplete burning of the waste materials; however, facility representatives stated that the area was periodically "shocked" to remove any residual explosive or flammable material.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. Cleanup of contaminated soil at the site in 1988 (removal of approximately 100 drums.)

   b. Completion of a site characterization report for the STTP as part of a RCRA closure effort. Lead was the chemical of concern.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

   d. The final Preliminary Assessment Report was completed in September 2005.

   e. A Site Inspection was completed in September 2010 and recommended a Remedial Investigation for munitions and explosives of concern (MEC) and munitions constituents (MC) in soil and groundwater.

   f. The Final Remedial Investigation (RI) Work Plan (along with completed Explosive Safety Submission) was submitted in November 2012.

8. **Current Status:** SWMU 20 has been included in the Munitions Response Program (MRP) and designated as Site UXO 020. Following MEC and MC field work (sampling, DGM survey, and intrusive investigation of anomalies), an RI Report was finalized in February 2023. A Remedial

Alternatives Analysis and Feasibility Study are currently being prepared. A SRG Tech Memo was submitted for regulatory review in August 2023.

SWMU 21 – CAFFEE ROAD DECONTAMINATION BURN POINT

(OLD MAP GRID L6)
IRP AOC
Main Area SWMU 21
Fact Sheet

1. **Contamination:** The Decontamination Burn Point is a thermal treatment open burn area for decontamination of scrap metal contaminated with explosive. The burn area had two large piles of scrap metal, one awaiting thermal treatment and a second, treated pile. The waste oil used to ignite and sustain the fire was stored in drums at a storage area near the burn point.

   Like the Cast Plant and Safety Burn Points, the state of Maryland determined that the Decontamination Burn Point would require a RCRA permit under Subpart X regulations.

2. **Location:** The unit lies at the south end of Caffee Road on top of the inactive Caffee Road Landfill and approximately 253 yards from Mattawoman Creek.

3. **From:** The metal was placed into a pile and ignited to remove any explosive contaminants by burning. Waste oil was used on the metal to ignite and sustain the fire. Following treatment, the metal was sold to off-site contractors as scrap.

4. **When:** This unit has been in operation since the Caffee Road Landfill was covered in the early 1980s.

5. **Generated By:** This unit is used for the thermal treatment of solids, including wood and metal contaminated with explosives. The contaminated material is burned with waste oil to aid combustion. Thermally treated material is periodically collected and sold as scrap. The unit is located on the soil cover over the Caffee Road Landfill.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. Operations ceased, the scrap pile was removed, and the site was re-graded to address stormwater runoff issues in September 2001.

   b. Three mounds covered with CR-6 were built around the new planned burn area in November 2001.

   c. Conduits, a 6-foot by 6-foot equipment concrete pad, heat shields, and control panel were installed in April 2002, but the new treatment pad has not yet been used for thermal treatment operations.

   d. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and EPA with concurrence from the MDE on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that this unit would be handled with Site 11. The remedial action at Site 11 also addresses this SWMU. See fact sheet for Main Area IRP Site 11.

UXO 13 – FDR SKEET RANGE

MRP Site UXO 13
Fact Sheet

1. **Contamination:** Lead, PAHs.

2. **Location:** The southeast portion of the main installation adjacent to Mattawoman Creek.

3. **From:** Recreational target practice.

4. **When:** 1940s to 1960s.

5. **Generated By:** Recreational munitions use that was limited to shotgun ammunition.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment Report was completed in September 2005 and recommended no further action (NFA) for munitions and explosives of concern (MEC), and a Site Inspection for munitions constituents (MC).

   b. A Site Inspection was completed in September 2010 and recommended a Remedial Investigation for MC in surface soil around the trap house and NFA for the shot fall area.

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 013. Initial fieldwork was completed in late 2022. A SAP Addendum and additional fieldwork are planned to address data gaps prior to submission of a RI Report..

UXO 19 – IGNITER AREA

MRP Site UXO 19
Fact Sheet

1. **Contamination:** Explosives, lead styphnate.

2. **Location:** The southeastern shoreline of the main installation in the vicinity of Building 1451 and adjacent to Mattawoman Creek.

3. **From:** Disposal of igniters at the shoreline.

4. **When:** Unknown.

5. **Generated By:** Disposal of igniters described to be electric primers or electrically-primed rifle cartridges approximately .50 caliber in size.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was designated as Munitions Response Program (MRP) Site UXO 19 and was included in the Water Area Munitions Study (WAMS) which was completed in February 2005, and recommended an interim removal action for munitions and explosives of concern (MEC) and a Site Inspection for munitions constituents (MC).

   b. A shoreline munitions inventory was completed in January 2010.

   c. The Site Inspection was completed in September 2010 and recommended no further action (NFA) for MC in the sediment.

   d. A Final Interim Removal Action Work Plan was completed in January 2011 and the Final Explosive Safety Submission was completed in June 2012. The interim removal action (IRA) was completed in October 2012 along a 400- by 10-foot area along the shoreline. Approximately 410 pounds of material documented as safe (MDAS) was removed.

   e. A DGM Survey Work Plan to investigate the presence of potential items in the shallow water off the shoreline was completed in December 2012 and the DGM Survey fieldwork was completed in May 2013. A DGM Technical Memorandum was completed in June 2013.

8. **Current Status:** A Draft QAPP for DGM and intrusive investigation was submitted in August 2023 and is currently under regulatory review.

UXO 29 – SOUTHWESTERN PISTOL RANGE

MRP Site UXO 29
Fact Sheet

1. **Contamination:** Lead and other munitions constituents such as antimony, arsenic, copper, nickel, and lead styphnate/lead azide.

2. **Location:** The western end of the main installation peninsula, between Drop Tower Drive and Pump House Lane, southwest of Building 739.

3. **From:** Small arms (pistol) training.

4. **When:** 1940s.

5. **Generated By:** Practice range firing of small arms. The site is also overlapped by The Valley firing fan.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment Report was completed in September 2005.

   b. The Site Inspection was completed in September 2010 and recommended no action for this site.

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 029. A draft Technical Memorandum that recommends NFA for the site was submitted in January 2010 but was never finalized. Instead, the information documenting NFA for this site was included in the Final Site Inspection. A no action Decision Document was signed in October 2011.

UXO 30 – GATE 3 BURNING GROUND

MRP Site UXO 30
Fact Sheet

1. **Contamination:** Flares, pyrotechnics, solid fuse boosters, bulk explosives, propellants, small arms ammunition.

2. **Location:** Near the intersection of Strauss Avenue and E. Caffee Road, along the Potomac River shoreline.

3. **From:** Burning of explosives.

4. **When:** 1955-1961.

5. **Generated By:** Burning of explosives.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment Report was completed in September 2005 and recommended a Site Inspection for munitions and explosives of concern (MEC) and munitions constituents (MC) in surface soil, subsurface soil, and groundwater.

   b. A Site Inspection was completed in September 2010 and recommended further investigation of MEC based on subsurface anomalies and a Remedial Investigation for MC in soil and groundwater.

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 030. The site is currently in the Remedial Investigation phase. RI sampling fieldwork was completed in February 2023 and a RI Report is expected to be submitted for regulatory review in 2024.

UXO 33 – WATER IMPACT AREA

MRP Site UXO 33
Fact Sheet

1. **Contamination:** Naval ordnance constituents: explosives, black powder, smokeless powder, brown powder, emmensite, joveite, wet gun cotton, randite, and thorite.

2. **Location:** Located within the Potomac River between Chapman's Point, Maryland and the mouth of the Chicamuxen River encompassing approximately 12,296 acres.

3. **From:** Testing and development of ordnance that may have strayed from targets.

4. **When:** 1890s to 1920s.

5. **Generated By:** Guns and rockets fired from the Valley that may have missed intended impact areas and landed in the Water Impact Area.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was designated as Munitions Response Program (MRP) Site UXO 024 and was included in the Water Area Munitions Study (WAMS) which was completed in February 2005.

   b. A Site Inspection (SI) was completed in September 2010 and recommended no action for munitions and explosives of concern (MEC) and munitions constituents (MC).

8. **Current Status:** Although the SI recommended no action for the site, it recommended that the existing Danger Zone on the NOAA maps be expanded to include the potential impact area from UXO 033, updating the current site use, and restricting intrusive activities. A report titled "Preliminary Assessment of Water Ranges for Munitions Response Sites and Areas of Concern for the Naval Support Activity South Potomac (Dahlgren), VA" dated August 2015 stated that while MEC may be present at UXO 33, due to sediment deposition over time, soft sediments, and currents in the river, there is an incomplete pathway for human exposure. Institutional controls against disturbing the sediments, documented in the description of the Danger Zone regulations and shown on the NOAA charts, is recommended. Additionally, a 1935 range map retrieved from the Archive showed seven range fans within the boundary of UXO 33. This site may be investigated further in the future.

2.2 SITE DESCRIPTIONS – STUMP NECK ANNEX

This section consists of fact sheets for the Stump Neck Annex sites and AOCs.

SITE 30 / SWMU 22 / UXO 10 – STUMP NECK IMPACT AREA

(OLD MAP GRID F16, G16)
IRP Site 30 / Stump Neck Annex SWMU 22 / MRP Site UXO 10
Fact Sheet

1. **Contamination:** Exploded ordnance.

2. **Location:** The area is approximately 40 acres of marshland.

3. **From:** According to facility representatives, this area was used for testing of single-base, powder-fired projectiles.

4. **When:** The unit was reportedly used before World War II.

5. **Generated By:** Projectile testing.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. No projectiles have been recovered from the area.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. A Preliminary Assessment (PA) Report was completed in September 2005, recommending the area be investigated for MEC.

   d. A Site Inspection (SI) Report was completed in September 2010, recommending a Remedial Investigation (RI) for munitions and explosives of concern (MEC) and NFA for munitions constituents (MC).

8. **Current Status:** Currently designated as Munitions Response Program (MRP) Site UXO 010. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

SITE 31 / SWMU 23 / UXO 7 – OLD DEMOLITION RANGE

IRP Site 31 / Stump Neck Annex SWMU 23 / MRP Site UXO 7
Fact Sheet

1. **Contamination:** Small quantities of shrapnel and casings from detonation of explosives.

2. **Location:** The area is approximately 1 acre in size. This unit is in the immediate vicinity of the Chicamuxen Creek's Edge Dump Site B (SWMU 4).

3. **From:** Training activities at the site are believed to have been similar to those now practiced at Range 6 (SWMU 5), an explosive ordnance disposal training range.

4. **When:** Used in 1962, and for many years prior to 1962, as an old demolition training ground.

5. **Generated By:** Explosive Ordnance Disposal (EOD) training.

6. **Amount:** Small quantities of shrapnel and casings.

7. **Work Completed:**

   a. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   b. A Preliminary assessment (PA) started in June 2003. The PA Report was completed in September 2005.

8. **Current Status:** Currently designated as Munitions Response Program (MRP) Site UXO 007. Because this site is collocated with an active range (Hypervelocity Gun), it is ineligible for further action under CERCLA. A No Action Decision Document was signed in October 2005.

SITE 32 / SWMU 11 – SUSPECTED TOOL BURIAL SITE

IRP Site 32
(Stump Neck Annex SWMU 11)
Fact Sheet

1. **Contamination:** Beryllium-copper alloy.

2. **Location:** Vicinity of Building 31 Stump Neck.

3. **From:** Hand tools used in explosive ordnance disposal work.

4. **When:** Unknown.

5. **Generated By:** This unit is suspected to contain special beryllium-copper alloy hand tools used in explosive ordnance work.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection, the unit was covered with grass and rimmed by sparse woods. Facility representatives indicated the burial site's approximate size was 10 feet by 10 feet.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This site was subjected to a Site Screening Process (SSP) during 2002. Because the site is so similar to Site 34 with respect to the potential sources of contamination, the work plan allowed for not pursuing the investigation of Site 32 if the results from the Site 34 investigation indicated that no action was appropriate. Since the results of the Site 34 investigation indicated no reason to pursue Site 32, no field investigation was performed.

   d. The SSP Report was finalized in March 2003.

8. **Current Status:** A No Action Decision Document was signed by the Navy and the EPA with concurrence from the MDE in June 2003.

SITE 33 / SWMU 7 – SCRAP METAL PIT

(OLD MAP GRID O16)
IRP Site 33 / Stump Neck Annex SWMU 7
Fact Sheet

1. **Contamination:** Metal parts of mines, torpedoes, and other explosive-inert items.

2. **Location:** The exact location of the Scrap Metal Pit could not be identified. The area is southwest of Building 2117.

3. **From:** Used as a disposal pit for mines and torpedoes. This unit is an outdoor, unlined earthen area that measures approximately 10 feet by 30 feet by 10 feet deep.

4. **When:** Prior to 1983.

5. **Generated By:** Disposed wastes include metal objects (parts of mines, torpedoes, and other inert materials) derived from the manufacture of explosives.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection in July 1988, the area was covered with grass and brier and was sparsely lined with trees. The area had been re-forested approximately two years earlier.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. A Site Screening Process (SSP) field investigation was completed in 2002. The field investigation included a geophysical survey; temporary monitoring wells with groundwater samples analyzed for Target Analyte List (TAL) metals and explosives; subsurface soil samples analyzed for TAL metals and explosives; and test pits located based on the results of the geophysical survey.

   d. The SSP Report was finalized in March 2003.

8. **Current Status:** A No Action Decision Document was signed in October 2004.

SITE 34 / SWMU 8 – TOOL BURIAL SITE

(OLD MAP GRID E15)
IRP Site 34 / Stump Neck Annex SWMU 8
Fact Sheet

1. **Contamination:** Beryllium-copper alloy.

2. **Location:** Located approximately 60 to 70 feet into a wooded area southeast of Building D21C.

3. **From:** Two unlined burial pits, each measuring about 5 feet by 15 feet by 12 feet deep. The volume of tools in each pit is reported to be about 5 feet by 8 feet by 2 feet.

4. **When:** Used once in 1972 or 1973. Beryllium-copper alloy hand tools were disposed in the pits. These tools were discarded because they did not pass a magnetometer test and were considered unserviceable.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   b. A Site Screening Process (SSP) field investigation was completed in 2002. The field investigation included a geophysical survey; temporary monitoring wells with groundwater samples analyzed for beryllium and copper; subsurface soil samples analyzed beryllium, copper, and explosives; and test pits located based on the results of the geophysical survey.

   c. The SSP Report was completed in March 2003.

8. **Current Status:** A No Action Decision Document was signed by the Navy and the EPA with concurrence from the MDE in June 2003.

SITE 35 / SWMU 9 / UXO 12 – TORPEDO BURIAL SITE

(OLD MAP GRID E14, E15)
IRP Site 35 / Stump Neck Annex SWMU 9 / MRP Site UXO 12
Fact Sheet

1. **Contamination:** Torpedoes and associated hardware, possibly containing fuses and parts which are not rendered safe.

2. **Location:** Located near Building 2075.

3. **From:** The unit is an unlined earthen pit. Inert objects disposed in this unit included discarded torpedo shells and associated hardware.

4. **When:** Used in the late 1940s and early 1950s and inactive since the early 1950s

5. **Generated By:** The waste was transported from a torpedo station near Washington, D.C.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection the area appeared flat and was covered with green grass. The perimeter of the unit is wooded and an unnamed creek dissects the area.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. A Preliminary Assessment (PA) Report was completed in September 2005, recommending an investigation for MEC.

   d. A Site Investigation (SI) Report was completed in September 2010.

8. **Current Status:** Currently designated as Munitions Response Program (MRP) Site UXO 012. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

SITE 36 / SWMU 10 – CLOSED LANDFILL

(OLD MAP GRID H14, H15)
IRP Site 36 / Stump Neck Annex SWMU 10
Fact Sheet

1. **Contamination:** Inert metal casings, mines, bombs, and torpedoes.

2. **Location:** Near Building 2010; west of Roach Road adjacent to Chickamuxen Creek.

3. **From:** Objects disposed in the landfill included metal casings, mines, bombs, and torpedoes, which reportedly were inert and contained no explosives or chemicals when buried.

4. **When:** Used from 1972 to 1974; inactive since 1974.

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The Initial Assessment Study describes a landfill that consists of two distinct adjacent areas. The unit is an unlined, earthen area, approximately 1 to 2 acres in size, and is covered with grass and other low vegetation. The unit is contiguous with a wetland area and is rimmed by sparse woods.

   b. During the visual site inspection, tall grass covered the area, and the soil was dark with a low brier ground cover.

   c. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   d. A Site Screening Process (SSP) field investigation was completed in 2002. According to the work plan, the field investigation was limited to a geophysical survey.

   e. A Benthic Study was completed in November 2007.

   f. The SSP Report was completed in May 2008. The report concluded that here were potential unacceptable risks to human health under a residential exposure scenario. The report recommended a Feasibility Study (FS) to evaluate alternatives that would address potential risks to human health and the environment.

   g. The FS Report was completed in March 2010.

   h. A Proposed Plan was finalized in April 2010, recommending removal of surface debris and Institutional Controls (ICs) along with long-term monitoring (LTM) at the site. A public meeting was held on April 15, 2010.

   i. The Record of Decision (ROD) was signed in September 2011.

   j. A landfill maintenance work plan addendum (for debris removal) was completed in October 2013. An Explosive Safety Submission (ESS) for the debris removal was submitted to Naval

Ordnance Safety and Security Activity (NOSSA). Debris removal fieldwork was completed in April 2014. A Remedial Action Completion Report (RACR) was finalized in September 2014.

8. **Current Status:** Site 36 is in the LTM phase currently on a semiannual sampling frequency which began in 2014. Groundwater and pore water samples are analyzed in accordance with *Maryland Solid Waste Tables 1 and 2*. The landfill cover/conditions and ICs are inspected during each LTM sampling event.

SITE 37 / SWMU 24 – CAUSEWAY

(OLD MAP GRID E13)
IRP Site 37 / Stump Neck Annex SWMU 24
Fact Sheet

1. **Contamination:** Causeway fill, which is primarily rubble partly composed of old torpedo casings.

2. **Location:** The access road to the ranges at Stump Neck crosses a narrow neck of land. The causeway is directly adjacent to the Potomac River.

3. **From:** The narrow neck of land has been built up with fill material.

4. **When:** Unknown.

5. **Generated By:** Shore stabilization.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. Observation of the area indicated the presence of a raised land area and use of concrete blocks and rock to protect the Potomac River side of the roadway from erosion for a distance of 300 to 400 feet. Along the river's edge, there was a small beach which was rimmed with rip-rap wrapped in wire mesh. During the visual site inspection, the unit appeared relatively flat and grassy.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. A Site Screening Process (SSP) field investigation was completed in 2002. The field investigation included the installation of temporary monitoring wells with groundwater, soil, sediment, and surface water samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs); Target Analyte List (TAL) metals; and explosives.

   d. The SSP Report was completed in March 2003, recommending a Remedial Investigation (RI).

   e. During scoping of the RI for Site 37, the team identified the need for further SSP investigation prior to entering the RI phase, because no waste was encountered during the 2002 SSP effort.

   f. The additional (i.e., Phase 2) SSP fieldwork was conducted in June 2011. No waste was encountered in eight soil borings and two test trenches. The Phase 2 SSP Report was finalized in October 2011. The report recommended no action, because no waste was used to build up the Causeway. Therefore, no CERCLA response is necessary.

8. **Current Status:** A No Action Decision Document was signed in November 2011.

SITE 38 / SWMU 1 – RUM POINT LANDFILL

(OLD MAP GRID U7)
IRP Site 38 / Stump Neck Annex SWMU 1
Fact Sheet

1. **Contamination:** Various unknown containers and metals in addition to ash from a thermal treatment tank.

2. **Location:** West of Rum Point Road.

3. **From:** The unit is an unlined landfill that is approximately 1.5 to 2 acres in size.

4. **When:** Until December 1989.

5. **Generated By:** Ash from a thermal treatment tank, located on Range 3 Burn Point, was reportedly disposed here one time.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was identified in the Initial Assessment Study (IAS) of the Naval Assessment and Control of Installation Pollutants (NACIP) Program. The IAS report indicated disposal of several metal objects, including garbage cans and drums.

   b. As required by the Naval Explosive Ordnance Disposal Technology Center (NEODTC) RCRA Corrective Action Permit, an RCRA Facility Investigation (RFI) / Verification Investigation (VI) Report was completed (draft) in January 1998. That document recommended that a no further action (NFA) decision be considered for this site.

   c. A Site Screening Process (SSP) effort and report were completed in June 2008. The report concluded that there were potential unacceptable risks to human health under a residential exposure scenario. A Feasibility Study (FS) was recommended to evaluate alternatives that would address potential risks to human health and the environment.

   d. Pre-FS waste delineation efforts were conducted in 2010. The Draft FS was submitted in January 2011.

   e. A Draft Proposed Plan was submitted in January 2011, recommending a cap-in-place remedy. A Draft Record of Decision (ROD) was submitted in June 2011.

   f. To help with the cover system design and/or to evaluate a potential dig and haul alternative, additional trenching activities to determine the thickness of waste on the site boundaries were conducted in June 2011. Material Potentially Presenting an Explosive Hazard (MPPEH) items were encountered, stopping the field activity.

   g. Following approval of an Explosive Safety Submission (ESS) by Naval Ordnance Safety and Security Activity (NOSSA), additional test pits were installed in May 2012 using unexploded ordnance (UXO) safety protocols. No munitions and explosives of concern (MEC) items were found during test pitting activities.

h. The FS Report was finalized in June 2013. The 2011 and 2012 test pitting results indicated significantly less volume of buried waste than was assumed in the Draft FS Report. The Final FS Report included detailed development of a dig and haul alternative for buried waste and contaminated soil, followed by a groundwater evaluation (i.e., groundwater long-term monitoring [LTM]).

i. The Final Proposed Plan was completed in July 2013. The Preferred Remedy is excavation and offsite disposal of buried waste and impacted soils, land use controls (LUCs), and groundwater long-term monitoring (LTM) to evaluate changes in manganese concentrations. A public meeting was held on August 21, 2013. The Final Record of Decision (ROD) was signed in June 2014.

j. RA fieldwork began in October 2015 and was completed in September 2017. A Remedial Action Closeout Report (RACR) was signed in September 2017. A UFP-SAP Work Plan for groundwater monitoring was finalized in 2018.

8. Current Status: The site is currently in the LTM phase and a post-RA groundwater investigation started in summer 2018. The Revised Draft Groundwater Evaluation Report is expected to be submitted in fall 2023. The outcome of the groundwater evaluation for the three previous sampling rounds will dictate future groundwater remedial requirements, if any.

SITE 58 / SWMU 2 – RANGE 3 BURN POINT

IRP Site 58 / Stump Neck Annex SWMU 2
Fact Sheet

1. **Contamination:** Unknown explosives, waste ash, and petroleum.

2. **Location:** Bank of Chicamuxen Creek. This unit is located downhill and slightly southwest of the Pink Water Treatment Tank (SWMU 13). The Range 3 Burn Point is located within the 100-year flood plain.

3. **From:** The unit is used for burning or thermal treatment of explosive wastes, explosive-contaminated materials, and carbon.

4. **When:** Currently in use.

5. **Generated By:** The Range 3 Burn Point is used to periodically burn or thermally treat explosive wastes generated at the facility and is a RCRA-regulated unit. The wastes are burned either directly on bare soil using gasoline as an ignition source or in a Thermal Treatment Tank (SWMU 16) that rests on bare soil approximately 15 to 30 feet from the Creek's edge. This area also contains a metal container used to test small blasting caps (squibs).

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection, burned scraps were observed in the container, and charred debris was observed on the soil in the immediate vicinity of the Thermal Treatment Tank. A paint solvent or paint odor was detected close to the creek, approximately 15 feet from the Thermal Treatment Tank.

   b. As required by the Naval Explosive Ordnance Disposal Technology Center (NEODTC) RCRA Corrective Action Permit, a RCRA Facility Investigation (RFI) / Verification Investigation (VI) Report was completed (draft) in January 1998. That document recommended that a no further action (NFA) decision be considered for this site.

8. **Current Status:** Currently designated as an active range and will not be addressed under the Installation Restoration Program (IRP).

SITE 59 / SWMU 3 – CHICAMUXEN CREEK'S EDGE DUMP SITE A

IRP Site 59 / Stump Neck Annex SWMU 3
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** This unit is located directly under the Range 3 Burn Point (SWMU 2). Exactly what was dumped in this unit is not known. There are indications that the earthen area which comprises this unit and the Range 3 Burn Point (SWMU 2) are man-made fill areas. The unit is located adjacent to Chicamuxen Creek within the 100-year flood plain. The unit is surrounded on three sides by a rip-rap berm covered with wire mesh.

3. **From:** Potential contamination associated with filling operations.

4. **When:** Unknown.

5. **Generated By:** Unknown.

6. **Amount:** The unit is approximately 2 acres in size and is covered with bare soil.

7. **Work Completed:** As required by the Naval Explosive Ordnance Disposal Technology Center (NEODTC) RCRA Corrective Action Permit, a RCRA Facility Investigation (RFI) / Verification Investigation (VI) Report was completed (draft) in January 1998. That document recommended that a no further action (NFA) decision be considered for this site.

8. **Current Status:** Currently designated as an active range and will not be addressed under the Installation Restoration Program (IRP).

SITE 60 / SWMU 4 – CHICAMUXEN CREEK'S EDGE DUMP SITE B

IRP Site 60 / Stump Neck Annex SWMU 4
Fact Sheet

1. **Contamination:** This unit was used as a dump site but facility representatives were uncertain of the exact nature of materials disposed.

2. **Location:** Immediate vicinity of the Old Demolition Range (SWMU 23).

3. **From:** This unit is an unconfined earthen area located adjacent to Chicamuxen Creek.

4. **When:** Unknown.

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. No release controls associated with this unit. During the Visual Site Inspection (VSI), the unit was covered with grass, and a sparse stand of trees separated the area from the water's edge.

   b. As required by the Naval Explosive Ordnance Disposal Technology Center (NEODTC) RCRA Corrective Action Permit, a RCRA Facility Investigation (RFI) / Verification Investigation (VI) Report was completed (draft) in January 1998.

8. **Current Status:** Designated as part of Site 31 – Old Demolition Range (UXO 007), which was investigated under the Preliminary Assessment (PA) in 2005. Since this site is collocated with an active range (Hypervelocity Gun), it is ineligible for further action under CERCLA. A No Action Decision Document was signed in October 2005.

SITE 61 / SWMU 5 – RANGE 6

IRP Site 61 / Stump Neck Annex SWMU 5
Fact Sheet

1. **Contamination:** Explosives. The area was used as a demolition range. The site consists of five ranges that were used for open detonation training. Small amounts (less than 2 to 3 pounds) of explosives were used. Unexploded ordnance was open-detonated in place.

2. **Location:** Range 6 is located at the end of Archer Avenue, on a point of land extending into the Potomac River and Chicamuxen Creek. This unit is located within the 100-year flood plain.

3. **From:** Wastes that were managed in this unit include small quantities of shrapnel and casings from detonation of explosives.

4. **When:** This unit has been phased out since the Explosive Ordnance Disposal (EOD) school relocated to Florida during early 1998.

5. **Generated By:** EOD school training.

6. **Amount:** This unit was used on a weekly basis, depending on the number of recruits at any given time.

7. **Work Completed:**

   a. A Verification Investigation (VI) was completed in June 1996. The VI Report recommended additional field investigation.

   b. As required by the Naval Explosive Ordnance Disposal Technology Center (NEODTC) RCRA Corrective Action Permit, a RCRA Facility Investigation (RFI) / Verification Investigation (VI) Report was completed in draft in January 1998. That document recommended consideration for implementing a feasibility study or land use restrictions.

8. **Current Status:** Currently designated as an active range and will not be addressed under the Installation Restoration Program (IRP).

SITE 62 / SWMU 6 / UXO 1 – AIR BLAST POND

(OLD MAP GRID F15)
IRP Site 62 / Stump Neck Annex SWMU 6 / MRP Site UXO 1
Fact Sheet

1. **Contamination:** Explosives include Pentolite, HBX1, HBX2, H6, and C4 Propellant (similar to lead azide).

2. **Location:** Adjacent to Chicamuxen Creek near industrial outfall IW 32.

3. **From:** Explosives testing.

4. **When:** Used by the facility from 1955 to 1975; has not been in service for 15 to 20 years.

5. **Generated By:** The unit consists of an unlined earthen pit, measuring approximately 100 feet in diameter, with a capacity of 1.3 million gallons. During operation, explosives were detonated above water and in water during testing. The pit was filled with water from Chicamuxen Creek through a steel, 14-inch-diameter pipe at a rate of 1,300 gallons per minute. Wire was strung across the pit to measure the concussion factor of explosives above water. The water in the pond was periodically discharged into Chicamuxen Creek through the same pipe (IW 32). The pond was emptied two to three times per year. The unit is located in a wooded area of the facility.

6. **Amount:** According to an interview of a former facility employee conducted by the Naval Explosive Ordnance Disposal Technology Center, a maximum of 8 pounds of explosives were used per detonation event (shot). During the unit's period of operations, three to four shots were conducted per day, with an estimated total of 1,500 shots over the unit's active life.

7. **Work Completed:**

   a. As required by the Naval Explosive Ordnance Disposal Technology Center (NEODTC) RCRA Corrective Action Permit, a RCRA Facility Investigation (RFI) / Verification Investigation (VI) Report was completed (draft) in January 1998. That document recommended consideration of no action for this site.

   b. A Preliminary Assessment (PA) Report was completed in September 2005, recommending a Site Inspection (SI) for munitions and explosives of concern (MEC).

   c. An SI Report was completed in September 2010, recommending a Remedial Investigation (RI) for munitions and explosives of concern (MEC) and no action for munitions constituents (MC).

8. **Current Status:** Currently designated as Munitions Response Program (MRP) Site UXO 001. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

SITE 63 / SWMU 25 / UXO 2 – AREA 8

IRP Site 63 / Stump Neck Annex SWMU 25 / MRP Site UXO 2
Fact Sheet

1. **Contamination:** Area 8 was an active facility used to train military personnel to defuse explosive devices. Explosives were detected in sediment samples collected at Area 8.

2. **Location:** Located on Roach Road. Access to the site is controlled by a fence and a gate located on Archer Avenue. Area 8 is approximately 9.6 acres in size.

3. **From:** At the water-shot locations, the explosive was placed 2 to 5 feet below the water surface. At the air-shot locations, the explosive was suspended (on wire) approximately 2 feet above ground. The types of ordnance used included TNT stock, PETN, military dynamite, blasting caps, detonation cord, and similar devices.

4. **When:** EOD School relocated in 1998.

5. **Generated By:** EOD School training.

6. **Amount:** Training exercises at Area 8 were performed 10 months a year. It is estimated that approximately 50 to 75 pounds (net explosive weight) of explosives were used at this training facility each year. No more than 0.5 pound of explosives were used at the air- or water-shot locations during training exercises.

7. **Work Completed:**

   a. A Verification Investigation (VI) was completed in January 1996. The report recommended no further remedial action for the site, because contaminants detected at the site are unlikely to pose a risk to human health and the environment based on a future industrial land use scenario.

   b. A Preliminary Assessment (PA) Report was completed in September 2005, recommending a Site Inspection (SI) for MEC.

   c. An SI Report was completed in September 2010, recommending a Remedial Investigation (RI) for munitions and explosives of concern (MEC) and no further action (NFA) for munitions constituents (MC).

8. **Current Status:** Currently designated as Munitions Response Program (MRP) Site UXO 002. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

SITE 64 / SWMU 26 / UXO 4 – IMPROVISED EXPLOSIVE DEVICES (IED) SITE

IRP Site 64 / Stump Neck Annex SWMU 26 / MRP Site UXO 4
Fact Sheet

1. **Contamination:** Training operations were performed at this site to demonstrate that household and other easily obtained chemicals could be used to make IEDs. During these operations, small amounts of residual waste were discarded on the ground. These waste chemicals included small amounts of silver nitrate.

2. **Location:** Near Building 2118.

3. **From:** Residual waste discarded on the ground.

4. **When:** Since November 1957, the IED has been used to test and demonstrate the explosive potential of chemical mixtures.

5. **Generated By:** Training demonstrations.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A verification investigation was completed in January 1996. The report recommended no further remedial action for the site, because contaminants detected at the site are unlikely to pose a risk to human health and the environment based on a future industrial land use scenario.

   b. A Preliminary Assessment (PA) Report was completed in September 2005, recommending a Site Inspection (SI) for munitions and explosives of concern (MEC).

   c. An SI Report was completed in September 2010, recommending a Remedial Investigation (RI) for munitions and explosives of concern (MEC) and no further action (NFA) for munitions constituents (MC).

8. **Current Status:** Currently designated as a closed range and included in the Munitions Response Program (MRP) as Site UXO 004. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

SITE 65 / SWMU 27 / UXO 5 – INERT ORDNANCE DISPOSAL (IOD) SITE

IRP Site 65 / Stump Neck Annex SWMU 27 / MRP Site UXO 5
Fact Sheet

1. **Contamination:** This site consists of a cement bunker where inert ordnance and inert training aids were discarded.

2. **Location:** South of Building 2074SN.

3. **From:** Historical activities at the IOD are not well documented, but the site was apparently used for disposal of inert ordnance.

4. **When:** The initial date when the scrap metal was discarded is unknown.

5. **Generated By:** Based on current information, only inert metal scrap was placed in this bunker. A layer of cement was poured over the metal scrap.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A verification investigation was completed in January 1996. The report recommended no further remedial action for the site, because contaminants detected at the site are unlikely to pose a risk to human health and the environment based on a future industrial land use scenario.

   b. A Preliminary Assessment Report was completed in September 2005, recommending a Site Inspection (SI) for MEC.

   c. An SI Report was completed in September 2010, recommending a Remedial Investigation (RI) for munitions and explosives of concern (MEC) and no further action (NFA) for munitions constituents (MC).

8. **Current Status:** Currently designated as Munitions Response Program (MRP) Site UXO 005. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

SWMU 12 – WASTE OIL STORAGE SITE

(OLD MAP GRID D15)
IRP AOC
Stump Neck Annex SWMU 12
Fact Sheet

1. **Contamination:** Waste oil.

2. **Location:** Designated area of storage lot near Building 2019.

3. **From:** Waste oil is stored in 55-gallon drums on wooden pallets in an asphalt-covered area surrounded by a chain-link fence.

4. **When:** Since approximately 1985.

5. **Generated By:** The waste oil is generated by vehicle maintenance operations and employee self-help oil changes at NAVEODTECHCEN. The waste is periodically collected from the storage site by Property Disposal (located off-site at NSFIH) for off-site recycling or disposal.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that NFA is required to be taken in connection with this unit.

SWMU 13 – PINK WATER TREATMENT TANK AND ASSOCIATED TRENCHES

IRP AOC
Stump Neck Annex SWMU 13
Fact Sheet

1. **Contamination:** TNT, RDX, and various other forms of explosives. Types of explosives treated at the unit have included Tolite, RDX, RDX/Octal, TNT, Comp B, TD-50, H-6, and Black Powder. Spent carbon contaminated with explosives (KO45).

2. **Location:** Building 2057, northeast of the Range 3 Burn Point (SWMU 2).

3. **From:** "Pink water" (K047) that is contaminated with explosive residue. This contaminated water is collected and treated on site at the Pink Water Treatment Tank.

4. **When:** Used from April until October each year since the permit was granted on November 14, 1985.

5. **Generated By:** Pink water is generated at the facility by a process in which explosive residues are removed from various types of ordnance. The treatment unit is a RCRA-regulated unit. The explosive is removed by steaming the interior of the ordnance casing.

   The contaminated water is collected and treated on site at the Pink Water Treatment Tank. As the pink water is generated during steaming, the water is collected in a concrete trench that directs the waste to a 1,500-gallon stainless-steel collection tank. The collection tank and additional treatment units are located in below-ground, concrete secondary containment structures. Treatment consists of filtering to remove solid explosive particles and activated carbon adsorption for removal of organic constituents. The carbon filters are assembled in two inline, 55-gallon drums. Following treatment, the water is discharged through a plastic pipe to NPDES outfall IW 49 on Chicamuxen Creek. The filter materials are periodically thermally treated at the Range 3 Burn Point (SWMU 2), and the spent carbon (K045) is shipped off site for disposal.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The facility was authorized to treat pink water from TNT operations under Controlled Hazardous Substances Facility Permit Number A-223a, issued by the MDE. The permit is dated November 14, 1985, authorizes the K047 waste to be treated by filtration and activated carbon adsorption. Filtration sludges (K045) are drummed and shipped off site for disposal. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that this unit should continue to be managed within the RCRA Closure process.

SWMU 14 – PHOTOGRAPHIC LAB SEPTIC TANK SYSTEM

IRP AOC
Stump Neck Annex SWMU 14
Fact Sheet

1. **Contamination:** Possible dilute amounts of silver, sodium thiosulfate, and hydroquinone.

2. **Location:** Near Photographic Lab, Building 22SN and X-ray facility, Building 2009, below-ground tank and associated collection and discharge lines and drain field.

3. **From:** Discharge of spent fixer and developer from film development.

4. **When:** Unknown.

5. **Generated By:** In the past, this unit handled wastewater from the photographic lab, which may have contained dilute amounts of silver, sodium thiosulfate, and hydroquinone.

   Waste fixers containing silver were drummed and transported off site for silver recovery. The unit handled sanitary wastewater only and was inspected weekly; in accordance with NPDES permit conditions sampling is conducted monthly.

   The effluent is chlorinated and discharged to the Potomac River under NPDES permit MD0020885, which was issued in May 1988 and expired in April 1993. In addition, dilute photographic wastewater is discharged to the Potomac River via NPDES permit #NMOOO3158 (EPA) and #88-DP-2515 (MDE).

7. **Work Completed:**

   a. After the visual site inspection, a new septic system was installed, eliminating surface discharge to the Potomac River.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by all Remedial Project Managers on April 23, 2002. The decision reached was that, due to lack of information available, the unit should be retained as an area of concern pending additional investigation.

   d. A Site Screening Process (SSP) Investigation was started in April 2004. Sampling was completed in October 2005. A Draft SSP report was submitted in September 2006 which recommended further investigation for this site. An additional investigation was completed in July 2007 that identified cobalt in groundwater. The final SSP Report was submitted in June 2009 and recommended that the site proceed to a Remedial Investigation (RI).

   e. The Final Remedial Investigation Work Plan was completed in June 2011, with initial RI field work being completed in October 2011. Results from the initial round of RI sampling did not fully delineate groundwater and surface soil contamination at the site, and an additional round of sampling was conducted in August 2012.

   f. The RI Report was finalized in April 2014. A Pilot Study Work Plan to evaluate options for treatment of cobalt in groundwater was finalized in March 2015. Pilot Study fieldwork which

included injection of organic substrate and sulfate was completed in October 2015. Monthly short-term performance monitoring of groundwater continued through July 2016. Results were evaluated in a Pilot Study Tech Memo, which was finalized in February 2018.

8. **Current Status:** The FS was finalized in February 2019. A Draft Proposed Plan was submitted in October 2018 and underwent regulatory review. Finalization of the PP has been delayed pending the results of an additional investigation for newly discovered PCBs. Fieldwork was completed in May 2023 and a report is expected to be submitted for regulatory review in late 2023.

SWMU 15 – SPENT PHOTOGRAPHIC SOLUTION STORAGE

(OLD MAP GRID G11)
IRP AOC
Stump Neck Annex SWMU 15
Fact Sheet

1. **Contamination:** Silver, sodium thiosulfate, and hydroquinone.

2. **Location:** Photographic Laboratory, Building 22SN.

3. **From:** The visual site inspection (VSI) team observed a drum containing spent photographic solution staged outside the building.

4. **When:** At the time of the VSI in 1989.

5. **Generated By:** Spent photographic solution is collected and stored at the Photographic Laboratory, Building 22SN. The spent photographic solution is stored in a 50-gallon polyethylene tank prior to shipment off site for silver recovery.

6. **Amount:** One 55-gallon drum

7. **Work Completed:**

   a. According to information provided by the facility after the VSI, the drums are normally staged indoors until they are transferred off site. The drum observed during the VSI was prematurely moved outside for shipment.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 16 – THERMAL TREATMENT TANK

IRP AOC
Stump Neck Annex SWMU 16
Fact Sheet

1. **Contamination:** The Thermal Treatment Tank is used for burning explosives and explosive-contaminated items.

2. **Location:** Range 3 Burn Point (SWMU 2). Ash was observed on bare soil immediately beneath and around the unit.

3. **From:** The Thermal Treatment Tank is an open-top, steel tank used for burning explosives and explosive-contaminated items. The tank is approximately 5 feet tall by 3 feet wide.

4. **When:** Currently active.

5. **Generated By:** Ash from the Thermal Treatment Tank was disposed one time in the Rum Point Landfill (SWMU 1). The ash is being tested for TCLP Toxicity. If hazardous, the ash is manifested as a hazardous waste. Otherwise, it is disposed in an off-site sanitary landfill.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection, the tank was located on bare soil approximately 15 to 30 feet from Chicamuxen Creek's edge.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002. The decision reached was this unit would be investigated as part of the Remedial Investigation (RI) for Site 58.

8. **Current Status:** Currently designated as an active range and will not be addressed under the Installation Restoration Program (IRP).

SWMU 17 – BUILDING 2015 – CHEMISTRY LAB ACCUMULATION AREA

(OLD MAP GRID S9)
IRP AOC
Stump Neck Annex SWMU 17
Fact Sheet

1. **Contamination:** Waste enamel, epoxy compound, capicure EH-30, and a resinous chlorinated paraffin (chlorowax 40).

2. **Location:** This unit is located inside Building 2015.

3. **From:** The unit consists of a metal-covered workbench used to store approximately 25 small metal and glass containers of spent chemicals. The containers are labeled and contained in zip-lock plastic bags.

4. **When:** The waste, which was observed during the visual site inspection (VSI), had been stored here since the chemistry lab began operations approximately 20 years ago.

5. **Generated By:** Unknown.

6. **Amount:** Small containers of unknown volume

7. **Work Completed:**

   a. In addition to a VSI according to facility representatives, prior to disposal off-site, the containers were placed in over-pack drums and transferred to the Main Area.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 18 – WASTE PILE

(OLD MAP GRID F14)
IRP AOC
Stump Neck Annex SWMU 18
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** This unit is adjacent to the Air Blast Pond (SWMU 6). Facility representatives indicated that this area was originally identified in an aerial photo, which showed a mounded area.

3. **From:** Facility representatives indicated that the mounding seen in an aerial photo may have been excavated material from construction of the Air Blast Pond (SWMU 6).

4. **When:** Unknown.

5. **Generated By:** Construction excavation.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection, the unit consisted of a flat, earthen area that was covered with grass. The unit is separated from the Air Blast Pond by a densely wooded area.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 19 – DISPOSAL AREA NO. 1

(OLD MAP GRID YY21)
IRP AOC
Stump Neck Annex SWMU 19
Fact Sheet

1. **Contamination:** Inert material.

2. **Location:** During the visual site inspection the area was observed to slope downhill from the northwest. A bunker, which functions as an office, occupies a portion of the area. The remaining portion consists of a leveled grassy area rimmed with sparse woods on the eastern side. The woods separate the unit from Chicamuxen Creek (south of Building 2063SN)

3. **From:** This is an unlined earthen area that was later used for various types of training.

4. **When:** Unknown.

5. **Generated By:** Unknown.

6. **Amount:** The unit's size was estimated to be approximately 1.5 acres.

7. **Work Completed:**

   a. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   b. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** This site was moved to the Munitions Response Program and will be investigated with Site 64 – Improvised Explosive Devices (MRP Site UXO 004). See fact sheet for Stump Neck Annex Site 64 / SWMU 26 / UXO 4.

SWMU 20 – DISPOSAL AREA NO. 2

(OLD MAP GRID D14)
IRP AOC
Stump Neck Annex SWMU 20
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** This is a relatively flat earthen area that is bounded on the north by the Potomac River. It is located west of Building 2012SN.

3. **From:** Facility representatives could not provide information about the composition of the inert material disposed here.

4. **When:** Unknown.

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. During the visual site inspection, the area was covered with grass and is currently used as a skeet and trap shooting area.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

   d. The final Preliminary Assessment Report was completed in September 2005.

8. **Current Status:** The decision reached during the desktop audit was that this unit will be investigated as part of SWMU 28 – Old Skeet and Trap Range (MRP Site UXO 015). See fact sheet for SWMU 28 / UXO 15.

SWMU 21 – DRUM STORAGE AREA

(OLD MAP GRID YY21)
IRP AOC
Stump Neck Annex SWMU 21
Fact Sheet

1. **Contamination:** Unknown.

2. **Location:** This unit is a relatively flat earthen area where several drums of unknown materials and origin were stored on a short-term basis. (West of Building 2012SN)

3. **From:** The drums were noted in an aerial photo, and facility representatives could provide no further information.

4. **When:** Unknown.

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. At the time of the visual site inspection, no drums were being stored here.

   b. The 1990 EPA RCRA Corrective Action Permit stated that no further action (NFA) was necessary at the time.

   c. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002.

8. **Current Status:** The decision reached during the desktop audit was that no action is required to be taken in connection with this unit.

SWMU 28 / UXO 15 – OLD SKEET AND TRAP RANGE

IRP AOC
Stump Neck Annex SWMU 28 / MRP Site UXO 15
Fact Sheet

1. **Contamination:** This area lies on what was originally identified as SWMU 20, Disposal Area 2, in the RCRA corrective action permit. The permit states that, "During the visual site inspection, the area was covered with grass and is currently used as a skeet and trap shooting area." In addition, the permit states, "EPA has determined that no further action (NFA) is necessary at this time." However, since the draft RFA was written, use of the skeet range has been discontinued. The skeet range was used mainly for recreational purposes. Clay pigeons were used as targets. Therefore, lead shots remain on the ground at the skeet range and in the Potomac River.

2. **Location:** West of Building 2012SN.

3. **From:** Unknown.

4. **When:** Operations began more than 25 years ago and ended in June 1991. The range is currently inactive.

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002. The decision reached was that the unit should be subjected to the site screening process.

   b. A final Preliminary Assessment (PA) Report was completed in September 2005.

   c. The site was designated as Munitions Response Program (MRP) Site UXO 015.

   d. A Site Investigation (SI) Report was finalized for the site in September 2010. The report recommended a Phase 2 SI to fill data gaps.

   e. A Work Plan for the Phase 2 SI was completed in June 2011. The Phase 2 SI field work was completed in October 2011.

   f. The Phase 2 SI Report was finalized in May 2012. Additional groundwater investigation was recommended for UXO 015.

   g. The Engineering Evaluation and Cost Analysis (EE/CA) for a soil non-time-critical removal action (NTCRA) was finalized in June 2012. The Revised Final EE/CA was submitted in March 2017. The Final Action Memo to support an IRA (soil removal) was signed in July 2017.

8. **Current Status:** A NTCRA for soil was completed in June 2021. It is anticipated that post-removal groundwater sampling may be required through 2024 prior to site closeout.

SWMU 29 / UXO 17 – SMALL ARMS RANGE (PISTOL RANGE)

(OLD MAP GRID V7)
IRP AOC
Stump Neck Annex SWMU 29 / MRP Site UXO 17
Fact Sheet

1. **Contamination:** The facility Security Department used this site for training for approximately 7 years, ending in August 1991. Rounds were fired into the side of a hill. The side of the hill contains lead shots.

2. **Location:** Near Building 2070SN.

3. **From:** Unknown.

4. **When:** Approximately 7 years, ending in August 1991

5. **Generated By:** Unknown.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002. The decision reached was that, due to lack of information available, the unit should be retained as an area of concern pending additional investigation.

   b. The final Preliminary Assessment (PA) Report was completed in September 2005.

   c. The site was designated as Munitions Response Program (MRP) Site UXO 017.

   d. A Site Investigation (SI) Report was finalized for the site in September 2010. The report recommended a Phase 2 SI to fill data gaps.

   e. A Work Plan for the Phase 2 SI was completed in June 2011. The Phase 2 SI field work was completed in October 2011.

   f. The Phase 2 SI Report was finalized in May 2012. No unacceptable risks were identified for groundwater at UXO 017. Therefore, no action is recommended for groundwater at UXO 017.

   g. The Engineering Evaluation and Cost Analysis (EE/CA) for a soil non-time-critical removal action (NTCRA) was finalized in June 2012. A revised Final EE/CA was submitted in March 2017. A Final Action Memo to support an IRA (soil removal) was signed in July 2017.

8. **Current Status:** An IRA Work Plan was finalized in July 2018. Soil removal action work was completed in March 2019. A Construction Closeout Report and Decision Document were finalized in September 2019.

SWMU 30 – BUILDING 2015 DRY WELL

IRP AOC
Stump Neck Annex SWMU 30
Fact Sheet

1. **Contamination:** This site consists of a dry well that is connected to a laboratory located in Building 2015.

2. **Location:** Industrial Wastewater Outfall 64 (IW 64), Building 2015.

3. **From:** Spent chemical reagents from the laboratory were discarded by pouring them down the drain. Currently, only wash water from a hand sink is discharged to the dry well.

4. **When:** Approximately 10 years.

5. **Generated By:** The overflow from the dry well enters permitted NPDES Outfall IW 64.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. This unit was included in the January 2002 Desktop Audit Decision Document, which was signed by the Navy and the EPA with concurrence from the MDE, on April 23, 2002. The decision reached was that, due to lack of information available, the unit should be retained as an area of concern pending additional investigation.

   b. A Site Screening Process (SSP) Report was submitted in September 2006. The report recommended no action.

8. **Current Status:** A No Action Decision Document was signed in September 2006.

UXO 14 – MARINE RIFLE RANGE

MRP Site UXO 14
Fact Sheet

1. **Contamination:** Lead and other munitions constituents such as antimony, arsenic, copper, nickel, and lead styphnate/lead azide.

2. **Location:** South of Archer Avenue between the Causeway and Building 2195.

3. **From:** Small arms training.

4. **When:** 1911 to 1918.

5. **Generated By:** Practice range firing of small arms.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment (PA) Report was completed in September 2005.

   b. The site was designated as MRP Site UXO 014.

   b. A Site Investigation (SI) Report was finalized for the site in September 2010. The report recommended a Phase 2 SI to fill data gaps.

   c A Work Plan for the Phase 2 SI was completed in June 2011. The Phase 2 SI field work was completed in October 2011.

   d. The Phase 2 SI Report was finalized in May 2012. No unacceptable risks were identified for groundwater at UXO 014. Therefore, no action is recommended for groundwater at UXO 014.

   e. The Engineering Evaluation and Cost Analysis (EE/CA) for a soil non-time-critical removal action (NTCRA) was finalized in June 2012. A revised Final EE/CA was submitted in March 2017. A Final Action Memo to support an IRA (soil removal) was signed in July 2017.

8. **Current Status:** A NTCRA for soil was completed in June 2021. A Removal Action Completion Report (RACR) and no further action SSP Closeout document were finalized in September 2021.

UXO 16 – RUM POINT SKEET RANGE

MRP Site UXO 16
Fact Sheet

1. **Contamination:** Lead, antimony, arsenic, copper, zinc, and polycyclic aromatic hydrocarbons (PAHs).

2. **Location:** The northeast section of the Stump Neck Annex, directly north of Skeet Range Way.

3. **From:** Small arms (shotgun) firing.

4. **When:** 1991 to 2001.

5. **Generated By:** Recreational skeet range use by the Potomac River Gun Club.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment (PA) Report was completed in September 2005.

   b. The site was designated as Munitions Response Program (MRP) Site UXO 016.

   c. A Site Investigation (SI) Report was finalized for the site in September 2010. The report recommended a Phase 2 SI to fill data gaps.

   d. A Work Plan for the Phase 2 SI was completed in June 2011. The Phase 2 SI field work was completed in October 2011.

   e. The Phase 2 SI Report was finalized in May 2012. No unacceptable risks were identified for groundwater at UXO 016. Therefore, no action is recommended for groundwater at UXO 016.

   f. The Engineering Evaluation and Cost Analysis (EE/CA) for a soil non-time-critical removal action (NTCRA) was finalized in June 2012. A revised Final EE/CA was submitted in March 2017. A Final Action Memo to support an IRA (soil removal) was signed in July 2017.

8. **Current Status:** An IRA Work Plan was finalized in July 2018. Soil removal action work was completed in March 2019. A Construction Closeout Report and Decision Document were finalized in September 2019.

UXO 18 – BATTLE RANGE FIRING AREA

MRP Site UXO 18
Fact Sheet

1. **Contamination:** Naval ordnance constituents- explosives and metals.

2. **Location:** The north-central section of Stump Neck Annex extending from the Potomac River to the north bluff along the shoreline of the Mattawoman Creek.

3. **From:** Testing of projectiles through battle range firing.

4. **When:** 1910 - unknown.

5. **Generated By:** Battle range firing using 3", 5", 8", 12", and 14" AP shells and high powered firing using pasteboard or similar targets. (Battle Range area is 340 acres in size; approximately 184 acres are overlapped by the Water Impact Area.)

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was designated as Munitions Response Site (MRP) Site UXO 018 and was included in the Water Area Munitions Study (WAMS) which was completed in February 2005.

   b. A Site Inspection (SI) was completed in September 2010 and recommended no action for munitions and explosives of concern (MEC) and munitions constituents (MC).

8. **Current Status:** Although the SI recommended no action for the site, it recommended that the existing Danger Zone on the National Oceanic and Atmospheric Administration (NOAA) maps be expanded to include the potential impact area from UXO 033, updating the current site use, and restricting intrusive activities. This site may be investigated further in the future.

UXO 21 – TEST AREA 1

MRP Site UXO 21
Fact Sheet

1. **Contamination:** TNT and TNT breakdown products.

2. **Location:** Center of the Stump Neck Annex peninsula.

3. **From:** Experiments, testing, and training that utilized small charges.

4. **When:** 1950s to present.

5. **Generated By:** During the 1960s and 1970s, Advanced, Access, and Disablement (AA&D) trainings (such as booby traps and wires); in the 1980s, IED and IND training. Training items were inert but small charges of TNT were set off for total consumption.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) Report was completed in September 2005.

   b. A Site Inspection (SI) was completed in September 2010, and recommended a Remedial Investigation (RI) for munitions and explosives of concern (MEC), but no action for munitions constituents (MC).

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 021. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. A FS Tech Memo was finalized in November 2020. A Draft Proposed Plan was submitted in August 2023 and is currently under regulatory review.

UXO 22 – TEST AREA 2

UXO 22
Fact Sheet

1. **Contamination:** Constituents from ordnance testing/training.

2. **Location:** The southern central portion of Stump Neck Annex off an unnamed dirt road extending from the southern side of Old Range Road.

3. **From:** Non-explosive magnetic test range.

4. **When:** 1978 to present.

5. **Generated By:** The area is used as a non-explosive magnetic test range; no evidence confirming the use of explosives testing/training was discovered during the Preliminary Assessment (PA).

6. **Amount:** Unknown.

7. **Work Completed:** A Preliminary Assessment (PA) Report was completed in September 2005.

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 022. The IHIRT signed a Decision Document in February 2011 stating no action was necessary at this site.

UXO 23 – TORPEDO CASING DISPOSAL AREA

MRP Site UXO 23
Fact Sheet

1. **Contamination:** Metals and potential munitions constituents (MC) from residue remaining on the inside of torpedo casings.

2. **Location:** Center portion of the Stump Neck Annex north of Archer Avenue and partially within a designated wildlife area.

3. **From:** Disposal of torpedo casings.

4. **When:** 1950s.

5. **Generated By:** Disposal of torpedo casings that may have originated from training at the Explosive Ordnance Disposal (EOD) school or from use during WWII.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A Preliminary Assessment (PA) Report was completed in September 2005.

   b. A Site Inspection (SI) was completed in September 2010, recommending a Remedial Investigation (RI) for munitions and explosives of concern (MEC), but no action for munitions constituents (MC).

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 023. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

UXO 25 – ROACH ROAD RIFLE RANGE

MRP Site UXO 25
Fact Sheet

1. **Contamination:** Lead.

2. **Location:** Central portion of Stump Neck Annex on the west side of Roach Road.

3. **From:** Small arms training.

4. **When:** 1963 to 1986.

5. **Generated By:** Small arms training with pistols and rifles.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment (PA) Report was completed in September 2005.

   b. The site was designated as Munitions Response Program (MRP) Site UXO 025

   c. A Site Investigation (SI) Report was finalized for the site in September 2010. The report recommended a Phase 2 SI to fill data gaps.

   e. A Work Plan for the Phase 2 SI was completed in June 2011. The Phase 2 SI field work was completed in October 2011.

   f. The Phase 2 SI Report was finalized in May 2012. Additional investigation was recommended for groundwater at UXO 025.

   g. The Engineering Evaluation and Cost Analysis (EE/CA) for a soil non-time-critical removal action (NTCRA) was finalized in June 2012. A revised Final EE/CA was submitted in March 2017. A Final Action Memo to support an IRA (soil removal) was signed in July 2017.

8. **Current Status:** An IRA Work Plan was finalized in July 2018. A NTCRA for soil was completed in March 2019. A Construction Closeout Report and Decision Document were finalized in September 2019.

UXO 26 – THE VALLEY IMPACT AREA

MRP Site UXO 26
Fact Sheet

1. **Contamination:** Potential munitions constituents including explosive D, black powder, TNT, magnesium, NH powder, CTNT, various propellants, and metals.

2. **Location:** The majority of the western portion of the Stump Neck Annex.

3. **From:** Used as an impact area from The Valley on Indian Head Main Installation.

4. **When:** 1891 to 1921.

5. **Generated By:** Firing of long-range projectiles from The Valley to the impact area.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment (PA) Report was completed in September 2005.

   b. A Site Inspection (SI) was completed in September 2010, and recommended a Remedial Investigation (RI) for munitions and explosives of concern (MEC), but no action for munitions constituents (MC).

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 026. A MC UFP-SAP/Work Plan Addendum was submitted in August 2023 and is under regulatory review. RI sampling fieldwork is expected to be completed in late 2023. A RI Report is planned to be submitted in 2024.

UXO 27 – SONAR TRAINING AREA

MRP Site UXO 27
Fact Sheet

1. **Contamination:** TNT, explosives residuals, and metals.

2. **Location:** In the Potomac River along the north-central portion of Stump Neck Annex, north of Archer Ave. in the vicinity of Building 2174.

3. **From:** Underwater sonar training exercises.

4. **When:** 1980s to mid-1990s.

5. **Generated By:** Use of inert ordnance items (sea mines, torpedoes, and depth charges) for training. The site may also contain munitions associated with the Water Impact Area, which encompasses the Sonar Training Area.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. The site was designated as Munitions Response Program (MRP) Site UXO 027. It was included in the Water Area Munitions Study (WAMS), which was completed in February 2005 and recommended a Site Inspection for munitions and explosives of concern (MEC), but no action for munitions constituents (MC).

   b. A Site Inspection (SI) was completed in September 2010, and recommended institutional controls (ICs).

8. **Current Status:** The SI Report recommended that the existing Danger Zone on the National Oceanic and Atmospheric Administration (NOAA) maps be expanded to include the potential impact area from UXO 033, updating the current site use, and restricting intrusive activities. A SAP, QAPP, and Dive Plan are expected to be submitted in early 2024 for regulatory review.

UXO 28 – EOD SCHOOL DEMO AREA

MRP Site UXO 28
Fact Sheet

1. **Contamination:** Potential munitions constituents include metals, TNT, explosive residuals, and Tetryl.

2. **Location:** On the Stump Neck Annex, within the boundaries of the Marine Rifle Range and the Torpedo Burial Site.

3. **From:** Use as a demolition area.

4. **When:** 1944 to 1949.

5. **Generated By:** Explosive Ordnance Disposal (EOD) school use to detonate live explosives.

6. **Amount:** Unknown.

7. **Work Completed:**

   a. A final Preliminary Assessment (PA) Report was completed in September 2005.

   b. A Site Inspection (SI) was completed in September 2010, and recommended a Remedial Investigation (RI) for munitions and explosives of concern (MEC), but no action for munitions constituents (MC).

8. **Current Status:** The site was designated as Munitions Response Program (MRP) Site UXO 028. The RI Report (Volume I-MEC and Volume II-MC) was finalized in May 2020. Additional fieldwork to evaluate metals and complete chromium speciation is expected to be completed in late 2023. An updated risk assessment and revised RI Report are planned to be submitted in 2024.

UXO 31 – POPE'S CREEK

MRP Site UXO 31
Fact Sheet

1. **Contamination:** Potential TNT.

2. **Location:** Southeast of Indian Head, off the installation, near Pope's Creek, Maryland. Lies approximately 1 to 2 miles north of the Potomac River Bridge and extends west from the eastern shoreline of the Potomac River.

3. **From:** Underwater testing of demolition charges and/or explosive material.

4. **When:** 1947.

5. **Generated By:** Underwater explosions of demolition charges and/or explosive material.

6. **Amount:** Unknown.

7. **Work Completed**:

   a. The site was designated as Munitions Response Program (MRP) Site UXO 031 and was included in the Water Area Munitions Study (WAMS) which was completed in February 2005.

   b. A Site Inspection (SI) was completed in September 2010, and recommended no action for munitions and explosives of concern (MEC) and munitions constituents (MC).

8. **Current Status:** The site was designated as MRP Site UXO 031. Although the SI recommended no action for the site, it recommended that the existing Danger Zone on the National Oceanic and Atmospheric Administration (NOAA) maps be expanded to include the potential impact area from UXO 033, updating the current site use, and restricting intrusive activities. A SAP, QAPP, and Dive Plan are expected to be submitted in early 2024 for regulatory review.

SITE 75 – OLD FIREHOUSE

IRP Site 75
Fact Sheet

1. **Contamination:** Per- and Polyfluoroalkyl Substances (PFAS)

2. **Location:** Field by the Old Firehouse behind Building 15N (gymnasium) located in the northwest portion of Stump Neck Annex.

3. **From:** Fire-fighting training activities and fire truck washing.

4. **When:** Unknown.

5. **Generated By:** Potential use of foam containing PFAS in fire training exercises and washing of trucks.

6. **Amount:** Unknown.

7. **Work Completed:** Site added to program in 2023.

8. **Current Status:** A Preliminary Assessment Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report for PFAS is expected by September 2023.

SITE 76 – FIELD BY CONTRACTOR LOT

IRP Site 76
Fact Sheet

1. **Contamination:** PFAS

2. **Location:** Archer Avenue along the boundaries of UXO 26 and 28 within the northern portion of Stump Neck Annex.

3. **From:** Fire-fighting training activities.

4. **When:** Unknown.

5. **Generated By:** Potential use of foam containing PFAS in fire training exercises.

6. **Amount:** Unknown.

7. **Work Completed:** Site added to program in 2023.

8. **Current Status:** A Preliminary Assessment Report for PFAS was finalized in March 2023. SI fieldwork was completed in January 2023 and a Final SI Report for PFAS is expected by September 2023.

3.0 SITE LOCATION SUMMARY

The locations of all the sites and AOCs identified in the previous sections of this Site Management Plan are illustrated in Figures 3-1 and 3-2. Figure 3-1 shows the locations of the NSFIH Main Area sites and AOCs, while Figure 3-2 shows the locations of the NSFIH Stump Neck Annex sites and AOCs.

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4.0 SCHEDULES

Table 4-1 provides the schedule for the investigation and reporting of all the sites and AOCs identified in the preceding sections of this Site Management Plan.

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Tetra Tech, 2012. Final Engineering Evaluation/Cost Analysis at Five Small Arms/Skeet Ranges, Stump Neck Annex, Naval Support Facility, Indian Head, Maryland. November.

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Tetra Tech, 2016. Final Sampling and Analysis Plan, Pre-Design Investigation, Site 43 – Toluene Disposal Area, Naval Support Facility, Indian Head, Maryland. October.

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Tetra Tech, 2021. North Cobalt Investigation Data Report, Site 43- Toluene Disposal Area, Naval Support Facility, Indian Head, Maryland, July.

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TABLE 1-1
INSTALLATION RESTORATION PROGRAM SITES AND SWMUs
MAIN AREA AND STUMP NECK ANNEX
NSFIH, INDIAN HEAD, MARYLAND

IR Site ID	SWMU or AOC ID	MRP UXO ID	Name	Main Area (MA) / Stump Neck (SN)	Relative Risk	FFA Group	Status	Comments
INSTALLATION RESTORATION (IR) SITES								
1			Thorium Spill	MA	Low	SSA	NFA	
2			Waste Crank Case Oil Applied to Torrence Road	MA	Low	SSA	NFA	
3			Nitroglycerin Explosion, Nitration Building Area	MA	Low	SSA	NFA	
4			Lloyd Road Oil Spill Sites	MA	Low	SSA	NFA	
5			X-Ray Building 731	MA	Medium	SSA	NFA	
6			Building 1349, Hypo Spill	MA	High	RI/FS	NFA	IRA resulted in NFA ROD
7			Building 682, HMX Spill	MA	Medium	SSA	NFA	
8			Building 766, Mercury Deposits	MA	High	SSA	NFA	IRA resulted in NFA DD
9			Patterson Avenue, Oil Spill	MA	Low	SSA	NFA	
10		9	Single-base Propellant Grains Spill	MA	Low	SSA	RI/FS	Included in MRP
11			Caffee Road Landfill	MA	High	RI/FS	RC / LTM	
12			Town Gut Landfill	MA	High	RI/FS	RC / LTM	
13			Paint Solvents Disposal Ground	MA	High	RI/FS	NFA	
14			Waste Acid Disposal Pit	MA	High	SSA	NFA	IC's - Lab Area
15			Mercury Deposits in Manhole, Fluorine Lab	MA	High	RI/FS	NFA	IC's - Lab Area
16			Laboratory Chemical Disposal	MA	High	RI/FS	NFA	IC's - Lab Area
17			Disposed Metal Parts Along Shoreline	MA	High	RI/FS	RA-O	
18			Hog Island	MA	Low	SSA	NFA	
19			Catch Basins at Chip Collection Houses	MA	Low	SSA	NFA	IRA resulted in NFA DD
20			Single-base Powder Facilities	MA	Low	SSA	NFA	
21			Bronson Road Landfill	MA	High	RI/FS	RC / LTM	
22		6	NG Slums Burning Site	MA	Low	SSA	RI/FS	Included in MRP
23			Hydraulic Oil Spill Discharges From Extrusion Plant	MA	Low	SSA	NFA	
24			Abandoned Drain Lines	MA	Medium	SSA	NFA	
25			Hypo Discharge X-Ray Building No. 2	MA	High	RI/FS	NFA	
26			Thermal Destructor 2	MA	Low	SSA	NFA	
27			Thermal Destructor 1	MA	Low	SSA	NFA	IRA resulted in NFA DD
28		8	Original Burning Ground	MA	High Medium	SSA	RC/LTM	NFA for soil. ICs and LTM for GW
29		11	The Valley	MA	Low	SSA	RI/FS	Included in MRP
30	22	10	Stump Neck Impact Area	SN	NE	SSA	RI/FS	Included in MRP
31	23	7	Old Demolition Range	SN	NE	SSA	NFA	Active Range
32	11		Suspected Tool Burial Site	SN	NE	SSA	NFA	
33	7		Scrap Metal Pit	SN	NE	SSA	NFA	
34	8		Tool Burial Site	SN	NE	SSA	NFA	
35	9	12	Torpedo Burial Site	SN	NE	SSA	RI/FS	Included in MRP
36	10		Closed Landfill	SN	NE	SSA	RC / LTM	
37	24	3	Causeway	SN	NE	SSA	NFA	No evidence of waste
38	1		Rum Point Landfill	SN	Medium	SSA	RC/LTM	NFA for soil. ICs and LTM for GW
39			Silver Release to Sediments	MA	High	RI/FS	NFA	
40			Palladium Catalyst in Sediments	MA	Low	RI/FS	NFA	
41		32	Scrap Yard	MA	High	RI/FS	NFA	Included in MRP. ICs for soil. GW re-assigned as IR Site 70.
42			Olsen Road Landfill	MA	High	RI/FS	RC / LTM	
43			Toluene Disposal Site	MA	Low	RI/FS	RI/FS	
44			Soak Out Area	MA	Medium	RI/FS	NFA	
45			Abandoned Drums	MA	Medium	RI/FS	NFA	
46			Cadmium Sandblast Grit	MA	Low	RI/FS	NFA	
47			Mercuric Nitrate Disposal Area	MA	High	RI/FS	RA-O	
48			Nitroglycerin Plant Disposal Area	MA	Low	RI/FS	NFA	
49			Chemical Disposal Pit	MA	High	RI/FS	NFA	IC's - Lab Area
50			Building 103, Crawl Space	MA	High	RI/FS	NFA	IC's - Lab Area
51			Building 101, Dry Well	MA	NE		NFA	
52			Building 102, Dry Well	MA	NE		NFA	
53			Mercury Contamination of the Sewage System	MA	High	RI/FS	NFA	IC's - Lab Area
54			Building 101	MA	High	RI/FS	NFA	IC's - Lab Area
55			Building 102	MA	High	RI/FS	NFA	IC's - Lab Area
56			IW87 - Lead Contamination	MA	Low	RI/FS	NFA	
57			TCE Building 292 Area	MA	High	RI/FS	RA-O	
58	2		Range 3 Burn Point	SN	High	SSA	NFA	Active Range
59	3		Chicamuxen Creek's Edge Site A	SN	High	SSA	NFA	Active Range
60	4		Chicamuxen Creek's Edge Site B	SN	Medium	SSA	NFA	Active Range
61	5		Range 6	SN	Medium	SSA	NFA	Active Range
62	6	1	Air Blast Pond	SN	Medium	SSA	RI/FS	Included in MRP
63	25	2	Area 8	SN	Medium	SSA	RI/FS	Included in MRP
64	26	4	IED (+SN SWMU 19)	SN	Medium	SSA	RI/FS	Included in MRP

TABLE 1-1
INSTALLATION RESTORATION PROGRAM SITES AND SWMUs
MAIN AREA AND STUMP NECK ANNEX
NSFIH, INDIAN HEAD, MARYLAND
PAGE 2 OF 2

IR Site ID	SWMU or AOC ID	MRP UXO ID	Name	Main Area (MA) / Stump Neck (SN)	Relative Risk	FFA Group	Status	Comments
65	27	5	IOD	SN	Medium	SSA	RI/FS	Included in MRP
66			Turkey Run Disposal Area	MA	Medium	SSA	RI/FS	
67			Hog-Out Facility	MA	Medium	RI/FS	RI/FS	
68			Former Building 259 Contamination	MA	Low	SSA	IRA	Formerly AOC 31
69			Building 1018 - Oxidizer Process Building	MA	Medium	SSA	RD	
70			Groundwater Contamination Along Water Works Way	MA	Medium	RI/FS	RI/FS	
71			Fire Training Areas-5	MA/SN	NE	NA	SSI	
72			Main Firehouse	MA	High	NA	RI/FS	
73			Open Field by Tracks	MA	Medium	NA	RI/FS	
74			Sanitary Treatment Plant #1	MA	Medium	NA	RI/FS	
75			Old Firehouse	SN	Medium	NA	RI/FS	
76			Field by Contractor Lot	SN	Medium	NA	RI/FS	
AOCs / SWMUs								
	6		Used Battery Accumulation Area (Bldg. 766)	MA	NE	AOC	NFA	
	12		Waste Oil Storage Site	SN	NE	AOC	NFA	
	13		Pink Water Treatment Tank	SN	NE	AOC	RCRA	
	14		Photographic Lab Septic Tank System	SN	NE	AOC	RI/FS	SWMU 14 now an IR Site
	15		Spent Photographic Solution Storage	SN	NE	AOC	NFA	
	16		Thermal Treatment Tank	SN	NE	AOC	NFA	Active Range
	17		Bldg. 2015 – Chem Lab Accumulation Area	SN	NE	AOC	NFA	
	18		Waste Pile	SN	NE	AOC	NFA	
	19	4	Disposal Area #1	SN	NE	AOC	RI/FS	Included in MRP with Site 64
	20	20	Safety Thermal Treatment Point	MA	Medium	AOC	RI/FS	Re-assigned as UXO 20
	20	15	Disposal Area #2	SN	NE	AOC	LTM	Investigate with Stump Neck SWMU 28, Included in MRP
	21		Caffee Road Decontamination Burn Point	MA	NE	AOC	LTM	Investigate with Site 11
	21		Drum Storage Area	SN	NE	AOC	NFA	
	27		Waste Oil Storage Area (Goddard Power Plant)	MA	Low	AOC	NFA	
	28	15	Old Skeet and Trap Range	SN	NE	AOC	LTM	Included in MRP
	29	17	Small Arms Range (Pistol Range)	SN	NE	AOC	NFA	Included in MRP
	30		Bldg. 2015 Dry Well	SN	NE	AOC	NFA	SWMU 30
	38		Caffee Road Waste Oil Storage Area	MA	Low	AOC	LTM	Investigate with Site 11
	69		Temp Accumulation Dumpster for Explosive Scrap	MA	Low	AOC	NFA	
	70		Temp Accum Areas for Drummed Explosive Scrap	MA	Low	AOC	NFA	
	72		Oil/Water Separators	MA	Low	AOC	NFA	
	74		Unlined Overland Drainage Ditches	MA	Low	AOC	NFA	
	4,5		Underground Storage Tanks (Bldg. 290 and 525)	MA	NE	AOC	NFA	
	40-46		Wastewater Collection/Treatment Tanks (Moser Plant)	MA	Low	AOC	NFA	
	47-51		Spent Acid Storage/Treatment Tanks (Moser Plant)	MA	Low	AOC	NFA	
	64-66		Waste Water Storage Tanks (Bldg. 1596)	MA	Low	AOC	NFA	
	AOC G		Sand Blasting Sand Storage Area	MA	Low	AOC	NFA	
	AOC H		Drum at Fuel Storage Area	MA	Low	AOC	NFA	
ADDITIONAL MRP SITES								
		13	FDR Skeet Range	MA	Low	NA	RI/FS	
		14	Marine Rifle Range	SN	Low	NA	NFA	
		16	Rum Point Skeet Range	SN	Low	NA	NFA	
		18	Battle Range Firing	SN	NE	NA	RI/FS	Water Area Munitions Site
		19	Igniter Area	MA	NE	NA	RI/FS	Water Area Munitions Site
		21	Test Area 1	SN	Low	NA	RI/FS	
		22	Test Area 2	SN	Low	NA	NFA	
		23	Torpedo Casing Disposal Area	SN	Low	NA	RI/FS	
		25	Roach Road Rifle Range	SN	Low	NA	NFA	
		26	The Valley Impact Area	SN	Medium	NA	RI/FS	
		27	Sonar Training Area	SN	NE	NA	RI/FS	Water Area Munitions Site
		28	EOD School Demo Area	SN	Medium	NA	RI/FS	
		29	Southwestern Pistol Range	MA	Low	NA	NFA	
		30	Gate 3 Burning Ground	MA	Medium	NA	RI/FS	
		31	Pope's Creek	--	NE	NA	RI/FS	Water Area Munitions Site
		33	Water Impact Area	MA	NE	NA	RI/FS	Water Area Munitions Site

AOC - Area of Concern
IC - Institutional Control
ID - Identification
IR - Installation Restoration [Program]
IRA - Interim Removal Action (or Removal Action)
LTM - Long Term Monitoring
MRP - Munitions Response Program
NA - Not Applicable
NE - Not Evaluated
NFA - No Further Action
PA -Preliminary Assessment
RA - Remedial Action
RA-O - Remedial Action-Operation
RC - Response Complete
RCRA - Resource Conservation and Recovery Act
RD - Remedial Design
RI/FS - Remedial Investigation/Feasibility Study
SSA - Site Screening Assessment
SSI - Site Screening Investigation
SSP - Site Screening Process
SWMU - Solid Waste Management Unit

TABLE 1-2
SUMMARY OF DESKTOP AUDIT FOR AREAs OF CONCERN (AOCs)
MAIN AREA
NSFIH, INDIAN HEAD, MARYLAND

AOC	NAME	DECISION
Main Area SWMUs 4 and 5	Underground Storage Tanks (Buildings 290/525)	No action required
Main Area SWMU 6	Used Battery Accumulation Area (Building 290)	No action required
Main Area SWMU 27	Waste Oil Storage Area (Goddard Power)	No action required
Main Area SWMU 38	Caffee Road Waste Oil Storage Area	Investigate with Site 11 Remedial Investigation
Main Area SWMUs 40-46	Wastewater Collection/Treatment Tanks	No action required
Main Area SWMUs 47-51	Spent Acid Storage/Treatment Tanks	No action required
Main Area SWMUs 64-66	Wastewater Storage Tanks (Building 1596)	No action required
Main Area SWMU 69	Temporary Dumpster for Explosive Scrap	No action required
Main Area SWMU 70	Temporary Areas for Drummed Explosive Scrap	No action required
Main Area SWMU 72	Oil/Water Separators	No action required
Main Area SWMU 74 (1)	Unlined Overland Drainage Ditches	Retain as an AOC pending further investigation
Main Area AOC G	Sand-Blasting Sand Storage Area	No action required
Main Area AOC H	Drum at Fuel Storage Area	No action required
Main Area SWMU 20 (2)	Safety Thermal Treatment Point	Conduct a Remedial Investigation
Main Area SWMU 21	Caffee Road Decontamination Burn Point	Investigate with Site 11 Remedial Investigation

Notes
AOC – Area of Concern
SWMU – Solid Waste Management Unit
1. After the initial desktop audit was finished, the Indian Head Installation Restoration Team (IHIRT) signed a concurrence letter for no further action at this AOC.
2. This SWMU has been moved to the Munitions Response Program (MRP).

TABLE 1-3
SUMMARY OF DESKTOP AUDIT FOR AREAs OF CONCERN (AOCs)
STUMP NECK ANNEX
NSFIH, INDIAN HEAD, MARYLAND

AOC	NAME	DECISION
Stump Neck SWMU 12	Waste Oil Storage Site	No action required
Stump Neck SWMU 13	Pink Water Treatment Tank	Manage under the RCRA program
Stump Neck SWMU 14 (1)	Photographic Lab Septic System	Retain as an AOC pending further investigation
Stump Neck SWMU 15	Spent Photographic Solution Storage	No action required
Stump Neck SWMU 16 (2)	Thermal Treatment Tank	Investigate with Site 58 Remedial Investigation
Stump Neck SWMU 17	Building 2015 – Chemical Lab Accumulation Area	No action required
Stump Neck SWMU 18	Waste Pile	No action required
Stump Neck SWMU 19 (3)	Disposal Area No. 1	Investigate with Site 64 Remedial Investigation
Stump Neck SWMU 20 (3)	Disposal Area No. 2	Investigate with Stump Neck SWMU 28
Stump Neck SWMU 21	Drum Storage Area	No action required
Stump Neck SWMU 28 (3)	Old Skeet and Trap Range	Investigate with the Site Screening Process
Stump Neck SWMU 29 (3)	Small Arms Range (Pistol Range)	Retain as an AOC pending further investigation
Stump Neck SWMU 30 (4)	Building 2015 Dry Well	Retain as an AOC pending further investigation

Notes

AOC – Area of Concern

SWMU – Solid Waste Management Unit

RCRA – Resource Conservation and Recovery Act

1. Currently undergoing a Remedial Investigation.
2. Designated as an active range and will not be addressed under the Installation Restoration (IR) program.
3. SWMUs that have been transferred to the Munitions Response Program (MRP).
4. No Further Action Required.

TABLE 4-1
SCHEDULE (FY23-24)
NSFIH, INDIAN HEAD, MD

Today's Date	Installation	last updated Date	Construction complete date	Response Complete Date	Navy POC	EPA POC	State POC		Create Chart						Version	
10/11/2023	Indian Head				Joe Rail	Rob Thomson	Curtis DeTore									
Site Name	**Contaminants of concern**	**Impacted Media**		**Notes**	**Program CERCLA/RCRA**	**Installation status FFA/NPL**	**LUC**		Edit Table							
Basewide	N/A	N/A		N/A	CERCLA		No		Reset Sort							
Site	**Goal**	**Milestone**	**Priority**	**Status**	**EPA Operational Unit Number**	**Planned Start Date**	**Revised/Actual Start Date**	**Planned Duration**	**Expected/Actual Duration**	**Expected/Actual End Date**	**FY**	**Contractor**	**Number of Draft for**	**Revision Reason**	**Notes**	**Date of last note**
Basewide SMP	Site Management Plan	Navy Report Development		Completed		5/31/2022	5/31/2023	30	7	6/7/2023	2023	Tetra Tech		12	Updated to be the FY23-24 SMP	
Basewide SMP	Site Management Plan	Regulatory Review Draft		Ongoing		6/7/2023		61	72	8/18/2023	2023	Tetra Tech		7	EPA comments received, awaiting MDE comments	
Basewide SMP	Site Management Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/18/2023		30	21	9/8/2023	2023	Tetra Tech				
Basewide SMP	Site Management Plan	Final Deliverable				9/8/2023		1	1	9/9/2023	2023	Tetra Tech				
Basewide Five-Yr Review	Five Year Review Fieldwork and Interviews	Complete Site Visits				10/4/2021		2	1	10/5/2021	2022	Meadows/Tetra Tech				
Basewide Five-Yr Review	Five Year Review Report	Contractor Report Development		Completed		10/5/2021		77	455	1/3/2023	2023	Meadows/Tetra Tech		12	Delay due to CTO award timing and LTM data acquisition from contractors and NIRIS.	
Basewide Five-Yr Review	Five Year Review Report	Navy Review of Pre-Draft Document		Completed		1/3/2023		30	22	1/25/2023	2023	Meadows/Tetra Tech		12	Delay due to CTO award timing and LTM data acquisition from contractors and NIRIS. Review is of Draft version, concurrent with Regulators.	
Basewide Five-Yr Review	Five Year Review Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Not needed		1/25/2023		33	0	1/25/2023	2023	Meadows/Tetra Tech			Draft review by the Navy and Regulators was concurrent. No pre-draft version/review occurred.	
Basewide Five-Yr Review	Five Year Review Report	Regulator Review		Completed		1/25/2023	1/3/2023	122	120	5/3/2023	2023	Meadows/Tetra Tech		12	Delay due to CTO award timing and LTM data acquisition from contractors and NIRIS. Regulators will review concurrently with Navy.	
Basewide Five-Yr Review	Five Year Review Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Ongoing		5/3/2023		60	100	8/11/2023	2023	Meadows/Tetra Tech		12	Provide more time to hold partnering discussion and incorporate any feedback	
Basewide Five-Yr Review	Five Year Review Report	Submit Final Document for Signature				8/11/2023		3	3	8/14/2023	2023	Meadows/Tetra Tech				
Basewide Five-Yr Review	Five Year Review Report	Navy and EPA Signatures				8/14/2023		32	32	9/15/2023	2023	Meadows/Tetra Tech				
Basewide CRP	Community Relations Plan	Contractor Report Development		Ongoing		9/21/2021		182	800	11/30/2023	2024	Helios/Tetra Tech		12	Added time for community input survey; instructed by RPM to delay and coordinate with Dahlgren CRP.	
Basewide CRP	Community Relations Plan	Internal Navy Review Pre-Draft				11/30/2023		30	30	12/30/2023	2024	Helios/Tetra Tech				
Basewide CRP	Community Relations Plan	Response to Comments				12/30/2023		14	14	1/13/2024	2024	Helios/Tetra Tech				
Basewide CRP	Community Relations Plan	Internal Navy Review Draft				1/13/2024		14	0	1/13/2024	2024	Helios/Tetra Tech		12	Version not needed	
Basewide CRP	Community Relations Plan	Regulatory Review Draft				1/13/2024		61	61	3/14/2024	2024	Helios/Tetra Tech	1			
Basewide CRP	Community Relations Plan	Response to Comments				3/14/2024		30	30	4/13/2024	2024	Helios/Tetra Tech				
Basewide CRP	Community Relations Plan	Regulatory Review Draft Final				4/13/2024		61	61	6/13/2024	2024	Helios/Tetra Tech				
Basewide CRP	Community Relations Plan	Response to Comments				6/13/2024		30	30	7/13/2024	2024	Helios/Tetra Tech				
Basewide CRP	Community Relations Plan	Regulatory Concurrence Final				7/13/2024		32	32	8/14/2024	2024	Helios/Tetra Tech				
Basewide CRP	Community Relations Plan	Final Deliverable				8/14/2024		1	3	8/17/2024	2024	Helios/Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Contractor Report Development				9/1/2021		90	140	1/19/2022	2022	Tetra Tech		6	Additional time to confirm ER,N-eligible sites	
Basewide RAD	RAD Preliminary Assessment Report	Internal Navy Review Pre-Draft		Completed		1/19/2022		30	240	9/16/2022	2022	Tetra Tech		6	Longer review time due to multiple Navy agency reviews	
Basewide RAD	RAD Preliminary Assessment Report	Response to Comments		Completed		9/16/2022		14	14	9/30/2022	2022	Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Internal Navy Review Draft		Completed		9/30/2022		14	53	11/22/2022	2023	Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Regulatory Review Draft		Completed		11/22/2022		61	204	6/14/2023	2023	Tetra Tech		7	EPA comments received on 1/3/23. No comments from MDE confirmed verbally 6/14.	
Basewide RAD	RAD Preliminary Assessment Report	Response to Comments		Completed		6/14/2023		30	30	7/14/2023	2023	Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Regulatory Review Draft Final		Not needed		7/14/2023		61	0	7/14/2023	2023	Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Response to Comments		Not needed		7/14/2023		30	0	7/14/2023	2023	Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Regulatory Concurrence Final		Ongoing		7/14/2023		30	30	8/13/2023	2023	Tetra Tech				
Basewide RAD	RAD Preliminary Assessment Report	Final Deliverable				8/13/2023		3	3	8/16/2023	2023	Tetra Tech				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Basewide RAD	RAD SI Sampling and Analysis Plan	Contractor Report Development				8/16/2023		180	180	2/12/2024	2024	Tetra Tech		12	New to the schedule as of Q4 2023.	
Basewide RAD	RAD SI Sampling and Analysis Plan	Navy Review Pre-Draft				2/12/2024		30	30	3/13/2024	2024	Tetra Tech				
Basewide RAD	RAD SI Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				3/13/2024		30	30	4/12/2024	2024	Tetra Tech				
Basewide RAD	RAD SI Sampling and Analysis Plan	Regulatory Review Draft				4/12/2024		60	60	6/11/2024	2024	Tetra Tech	1			
Basewide RAD	RAD SI Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/11/2024		150	150	11/8/2024	2025	Tetra Tech				
Basewide RAD	RAD SI Sampling and Analysis Plan	Final Deliverable				11/8/2024		3	3	11/11/2024	2025	Tetra Tech				
Basewide RAD	RAD SI Fieldwork	Sampling Fieldwork				11/11/2024		182	182	5/12/2025	2025	Tetra Tech		12	New to the schedule as of Q4 2023.	
Basewide RAD	RAD SI Fieldwork	Laboratory Analysis				5/12/2025		30	30	6/11/2025	2025	Tetra Tech				
Basewide RAD	RAD SI Fieldwork	Data Validation				6/11/2025		30	30	7/11/2025	2025	Tetra Tech				
Basewide RAD	RAD SI Fieldwork	Data Loading and Verification				7/11/2025		90	90	10/9/2025	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Contractor Report Development				10/9/2025		120	120	2/6/2026	2026	Tetra Tech		12	New to the schedule as of Q4 2023.	
Basewide RAD	RAD SI Report	Internal Navy Review Pre-Draft				2/6/2026		31	31	3/9/2026	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Response to Comments				3/9/2026		14	14	3/23/2026	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Internal Navy Review Draft				3/23/2026		14	14	4/6/2026	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Regulatory Review Draft				4/6/2026		60	60	6/5/2026	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Response to Comments				6/5/2026		31	31	7/6/2026	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Regulatory Review Draft Final				7/6/2026		60	60	9/4/2026	2026	Tetra Tech				
Basewide RAD	RAD SI Report	Response to Comments				9/4/2026		31	31	10/5/2026	2027	Tetra Tech				
Basewide RAD	RAD SI Report	Regulatory Concurrence Final				10/5/2026		30	30	11/4/2026	2027	Tetra Tech				
Basewide RAD	RAD SI Report	Final Deliverable				11/4/2026		1	1	11/5/2026	2027	Tetra Tech				
Basewide MMA SAP	MMA Sampling and Analysis Plan	Contractor Report Development		Ongoing		7/1/2021		184	802	9/11/2023	2023	Helios/Tetra Tech		12	Created links within the document. LANT is discussing with RPM if MMA SAP format can be used in coordination with Dahlgren MMA SAP.	
Basewide MMA SAP	MMA Sampling and Analysis Plan	Navy Review Pre-Draft				9/11/2023		30	30	10/11/2023	2024	Helios/Tetra Tech				
Basewide MMA SAP	MMA Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/11/2023		30	30	11/10/2023	2024	Helios/Tetra Tech				
Basewide MMA SAP	MMA Sampling and Analysis Plan	Regulatory Review Draft				11/10/2023		60	60	1/9/2024	2024	Helios/Tetra Tech	1			
Basewide MMA SAP	MMA Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/9/2024		150	150	6/7/2024	2024	Helios/Tetra Tech				
Basewide MMA SAP	MMA Sampling and Analysis Plan	Final Deliverable				6/7/2024		3	3	6/10/2024	2024	Helios/Tetra Tech				
UXO 1	Feasibility Study Report	Contractor Report Development			37	9/1/2023	1/8/2024	182	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 sampling results and approach.	
UXO 1	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		30	30	8/7/2024	2024	AECOM				
UXO 1	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/7/2024		33	33	9/9/2024	2024	AECOM				
UXO 1	Feasibility Study Report	Regulatory Review Draft				9/9/2024		60	60	11/8/2024	2025	AECOM	1			
UXO 1	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/8/2024		150	150	4/7/2025	2025	AECOM				
UXO 1	Feasibility Study Report	Final Deliverable				4/7/2025		3	3	4/10/2025	2025	AECOM				
UXO 1	PRAP	Contractor Report Development				4/10/2025		91	91	7/10/2025	2025	AECOM				
UXO 1	PRAP	Navy Review Draft				7/10/2025		32	32	8/11/2025	2025	AECOM				
UXO 1	PRAP	Response to Comments				8/11/2025		14	14	8/25/2025	2025	AECOM				
UXO 1	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/25/2025		14	14	9/8/2025	2025	AECOM				
UXO 1	PRAP	Regulatory (tech support) Review Draft_V1				9/8/2025		63	63	11/10/2025	2026	AECOM	1			
UXO 1	PRAP	Response to Comments				11/10/2025		30	30	12/10/2025	2026	AECOM				
UXO 1	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/10/2025		30	30	1/9/2026	2026	AECOM				
UXO 1	PRAP	Regulatory (EPA legal) Review Draft_V2				1/9/2026		60	60	3/10/2026	2026	AECOM				
UXO 1	PRAP	Response to Comments				3/10/2026		30	30	4/9/2026	2026	AECOM				
UXO 1	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/9/2026		32	32	5/11/2026	2026	AECOM				
UXO 1	PRAP	Regulatory Concurrence Draft				5/11/2026		30	30	6/10/2026	2026	AECOM				
UXO 1	PRAP	Final Deliverable				6/10/2026		1	1	6/11/2026	2026	AECOM				
UXO 1	ROD	Contractor Report Development				6/11/2026		120	120	10/9/2026	2027	AECOM				
UXO 1	ROD	Navy Review Draft				10/9/2026		31	31	11/9/2026	2027	AECOM				
UXO 1	ROD	Response to Comments				11/9/2026		14	14	11/23/2026	2027	AECOM				
UXO 1	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/23/2026		14	14	12/7/2026	2027	AECOM				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 1	ROD	Regulatory (tech support) Review Draft_V1				12/7/2026		60	60	2/5/2027	2027	AECOM				
UXO 1	ROD	Response to Comments				2/5/2027		31	31	3/8/2027	2027	AECOM				
UXO 1	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/8/2027		30	30	4/7/2027	2027	AECOM				
UXO 1	ROD	Regulatory (EPA legal) Review Draft_V2				4/7/2027		61	61	6/7/2027	2027	AECOM				
UXO 1	ROD	Response to Comments				6/7/2027		30	30	7/7/2027	2027	AECOM				
UXO 1	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/7/2027		30	30	8/6/2027	2027	AECOM				
UXO 1	ROD	Regulatory Concurrence Draft				8/6/2027		31	31	9/6/2027	2027	AECOM				
UXO 1	ROD	Final Deliverable				9/6/2027		1	1	9/7/2027	2027	AECOM				
UXO 1	ROD	Navy and EPA Signatures				9/7/2027		62	62	11/8/2027	2028	AECOM				
UXO 1	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/8/2027		365	365	11/7/2028	2029	AECOM				
UXO 1	Construction - Remedial Action (future)	Remedial action plans and construction				11/7/2028		365	365	11/7/2029	2030	AECOM				
UXO 1	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/7/2029		365	365	11/7/2030	2031	AECOM				
UXO 2	Feasibility Study Report	Contractor Report Development			38	9/1/2023	1/8/2024	180	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 sampling results and approach.	
UXO 2	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		35	35	8/12/2024	2024	AECOM				
UXO 2	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/12/2024		30	30	9/11/2024	2024	AECOM				
UXO 2	Feasibility Study Report	Regulatory Review Draft				9/11/2024		61	61	11/11/2024	2025	AECOM	1			
UXO 2	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/11/2024		150	150	4/10/2025	2025	AECOM				
UXO 2	Feasibility Study Report	Final Deliverable				4/10/2025		1	1	4/11/2025	2025	AECOM				
UXO 2	PRAP	Contractor Report Development				4/11/2025		90	90	7/10/2025	2025	AECOM				
UXO 2	PRAP	Navy Review Draft				7/10/2025		32	32	8/11/2025	2025	AECOM				
UXO 2	PRAP	Response to Comments				8/11/2025		14	14	8/25/2025	2025	AECOM				
UXO 2	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/25/2025		14	14	9/8/2025	2025	AECOM				
UXO 2	PRAP	Regulatory (tech support) Review Draft_V1				9/8/2025		60	60	11/7/2025	2026	AECOM	1			
UXO 2	PRAP	Response to Comments				11/7/2025		31	31	12/8/2025	2026	AECOM				
UXO 2	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/8/2025		30	30	1/7/2026	2026	AECOM				
UXO 2	PRAP	Regulatory (EPA legal) Review Draft_V2				1/7/2026		61	61	3/9/2026	2026	AECOM				
UXO 2	PRAP	Response to Comments				3/9/2026		30	30	4/8/2026	2026	AECOM				
UXO 2	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/8/2026		30	30	5/8/2026	2026	AECOM				
UXO 2	PRAP	Regulatory Concurrence Draft				5/8/2026		31	31	6/8/2026	2026	AECOM				
UXO 2	PRAP	Final Deliverable				6/8/2026		1	1	6/9/2026	2026	AECOM				
UXO 2	ROD	Contractor Report Development				6/9/2026		120	120	10/7/2026	2027	AECOM				
UXO 2	ROD	Navy Review Draft				10/7/2026		30	30	11/6/2026	2027	AECOM				
UXO 2	ROD	Response to Comments				11/6/2026		14	14	11/20/2026	2027	AECOM				
UXO 2	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/20/2026		14	14	12/4/2026	2027	AECOM				
UXO 2	ROD	Regulatory (tech support) Review Draft_V1				12/4/2026		60	60	2/2/2027	2027	AECOM				
UXO 2	ROD	Response to Comments				2/2/2027		30	30	3/4/2027	2027	AECOM				
UXO 2	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/4/2027		32	32	4/5/2027	2027	AECOM				
UXO 2	ROD	Regulatory (EPA legal) Review Draft_V2				4/5/2027		60	60	6/4/2027	2027	AECOM				
UXO 2	ROD	Response to Comments				6/4/2027		31	31	7/5/2027	2027	AECOM				
UXO 2	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/5/2027		30	30	8/4/2027	2027	AECOM				
UXO 2	ROD	Regulatory Concurrence Draft				8/4/2027		30	30	9/3/2027	2027	AECOM				
UXO 2	ROD	Final Deliverable				9/3/2027		3	3	9/6/2027	2027	AECOM				
UXO 2	ROD	Navy and EPA Signatures				9/6/2027		60	60	11/5/2027	2028	AECOM				
UXO 2	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/5/2027		367	367	11/6/2028	2029	AECOM				
UXO 2	Construction - Remedial Action (future)	Remedial action plans and construction				11/6/2028		365	365	11/6/2029	2030	AECOM				
UXO 2	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/6/2029		365	365	11/6/2030	2031	AECOM				
UXO 4	Feasibility Study Report	Contractor Report Development			29	9/1/2023	1/8/2024	180	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 results and approach.	
UXO 4	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		30	30	8/7/2024	2024	AECOM				
UXO 4	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/7/2024		33	33	9/9/2024	2024	AECOM				
UXO 4	Feasibility Study Report	Regulatory Review Draft				9/9/2024		60	60	11/8/2024	2025	AECOM	1			
UXO 4	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/8/2024		150	150	4/7/2025	2025	AECOM				
UXO 4	Feasibility Study Report	Final Deliverable				4/7/2025		1	1	4/8/2025	2025	AECOM				
UXO 4	PRAP	Contractor Report Development				4/8/2025		90	90	7/7/2025	2025	AECOM				
UXO 4	PRAP	Navy Review Draft				7/7/2025		30	30	8/6/2025	2025	AECOM				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 4	PRAP	Response to Comments				8/6/2025		14	14	8/20/2025	2025	AECOM				
UXO 4	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/20/2025		14	14	9/3/2025	2025	AECOM				
UXO 4	PRAP	Regulatory (tech support) Review Draft_V1				9/3/2025		61	61	11/3/2025	2026	AECOM	1			
UXO 4	PRAP	Response to Comments				11/3/2025		30	30	12/3/2025	2026	AECOM				
UXO 4	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/3/2025		30	30	1/2/2026	2026	AECOM				
UXO 4	PRAP	Regulatory (EPA legal) Review Draft_V2				1/2/2026		60	60	3/3/2026	2026	AECOM				
UXO 4	PRAP	Response to Comments				3/3/2026		30	30	4/2/2026	2026	AECOM				
UXO 4	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/2/2026		32	32	5/4/2026	2026	AECOM				
UXO 4	PRAP	Regulatory Concurrence Draft				5/4/2026		30	30	6/3/2026	2026	AECOM				
UXO 4	PRAP	Final Deliverable				6/3/2026		1	1	6/4/2026	2026	AECOM				
UXO 4	ROD	Contractor Report Development				6/4/2026		120	120	10/2/2026	2027	AECOM				
UXO 4	ROD	Navy Review Draft				10/2/2026		31	31	11/2/2026	2027	AECOM				
UXO 4	ROD	Response to Comments				11/2/2026		14	14	11/16/2026	2027	AECOM				
UXO 4	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/16/2026		14	14	11/30/2026	2027	AECOM				
UXO 4	ROD	Regulatory (tech support) Review Draft_V1				11/30/2026		60	60	1/29/2027	2027	AECOM				
UXO 4	ROD	Response to Comments				1/29/2027		31	31	3/1/2027	2027	AECOM				
UXO 4	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/1/2027		30	30	3/31/2027	2027	AECOM				
UXO 4	ROD	Regulatory (EPA legal) Review Draft_V2				3/31/2027		61	61	5/31/2027	2027	AECOM				
UXO 4	ROD	Response to Comments				5/31/2027		30	30	6/30/2027	2027	AECOM				
UXO 4	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				6/30/2027		30	30	7/30/2027	2027	AECOM				
UXO 4	ROD	Regulatory Concurrence Draft				7/30/2027		31	31	8/30/2027	2027	AECOM				
UXO 4	ROD	Final Deliverable				8/30/2027		1	1	8/31/2027	2027	AECOM				
UXO 4	ROD	Navy and EPA Signatures				8/31/2027		62	62	11/1/2027	2028	AECOM				
UXO 4	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/1/2027		365	365	10/31/2028	2029	AECOM				
UXO 4	Construction - Remedial Action (future)	Remedial action plans and construction				10/31/2028		365	365	10/31/2029	2030	AECOM				
UXO 4	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				10/31/2029		365	365	10/31/2030	2031	AECOM				
UXO 5	Feasibility Study Report	Contractor Report Development			34	9/1/2023	1/8/2024	180	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 results and approach.	
UXO 5	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		35	35	8/12/2024	2024	AECOM				
UXO 5	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/12/2024		30	30	9/11/2024	2024	AECOM				
UXO 5	Feasibility Study Report	Regulatory Review Draft				9/11/2024		61	61	11/11/2024	2025	AECOM	1			
UXO 5	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/11/2024		150	150	4/10/2025	2025	AECOM				
UXO 5	Feasibility Study Report	Final Deliverable				4/10/2025		1	1	4/11/2025	2025	AECOM				
UXO 5	PRAP	Contractor Report Development				4/11/2025		90	90	7/10/2025	2025	AECOM				
UXO 5	PRAP	Navy Review Draft				7/10/2025		32	32	8/11/2025	2025	AECOM				
UXO 5	PRAP	Response to Comments				8/11/2025		14	14	8/25/2025	2025	AECOM				
UXO 5	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/25/2025		14	14	9/8/2025	2025	AECOM				
UXO 5	PRAP	Regulatory (tech support) Review Draft_V1				9/8/2025		60	60	11/7/2025	2026	AECOM	1			
UXO 5	PRAP	Response to Comments				11/7/2025		31	31	12/8/2025	2026	AECOM				
UXO 5	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/8/2025		30	30	1/7/2026	2026	AECOM				
UXO 5	PRAP	Regulatory (EPA legal) Review Draft_V2				1/7/2026		61	61	3/9/2026	2026	AECOM				
UXO 5	PRAP	Response to Comments				3/9/2026		30	30	4/8/2026	2026	AECOM				
UXO 5	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/8/2026		30	30	5/8/2026	2026	AECOM				
UXO 5	PRAP	Regulatory Concurrence Draft				5/8/2026		31	31	6/8/2026	2026	AECOM				
UXO 5	PRAP	Final Deliverable				6/8/2026		1	1	6/9/2026	2026	AECOM				
UXO 5	ROD	Contractor Report Development				6/9/2026		120	120	10/7/2026	2027	AECOM				
UXO 5	ROD	Navy Review Draft				10/7/2026		30	30	11/6/2026	2027	AECOM				
UXO 5	ROD	Response to Comments				11/6/2026		14	14	11/20/2026	2027	AECOM				
UXO 5	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/20/2026		14	14	12/4/2026	2027	AECOM				
UXO 5	ROD	Regulatory (tech support) Review Draft_V1				12/4/2026		60	60	2/2/2027	2027	AECOM				
UXO 5	ROD	Response to Comments				2/2/2027		30	30	3/4/2027	2027	AECOM				
UXO 5	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/4/2027		32	32	4/5/2027	2027	AECOM				
UXO 5	ROD	Regulatory (EPA legal) Review Draft_V2				4/5/2027		60	60	6/4/2027	2027	AECOM				
UXO 5	ROD	Response to Comments				6/4/2027		31	31	7/5/2027	2027	AECOM				
UXO 5	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/5/2027		30	30	8/4/2027	2027	AECOM				
UXO 5	ROD	Regulatory Concurrence Draft				8/4/2027		30	30	9/3/2027	2027	AECOM				
UXO 5	ROD	Final Deliverable				9/3/2027		3	3	9/6/2027	2027	AECOM				
UXO 5	ROD	Navy and EPA Signatures				9/6/2027		60	60	11/5/2027	2028	AECOM				
UXO 5	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/5/2027		367	367	11/6/2028	2029	AECOM				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 5	Construction - Remedial Action (future)	Remedial action plans and construction				11/6/2028		365	365	11/6/2029	2030	AECOM				
UXO 5	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/6/2029		365	365	11/6/2030	2031	AECOM				
UXO 6	RI or SSP Fieldwork	Sampling Fieldwork	Funds expire in June 2023	Completed	40	9/27/2021		180	434	12/5/2022	2023	CH2M		12	1st round of GW sampling was completed in Nov 2021 b/c of issues with a hard clay that was	
UXO 6	RI or SSP Fieldwork	Laboratory Analysis	Funds expire in June 2023	Completed		12/5/2022		31	91	3/6/2023	2023	CH2M		12	Delay due to lab	
UXO 6	RI or SSP Fieldwork	Data Validation		Completed		3/6/2023		35	35	4/10/2023	2023	CH2M				
UXO 6	RI or SSP Fieldwork	Data Loading and Verification		Completed		4/10/2023		91	84	7/3/2023	2023	CH2M				
UXO 6	RI Report	Contractor Report Development		Ongoing		7/3/2023		120	553	1/6/2025	2025	CH2M		12	Additional sampling and a SAP addendum are required to fill data gaps identified during preparation of the RI.	
UXO 6	RI Report	Internal Navy Review Pre-Draft				1/6/2025		34	34	2/9/2025	2025	CH2M				
UXO 6	RI Report	Response to Comments				2/9/2025		14	14	2/23/2025	2025	CH2M				
UXO 6	RI Report	Internal Navy Review Draft				2/23/2025		14	14	3/9/2025	2025	CH2M				
UXO 6	RI Report	Regulatory Review Draft				3/9/2025		60	60	5/8/2025	2025	CH2M	1			
UXO 6	RI Report	Response to Comments				5/8/2025		31	31	6/8/2025	2025	CH2M				
UXO 6	RI Report	Regulatory Review Draft Final				6/8/2025		60	60	8/7/2025	2025	CH2M				
UXO 6	RI Report	Response to Comments				8/7/2025		31	31	9/7/2025	2025	CH2M				
UXO 6	RI Report	Regulatory Concurrence Final				9/7/2025		30	30	10/7/2025	2026	CH2M				
UXO 6	RI Report	Final Deliverable				10/7/2025		1	1	10/8/2025	2026	CH2M				
UXO 6	Feasibility Study Report	Contractor Report Development				10/8/2025		180	180	4/6/2026	2026	CH2M				
UXO 6	Feasibility Study Report	Navy Review Pre-Draft				4/6/2026		30	30	5/6/2026	2026	CH2M				
UXO 6	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				5/6/2026		32	32	6/7/2026	2026	CH2M				
UXO 6	Feasibility Study Report	Regulatory Review Draft				6/7/2026		60	60	8/6/2026	2026	CH2M	1			
UXO 6	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/6/2026		150	150	1/3/2027	2027	CH2M				
UXO 6	Feasibility Study Report	Final Deliverable				1/3/2027		1	1	1/4/2027	2027	CH2M				
UXO 6	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/4/2027		365	365	1/4/2028	2028	CH2M				
UXO 6	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/4/2028		365	365	1/3/2029	2029	CH2M				
UXO 6	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/3/2029		365	365	1/3/2030	2030	CH2M				
UXO 6	Construction - Remedial Action (future)	Remedial action plans and construction				1/3/2030		367	367	1/5/2031	2031	CH2M				
UXO 6	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/5/2031		365	365	1/5/2032	2032	CH2M				
UXO 9	UXO 9 Arsenic Fieldwork	Sampling Fieldwork			30	1/10/2022	12/1/2021	30	30	12/31/2021	2022	Tetra Tech				
UXO 9	UXO 9 Arsenic Fieldwork	Laboratory Analysis				12/31/2021		33	33	2/2/2022	2022	Tetra Tech				
UXO 9	UXO 9 Arsenic Fieldwork	Data Validation				2/2/2022		30	15	2/17/2022	2022	Tetra Tech				
UXO 9	UXO 9 Arsenic Fieldwork	Data Loading and Verification				2/17/2022		92	32	3/21/2022	2022	Tetra Tech				
UXO 9	UXO 9 Arsenic Report	Contractor Report Development				3/21/2022		120	242	11/18/2022	2023	Tetra Tech		12		
UXO 9	UXO 9 Arsenic Report	Internal Navy Review Pre-Draft		Completed		11/18/2022		30	112	3/10/2023	2023	Tetra Tech		6		
UXO 9	UXO 9 Arsenic Report	Response to Comments		Not needed		3/10/2023		14	0	3/10/2023	2023	Tetra Tech				
UXO 9	UXO 9 Arsenic Report	Internal Navy Review Draft		Not needed		3/10/2023		14	0	3/10/2023	2023	Tetra Tech		12	Version not needed or scoped - Navy reviewing pre-draft only	
UXO 9	UXO 9 Arsenic Report	Regulatory Review Draft		Completed		3/10/2023		60	91	6/9/2023	2023	Tetra Tech		7		
UXO 9	UXO 9 Arsenic Report	Response to Comments		Ongoing		6/9/2023		30	90	9/7/2023	2023	Tetra Tech		9	Received additional comments from EPA after initial response to comments.	
UXO 9	UXO 9 Arsenic Report	Regulatory Review Draft Final				9/7/2023		60	60	11/6/2023	2024	Tetra Tech				
UXO 9	UXO 9 Arsenic Report	Response to Comments				11/6/2023		30	30	12/6/2023	2024	Tetra Tech				
UXO 9	UXO 9 Arsenic Report	Regulatory Concurrence Final				12/6/2023		30	30	1/5/2024	2024	Tetra Tech				
UXO 9	UXO 9 Arsenic Report	Final Deliverable				1/5/2024		3	3	1/8/2024	2024	Tetra Tech				
UXO 9	UXO 9 Offbase SAP Addendum	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Funds expire in June 2023	Completed		1/30/2023		20	36	3/7/2023	2023	CH2M				
UXO 9	UXO 9 Offbase SAP Addendum	Regulatory Review Draft	Funds expire in June 2023	Completed		3/7/2023		60	58	5/4/2023	2023	CH2M				
UXO 9	UXO 9 Offbase SAP Addendum	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	Funds expire in June 2023	Completed		5/4/2023		30	43	6/16/2023	2023	CH2M				
UXO 9	UXO 9 Offbase SAP Addendum	Final Deliverable	Funds expire in June 2023	Completed		6/16/2023		1	0	6/16/2023	2023	CH2M				
UXO 9	UXO 9 Off-Base Fieldwork	Sampling Fieldwork				6/27/2022	9/27/2023	1	1	9/28/2023	2023	CH2M		12	Waiting on Base approval to sample offbase	
UXO 9	UXO 9 Off-Base Fieldwork	Laboratory Analysis				9/28/2023		32	32	10/30/2023	2024	CH2M				
UXO 9	UXO 9 Off-Base Fieldwork	Data Validation				10/30/2023		32	32	12/1/2023	2024	CH2M				
UXO 9	UXO 9 Off-Base Fieldwork	Data Loading and Verification				12/1/2023		91	91	3/1/2024	2024	CH2M				
UXO 9	UXO 9 RI Report	Contractor Report Development				12/28/2022	2/27/2023	182	400	4/2/2024	2024	CH2M		12	Delay is due to completion of offbase sampling	
UXO 9	UXO 9 RI Report	Navy Review Pre-Draft				4/2/2024		30	30	5/2/2024	2024	CH2M				

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UXO 9	UXO 9 RI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				5/2/2024		32	32	6/3/2024	2024	CH2M				
UXO 9	UXO 9 RI Report	Regulatory Review Draft				6/3/2024		60	60	8/2/2024	2024	CH2M	1			
UXO 9	UXO 9 RI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/2/2024		90	90	10/31/2024	2025	CH2M				
UXO 9	UXO 9 RI Report	Final Deliverable				10/31/2024		1	1	11/1/2024	2025	CH2M				
UXO 9	Feasibility Study Report	Contractor Report Development				11/1/2024		182	182	5/2/2025	2025	CH2M				
UXO 9	Feasibility Study Report	Navy Review Pre-Draft				5/2/2025		31	31	6/2/2025	2025	CH2M				
UXO 9	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/2/2025		32	32	7/4/2025	2025	CH2M				
UXO 9	Feasibility Study Report	Regulatory Review Draft				7/4/2025		60	60	9/2/2025	2025	CH2M	1			
UXO 9	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/2/2025		150	150	1/30/2026	2026	CH2M				
UXO 9	Feasibility Study Report	Final Deliverable				1/30/2026		3	3	2/2/2026	2026	CH2M				
UXO 9	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				2/2/2026		365	365	2/2/2027	2027	CH2M				
UXO 9	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				2/2/2027		367	367	2/4/2028	2028	CH2M				
UXO 9	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				2/4/2028		367	367	2/5/2029	2029	CH2M				
UXO 9	Construction - Remedial Action (future)	Remedial action plans and construction				2/5/2029		365	365	2/5/2030	2030	CH2M				
UXO 9	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				2/5/2030		367	367	2/7/2031	2031	CH2M				
UXO 10	Feasibility Study Report	Contractor Report Development			41	9/1/2023	1/8/2024	182	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 results and approach.	
UXO 10	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		31	31	8/8/2024	2024	AECOM				
UXO 10	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/8/2024		32	32	9/9/2024	2024	AECOM				
UXO 10	Feasibility Study Report	Regulatory Review Draft				9/9/2024		60	60	11/8/2024	2025	AECOM	1			
UXO 10	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/8/2024		150	150	4/7/2025	2025	AECOM				
UXO 10	Feasibility Study Report	Final Deliverable				4/7/2025		4	4	4/11/2025	2025	AECOM				
UXO 10	PRAP	Contractor Report Development				4/11/2025		91	91	7/11/2025	2025	AECOM				
UXO 10	PRAP	Navy Review Draft				7/11/2025		32	32	8/12/2025	2025	AECOM				
UXO 10	PRAP	Response to Comments				8/12/2025		14	14	8/26/2025	2025	AECOM				
UXO 10	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/26/2025		14	14	9/9/2025	2025	AECOM				
UXO 10	PRAP	Regulatory (tech support) Review Draft_V1				9/9/2025		63	63	11/11/2025	2026	AECOM	1			
UXO 10	PRAP	Response to Comments				11/11/2025		31	31	12/12/2025	2026	AECOM				
UXO 10	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/12/2025		31	31	1/12/2026	2026	AECOM				
UXO 10	PRAP	Regulatory (EPA legal) Review Draft_V2				1/12/2026		63	63	3/16/2026	2026	AECOM				
UXO 10	PRAP	Response to Comments				3/16/2026		30	30	4/15/2026	2026	AECOM				
UXO 10	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/15/2026		33	33	5/18/2026	2026	AECOM				
UXO 10	PRAP	Regulatory Concurrence Draft				5/18/2026		30	30	6/17/2026	2026	AECOM				
UXO 10	PRAP	Final Deliverable				6/17/2026		1	1	6/18/2026	2026	AECOM				
UXO 10	ROD	Contractor Report Development				6/18/2026		120	120	10/16/2026	2027	AECOM				
UXO 10	ROD	Navy Review Draft				10/16/2026		31	31	11/16/2026	2027	AECOM				
UXO 10	ROD	Response to Comments				11/16/2026		14	14	11/30/2026	2027	AECOM				
UXO 10	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/30/2026		14	14	12/14/2026	2027	AECOM				
UXO 10	ROD	Regulatory (tech support) Review Draft_V1				12/14/2026		60	60	2/12/2027	2027	AECOM				
UXO 10	ROD	Response to Comments				2/12/2027		31	31	3/15/2027	2027	AECOM				
UXO 10	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/15/2027		30	30	4/14/2027	2027	AECOM				
UXO 10	ROD	Regulatory (EPA legal) Review Draft_V2				4/14/2027		61	61	6/14/2027	2027	AECOM				
UXO 10	ROD	Response to Comments				6/14/2027		30	30	7/14/2027	2027	AECOM				
UXO 10	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/14/2027		30	30	8/13/2027	2027	AECOM				
UXO 10	ROD	Regulatory Concurrence Draft				8/13/2027		31	31	9/13/2027	2027	AECOM				
UXO 10	ROD	Final Deliverable				9/13/2027		1	1	9/14/2027	2027	AECOM				
UXO 10	ROD	Navy and EPA Signatures				9/14/2027		62	62	11/15/2027	2028	AECOM				
UXO 10	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/15/2027		365	365	11/14/2028	2029	AECOM				
UXO 10	Construction - Remedial Action (future)	Remedial action plans and construction				11/14/2028		365	365	11/14/2029	2030	AECOM				
UXO 10	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/14/2029		365	365	11/14/2030	2031	AECOM				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 11	General Sampling and Analysis Plan	Contractor Report Development	Funds expire in June 2023	Completed	31	7/12/2021		182	316	5/24/2022	2022	CH2M		12	Due to change of lab (SAP will be revised to include info for new lab)	
UXO 11	General Sampling and Analysis Plan	Navy Review Pre-Draft	Funds expire in June 2023	Completed		5/24/2022		30	30	6/23/2022	2022	CH2M				
UXO 11	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Funds expire in June 2023	Completed		6/23/2022		33	22	7/15/2022	2022	CH2M		12	Durations are decreased b/c of funds expiring in Jun 2023	
UXO 11	General Sampling and Analysis Plan	Regulatory Review Draft	Funds expire in June 2023	Completed		7/15/2022		60	80	10/3/2022	2023	CH2M		12	Longer regulatory review	
UXO 11	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	Funds expire in June 2023	Completed		10/3/2022		150	150	3/2/2023	2023	CH2M		12	Durations are decreased b/c of funds expiring in Jun 2023	
UXO 11	General Sampling and Analysis Plan	Final Deliverable	Funds expire in June 2023	Completed		3/2/2023		3	6	3/8/2023	2023	CH2M				
UXO 11	UXO 11 Aquifer Investigation	Fieldwork	Funds expire in June 2023	Completed		10/5/2022		5	57	12/1/2022	2023	CH2M		12	EPA requested that the MWs be redeveloped and issue with access to one of the MWs	
UXO 11	UXO 11 Aquifer Investigation	Laboratory Analysis	Funds expire in June 2023	Completed		12/1/2022		30	60	1/30/2023	2023	CH2M		12	Longer lab analyses	
UXO 11	UXO 11 Aquifer Investigation	Data Validation	Funds expire in June 2023	Completed		1/30/2023		31	31	3/2/2023	2023	CH2M				
UXO 11	UXO 11 Aquifer Investigation	Data Loading and Verification	Funds expire in June 2023	Completed		3/2/2023		32	32	4/3/2023	2023	CH2M				
UXO 11	UXO 11 Aquifer Tech Memo	Contractor Report Development		Ongoing		4/3/2023		121	165	9/15/2023	2023	CH2M		12	Prioritization of other deliverables.	
UXO 11	UXO 11 Aquifer Tech Memo	Navy & Regulatory Review Draft				9/15/2023		60	60	11/14/2023	2024	CH2M	1			
UXO 11	UXO 11 Aquifer Tech Memo	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/14/2023		150	150	4/12/2024	2024	CH2M				
UXO 11	UXO 11 Aquifer Tech Memo	Final Deliverable				4/12/2024		3	3	4/15/2024	2024	CH2M				
UXO 11	Feasibility Study Report	Contractor Report Development				4/15/2024		180	182	10/14/2024	2025	CH2M				
UXO 11	Feasibility Study Report	Navy Review Pre-Draft				10/14/2024		35	35	11/18/2024	2025	CH2M				
UXO 11	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				11/18/2024		31	31	12/19/2024	2025	CH2M				
UXO 11	Feasibility Study Report	Regulatory Review Draft				12/19/2024		63	63	2/20/2025	2025	CH2M	1			
UXO 11	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				2/20/2025		154	154	7/24/2025	2025	CH2M				
UXO 11	Feasibility Study Report	Final Deliverable				7/24/2025		4	4	7/28/2025	2025	CH2M				
UXO 11	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				7/28/2025		367	367	7/30/2026	2026	CH2M				
UXO 11	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				7/30/2026		368	368	8/2/2027	2027	CH2M				
UXO 11	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				8/2/2027		365	365	8/1/2028	2028	CH2M				
UXO 11	Construction - Remedial Action (future)	Remedial action plans and construction				8/1/2028		365	365	8/1/2029	2029	CH2M				
UXO 11	LUC (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				8/1/2029		365	365	8/1/2030	2030	CH2M				
Site 11	Round 17 - LTM Fieldwork	Sampling Fieldwork		Completed	12	7/1/2022	8/15/2022	14	14	8/29/2022	2022	Meadows		12		
Site 11	Round 17 - LTM Fieldwork	Laboratory Analysis		Completed		8/29/2022		30	30	9/28/2022	2022	Meadows				
Site 11	Round 17 - LTM Fieldwork	Data Validation		Completed		9/28/2022		33	33	10/31/2022	2023	Meadows				
Site 11	Round 17 - LTM Fieldwork	Data Loading and Verification		Completed		10/31/2022		32	32	12/2/2022	2023	Meadows				
Site 11	Round 17 - LTM Event Report	Contractor Report Development		Ongoing		10/28/2022		122	307	8/31/2023	2023	Meadows		12	Acquiring and compiling historic LTM data to to present in the report (to comply with LTMP requirements and support future statistical analysis)	
Site 11	Round 17 - LTM Event Report	Internal Navy Review Draft				8/31/2023		32	32	10/2/2023	2024	Meadows				
Site 11	Round 17 - LTM Event Report	Respond to comments, Navy Review Redlined Draft & RTCs, obtain approval, & prepare final				10/2/2023		63	63	12/4/2023	2024	Meadows				
Site 11	Round 17 - LTM Event Report	Final Deliverable				12/4/2023		1	1	12/5/2023	2024	Meadows				
Site 11	Round 18 - LTM Fieldwork	Sampling Fieldwork		Completed		12/12/2022		14	14	12/26/2022	2023	Meadows				
Site 11	Round 18 - LTM Fieldwork	Laboratory Analysis		Completed		12/26/2022		30	30	1/25/2023	2023	Meadows				
Site 11	Round 18 - LTM Fieldwork	Data Validation		Completed		1/25/2023		30	2	1/27/2023	2023	Meadows				
Site 11	Round 18 - LTM Fieldwork	Data Loading and Verification		Completed		1/27/2023		45	10	2/6/2023	2023	Meadows				

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Site 11	Round 18 - LTM Annual/End-of-Sequence Report	Contractor Report Development		Ongoing		2/25/2023	2/6/2023	121	308	12/11/2023	2024	Meadows		12	Delay in previous report due to historic data acquisition anticipated to impact this report	
Site 11	Round 18 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				12/11/2023		30	30	1/10/2024	2024	Meadows				
Site 11	Round 18 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				1/10/2024		47	47	2/26/2024	2024	Meadows				
Site 11	Round 18 - LTM Annual/End-of-Sequence Report	Regulator Review				2/26/2024		63	63	4/29/2024	2024	Meadows	1			
Site 11	Round 18 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				4/29/2024		60	60	6/28/2024	2024	Meadows				
Site 11	Round 18 - LTM Annual/End-of-Sequence Report	Final Deliverable				6/28/2024		1	1	6/29/2024	2024	Meadows				
Site 11	Round 19 - LTM Fieldwork	Sampling Fieldwork		Completed		3/13/2023	3/29/2023	14	1	3/30/2023	2023	Meadows				
Site 11	Round 19 - LTM Fieldwork	Laboratory Analysis		Completed		3/30/2023		30	18	4/17/2023	2023	Meadows				
Site 11	Round 19 - LTM Fieldwork	Data Validation		Completed		4/17/2023		30	7	4/24/2023	2023	Meadows				
Site 11	Round 19 - LTM Fieldwork	Data Loading and Verification		Completed		4/24/2023		39	3	4/27/2023	2023	Meadows				
Site 11	Round 19 - LTM Event Report	Contractor Report Development		Ongoing		5/27/2023	4/27/2023	121	308	2/29/2024	2024	Meadows		12	Delay in previous report due to historic data acquisition anticipated to impact this report	
Site 11	Round 19 - LTM Event Report	Internal Navy Review Draft				2/29/2024		32	32	4/1/2024	2024	Meadows				
Site 11	Round 19 - LTM Event Report	Respond to comments, Navy Review Redlined Draft & RTCs, obtain approval, & prepare final				4/1/2024		63	63	6/3/2024	2024	Meadows				
Site 11	Round 19 - LTM Event Report	Final Deliverable				6/3/2024		1	1	6/4/2024	2024	Meadows				
Site 11	Round 20 - LTM Fieldwork	Sampling Fieldwork				9/11/2023		14	14	9/25/2023	2023	Meadows				
Site 11	Round 20 - LTM Fieldwork	Laboratory Analysis				9/25/2023		30	30	10/25/2023	2024	Meadows				
Site 11	Round 20 - LTM Fieldwork	Data Validation				10/25/2023		30	30	11/24/2023	2024	Meadows				
Site 11	Round 20 - LTM Fieldwork	Data Loading and Verification				11/24/2023		57	57	1/20/2024	2024	Meadows				
Site 11	Round 20 - LTM Annual/End-of-Sequence Report	Contractor Report Development				11/25/2023		121	121	3/25/2024	2024	Meadows				
Site 11	Round 20 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				3/25/2024		30	30	4/24/2024	2024	Meadows				
Site 11	Round 20 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/24/2024		47	47	6/10/2024	2024	Meadows				
Site 11	Round 20 - LTM Annual/End-of-Sequence Report	Regulator Review				6/10/2024		60	60	8/9/2024	2024	Meadows	1			
Site 11	Round 20 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/9/2024		60	60	10/8/2024	2025	Meadows				
Site 11	Round 20 - LTM Annual/End-of-Sequence Report	Final Deliverable				10/8/2024		1	1	10/9/2024	2025	Meadows				
Site 12	Round 36 - LTM Fieldwork	Sampling Fieldwork		Completed		7/1/2022	8/15/2022	14	14	8/29/2022	2022	Meadows		12	Delay in approval to work off existing work plans and SAPs because MMA SAP will not be submitted in time.	
Site 12	Round 36 - LTM Fieldwork	Laboratory Analysis		Completed		8/29/2022		30	30	9/28/2022	2022	Meadows				
Site 12	Round 36 - LTM Fieldwork	Data Validation		Completed		9/28/2022		30	30	10/28/2022	2023	Meadows				
Site 12	Round 36 - LTM Fieldwork	Data Loading and Verification		Completed		10/28/2022		30	30	11/27/2022	2023	Meadows				
Site 12	Round 36 - LTM Annual/End-of-Sequence Report	Contractor Report Development		Ongoing		10/27/2022		123	323	9/15/2023	2023	Meadows		12	Acquiring and compiling historic LTM data to to present in the report (to comply with LTMP requirements and support future statistical analysis)	
Site 12	Round 36 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				9/15/2023		32	32	10/17/2023	2024	Meadows				
Site 12	Round 36 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/17/2023		49	49	12/5/2023	2024	Meadows				
Site 12	Round 36 - LTM Annual/End-of-Sequence Report	Regulator Review				12/5/2023		62	62	2/5/2024	2024	Meadows	1			

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Site 12	Round 36 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				2/5/2024		60	60	4/5/2024	2024	Meadows				
Site 12	Round 36 - LTM Annual/End-of-Sequence Report	Final Deliverable				4/5/2024		1	1	4/6/2024	2024	Meadows				
Site 12	Round 37 - LTM Fieldwork	Sampling Fieldwork		Completed		7/10/2023	7/24/2023	16	7	7/31/2023	2023	Meadows				
Site 12	Round 37 - LTM Fieldwork	Laboratory Analysis				7/31/2023		30	30	8/30/2023	2023	Meadows				
Site 12	Round 37 - LTM Fieldwork	Data Validation				8/30/2023		30	30	9/29/2023	2023	Meadows				
Site 12	Round 37 - LTM Fieldwork	Data Loading and Verification				9/29/2023		31	31	10/30/2023	2024	Meadows				
Site 12	Round 37 - LTM Event Report	Contractor Report Development				9/22/2023		122	122	1/22/2024	2024	Meadows				
Site 12	Round 37 - LTM Event Report	Internal Navy Review Pre-Draft				1/22/2024		30	30	2/21/2024	2024	Meadows				
Site 12	Round 37 - LTM Event Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				2/21/2024		61	61	4/22/2024	2024	Meadows				
Site 12	Round 37 - LTM Event Report	Regulator Review				4/22/2024		60	60	6/21/2024	2024	Meadows	1			
Site 12	Round 37 - LTM Event Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/21/2024		60	60	8/20/2024	2024	Meadows				
Site 12	Round 37 - LTM Event Report	Final Deliverable				8/20/2024		1	1	8/21/2024	2024	Meadows				
UXO 12	Feasibility Study Report	Contractor Report Development			35	9/1/2023	1/8/2024	182	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 results and approach.	
UXO 12	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		35	35	8/12/2024	2024	AECOM				
UXO 12	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/12/2024		30	30	9/11/2024	2024	AECOM				
UXO 12	Feasibility Study Report	Regulatory Review Draft				9/11/2024		61	61	11/11/2024	2025	AECOM	1			
UXO 12	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/11/2024		154	154	4/14/2025	2025	AECOM				
UXO 12	Feasibility Study Report	Final Deliverable				4/14/2025		1	1	4/15/2025	2025	AECOM				
UXO 12	PRAP	Contractor Report Development				4/15/2025		90	90	7/14/2025	2025	AECOM				
UXO 12	PRAP	Navy Review Draft				7/14/2025		32	32	8/15/2025	2025	AECOM				
UXO 12	PRAP	Response to Comments				8/15/2025		14	14	8/29/2025	2025	AECOM				
UXO 12	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/29/2025		14	14	9/12/2025	2025	AECOM				
UXO 12	PRAP	Regulatory (tech support) Review Draft_V1				9/12/2025		60	60	11/11/2025	2026	AECOM	1			
UXO 12	PRAP	Response to Comments				11/11/2025		31	31	12/12/2025	2026	AECOM				
UXO 12	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/12/2025		31	31	1/12/2026	2026	AECOM				
UXO 12	PRAP	Regulatory (EPA legal) Review Draft_V2				1/12/2026		63	63	3/16/2026	2026	AECOM				
UXO 12	PRAP	Response to Comments				3/16/2026		30	30	4/15/2026	2026	AECOM				
UXO 12	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/15/2026		30	30	5/15/2026	2026	AECOM				
UXO 12	PRAP	Regulatory Concurrence Draft				5/15/2026		31	31	6/15/2026	2026	AECOM				
UXO 12	PRAP	Final Deliverable				6/15/2026		1	1	6/16/2026	2026	AECOM				
UXO 12	ROD	Contractor Report Development				6/16/2026		120	120	10/14/2026	2027	AECOM				
UXO 12	ROD	Navy Review Draft				10/14/2026		30	30	11/13/2026	2027	AECOM				
UXO 12	ROD	Response to Comments				11/13/2026		14	14	11/27/2026	2027	AECOM				
UXO 12	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/27/2026		14	14	12/11/2026	2027	AECOM				
UXO 12	ROD	Regulatory (tech support) Review Draft_V1				12/11/2026		60	60	2/9/2027	2027	AECOM				
UXO 12	ROD	Response to Comments				2/9/2027		30	30	3/11/2027	2027	AECOM				
UXO 12	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/11/2027		32	32	4/12/2027	2027	AECOM				
UXO 12	ROD	Regulatory (EPA legal) Review Draft_V2				4/12/2027		60	60	6/11/2027	2027	AECOM				
UXO 12	ROD	Response to Comments				6/11/2027		31	31	7/12/2027	2027	AECOM				
UXO 12	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/12/2027		30	30	8/11/2027	2027	AECOM				
UXO 12	ROD	Regulatory Concurrence Draft				8/11/2027		30	30	9/10/2027	2027	AECOM				
UXO 12	ROD	Final Deliverable				9/10/2027		3	3	9/13/2027	2027	AECOM				
UXO 12	ROD	Navy and EPA Signatures				9/13/2027		60	60	11/12/2027	2028	AECOM				
UXO 12	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/12/2027		367	367	11/13/2028	2029	AECOM				
UXO 12	Construction - Remedial Action (future)	Remedial action plans and construction				11/13/2028		365	365	11/13/2029	2030	AECOM				
UXO 12	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/13/2029		365	365	11/13/2030	2031	AECOM				
UXO 13	RI or SSP Fieldwork	Sampling Fieldwork	Funds expire in June 2023	Completed	43	9/27/2021		180	437	12/8/2022	2023	CH2M		12	1st round of GW sampling was completed in Nov 2021 b/c of	
UXO 13	RI or SSP Fieldwork	Laboratory Analysis	Funds expire in June 2023	Completed		12/8/2022		31	90	3/8/2023	2023	CH2M		12	Longer lab analyses	
UXO 13	RI or SSP Fieldwork	Data Validation	Funds expire in June 2023	Completed		3/8/2023		35	35	4/12/2023	2023	CH2M				

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UXO 13	RI or SSP Fieldwork	Data Loading and Verification	Funds expire in June 2023	Completed		4/12/2023		92	79	6/30/2023	2023	CH2M				
UXO 13	RI Report	Contractor Report Development		Ongoing		6/30/2023		122	556	1/6/2025	2025	CH2M		12	Additional sampling and a SAP addendum are required to fill data gaps identified during preparation of the RI.	
UXO 13	RI Report	Internal Navy Review Pre-Draft				1/6/2025		35	35	2/10/2025	2025	CH2M				
UXO 13	RI Report	Response to Comments				2/10/2025		14	14	2/24/2025	2025	CH2M				
UXO 13	RI Report	Internal Navy Review Draft				2/24/2025		14	14	3/10/2025	2025	CH2M				
UXO 13	RI Report	Regulatory Review Draft				3/10/2025		60	60	5/9/2025	2025	CH2M	1			
UXO 13	RI Report	Response to Comments				5/9/2025		31	31	6/9/2025	2025	CH2M				
UXO 13	RI Report	Regulatory Review Draft Final				6/9/2025		60	60	8/8/2025	2025	CH2M				
UXO 13	RI Report	Response to Comments				8/8/2025		31	31	9/8/2025	2025	CH2M				
UXO 13	RI Report	Regulatory Concurrence Final				9/8/2025		30	30	10/8/2025	2026	CH2M				
UXO 13	RI Report	Final Deliverable				10/8/2025		1	1	10/9/2025	2026	CH2M				
UXO 13	Feasibility Study Report	Contractor Report Development				10/9/2025		180	180	4/7/2026	2026	CH2M				
UXO 13	Feasibility Study Report	Navy Review Pre-Draft				4/7/2026		30	30	5/7/2026	2026	CH2M				
UXO 13	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				5/7/2026		32	32	6/8/2026	2026	CH2M				
UXO 13	Feasibility Study Report	Regulatory Review Draft				6/8/2026		60	60	8/7/2026	2026	CH2M	1			
UXO 13	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/7/2026		150	150	1/4/2027	2027	CH2M				
UXO 13	Feasibility Study Report	Final Deliverable				1/4/2027		1	1	1/5/2027	2027	CH2M				
UXO 13	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/5/2027		365	365	1/5/2028	2028	CH2M				
UXO 13	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/5/2028		365	365	1/4/2029	2029	CH2M				
UXO 13	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/4/2029		365	365	1/4/2030	2030	CH2M				
UXO 13	Construction - Remedial Action (future)	Remedial action plans and construction				1/4/2030		367	367	1/6/2031	2031	CH2M				
UXO 13	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/6/2031		365	365	1/6/2032	2032	CH2M				
SWMU 14	General Sampling and Analysis Plan	Contractor Report Development	Funds expire in June 2023	Completed	27	7/12/2021		182	280	4/18/2022	2022	CH2M		12	Due to change of lab (SAP was revised to include info for new lab)	
SWMU 14	General Sampling and Analysis Plan	Navy Review Pre-Draft	Funds expire in June 2023	Completed		4/18/2022		35	25	5/13/2022	2022	CH2M		13	Completed earlier than planned	
SWMU 14	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Funds expire in June 2023	Completed		5/13/2022		35	49	7/1/2022	2022	CH2M		12	Additional time to prepare responses to comments.	
SWMU 14	General Sampling and Analysis Plan	Regulatory Review Draft	Funds expire in June 2023	Completed		7/1/2022		63	131	11/9/2022	2023	CH2M		12	Increased regulatory review time b/c of other deliverables. Longer review time by MDE.	
SWMU 14	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Ongoing		11/9/2022		155	320	9/25/2023	2023	CH2M		12	Increased duration b/c EPA requested the addition of seep sampling in R2 comments, which will require Navy QAO re-review. QAO has reviewed and provided additional comment. Regulators will review RTCs and redlined text.	
SWMU 14	General Sampling and Analysis Plan	Final Deliverable				9/25/2023		7	5	9/30/2023	2023	CH2M		12	Decreased duration b/c of funds expiring	
SWMU 14	SWMU 14 PCB Fieldwork	Complete Sampling Fieldwork	Funds expire in June 2023	Completed		9/30/2023	4/24/2023	126	11	5/5/2023	2023	CH2M		12	B/c of funds expiring in Jun 2023, the IHIRT agreed for fieldwork to be completed before finalization	
SWMU 14	SWMU 14 PCB Fieldwork	Laboratory Analysis & QC		Completed		5/5/2023		61	63	7/7/2023	2023	CH2M				
SWMU 14	SWMU 14 PCB Fieldwork	Data Validation, QC, data load		Ongoing		7/7/2023		91	91	10/6/2023	2024	CH2M				
SWMU 14	SWMU 14 PCB Investigation Report	Contractor Report Development				10/6/2023		122	122	2/5/2024	2024	CH2M				
SWMU 14	SWMU 14 PCB Investigation Report	Navy Review Pre-Draft				2/5/2024		31	31	3/7/2024	2024	CH2M				
SWMU 14	SWMU 14 PCB Investigation Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				3/7/2024		35	35	4/11/2024	2024	CH2M				
SWMU 14	SWMU 14 PCB Investigation Report	Regulatory Review Draft				4/11/2024		60	60	6/10/2024	2024	CH2M	1			
SWMU 14	SWMU 14 PCB Investigation Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/10/2024		150	150	11/7/2024	2025	CH2M				
SWMU 14	SWMU 14 PCB Investigation Report	Final Deliverable				11/7/2024		1	1	11/8/2024	2025	CH2M				
SWMU 14	PRAP	Contractor Report Development				11/8/2024		90	90	2/6/2025	2025	CH2M				
SWMU 14	PRAP	Navy Review Draft				2/6/2025		32	32	3/10/2025	2025	CH2M				
SWMU 14	PRAP	Response to Comments				3/10/2025		14	14	3/24/2025	2025	CH2M				

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SWMU 14	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				3/24/2025		14	14	4/7/2025	2025	CH2M				
SWMU 14	PRAP	Regulatory (tech support) Review Draft_V1				4/7/2025		63	63	6/9/2025	2025	CH2M	1			
SWMU 14	PRAP	Response to Comments				6/9/2025		30	30	7/9/2025	2025	CH2M				
SWMU 14	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				7/9/2025		30	30	8/8/2025	2025	CH2M				
SWMU 14	PRAP	Regulatory (EPA legal) Review Draft_V2				8/8/2025		60	60	10/7/2025	2026	CH2M				
SWMU 14	PRAP	Response to Comments				10/7/2025		30	30	11/6/2025	2026	CH2M				
SWMU 14	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				11/6/2025		32	32	12/8/2025	2026	CH2M				
SWMU 14	PRAP	Regulatory Concurrence Draft				12/8/2025		30	30	1/7/2026	2026	CH2M				
SWMU 14	PRAP	Final Deliverable				1/7/2026		1	1	1/8/2026	2026	CH2M				
SWMU 14	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/8/2026		365	365	1/8/2027	2027	CH2M				
SWMU 14	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/8/2027		367	367	1/10/2028	2028	CH2M				
SWMU 14	Construction - Remedial Action (future)	Remedial action plans and construction				1/10/2028		365	365	1/9/2029	2029	CH2M				
SWMU 14	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/9/2029		365	365	1/9/2030	2030	CH2M				
SWMU 14	LUC (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/9/2030		365	365	1/9/2031	2031	CH2M				
SWMU 14	LTM (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/9/2031		365	365	1/9/2032	2032	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 9, 2021)	Contractor Report Development		Completed	14	8/27/2021		124	124	12/29/2021	2022	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 9, 2021)	Navy & Regulatory Review Draft		Completed		12/29/2021		63	224	8/10/2022	2022	CH2M		7	Waiting on MDE's comments	
Site 17	Site 17 Annual Monitoring Report (Year 9, 2021)	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		8/10/2022		154	35	9/14/2022	2022	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 9, 2021)	Final Deliverable		Completed		9/14/2022		7	9	9/23/2022	2022	CH2M				
Site 17	Site 17 Annual Monitoring Fieldwork (Year 10, 2022)	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Not needed		4/25/2022		154	0	4/25/2022	2022	CH2M		12	Will not be completed in 2022 due to change of lab; a new SAP will be prepared.	
Site 17	Site 17 Annual Monitoring Report (Year 10, 2022)	Contractor Report Development		Not needed		4/25/2022		126	0	4/25/2022	2022	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 10, 2022)	Navy & Regulatory Review Draft		Not needed		4/25/2022		63	0	4/25/2022	2022	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 10, 2022)	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Not needed		4/25/2022		150	0	4/25/2022	2022	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 10, 2022)	Final Deliverable		Not needed		4/25/2022		4	0	4/25/2022	2022	CH2M				
Site 17	Site 17 Performance Monitoring SAP	Contractor Report Development	Priority b/c fieldwork must be done in Apr 2023	Completed		6/6/2022		120	121	10/5/2022	2023	CH2M		12		
Site 17	Site 17 Performance Monitoring SAP	Navy Review Pre-Draft	Priority b/c fieldwork must be done in Apr 2023	Completed		10/5/2022		28	27	11/1/2022	2023	CH2M				
Site 17	Site 17 Performance Monitoring SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Priority b/c fieldwork must be done in Apr 2023	Completed		11/1/2022		30	45	12/16/2022	2023	CH2M				
Site 17	Site 17 Performance Monitoring SAP	Regulatory Review Draft	Priority b/c fieldwork must be done in Apr 2023	Completed		12/16/2022		60	160	5/25/2023	2023	CH2M		7	Longer review time by MDE	
Site 17	Site 17 Performance Monitoring SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	Priority b/c fieldwork must be done in Apr 2023	Completed		5/25/2023		31	49	7/13/2023	2023	CH2M				
Site 17	Site 17 Performance Monitoring SAP	Final Deliverable	Priority b/c fieldwork must be done in Apr 2023	Completed		7/13/2023		1	1	7/14/2023	2023	CH2M				
Site 17	Site 17 Annual Monitoring Fieldwork (Year 11, 2023)	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification	Priority due to expiring funds in June 2024	Ongoing/fieldwork completed in Apr		4/24/2023		154	154	9/25/2023	2023	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 11, 2023)	Contractor Report Development	Priority due to expiring funds in June 2024	Not started		9/25/2023		123	123	1/26/2024	2024	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 11, 2023)	Navy & Regulatory Review Draft	Priority due to expiring funds in June 2024	Not started		1/26/2024		63	63	3/29/2024	2024	CH2M	1			

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Site 17	Site 17 Annual Monitoring Report (Year 11, 2023)	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Not started		3/29/2024		151	151	8/27/2024	2024	CH2M				
Site 17	Site 17 Annual Monitoring Report (Year 11, 2023)	Final Deliverable		Not started		8/27/2024		6	6	9/2/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #1	Contractor Report Development		Completed		7/22/2021		123	119	11/18/2021	2022	CH2M		13	Completed earlier than planned	
Site 17	Site 17 NP Pilot Study Tech Memo #1	Navy Review Pre-Draft		Completed		11/18/2021		35	48	1/5/2022	2022	CH2M		6	Navy review	
Site 17	Site 17 NP Pilot Study Tech Memo #1	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		1/5/2022		31	9	1/14/2022	2022	CH2M		13	Completed earlier than planned	
Site 17	Site 17 NP Pilot Study Tech Memo #1	Navy & Regulatory Review Draft		Completed		1/14/2022		65	208	8/10/2022	2022	CH2M		7	Longer MDE review time	
Site 17	Site 17 NP Pilot Study Tech Memo #1	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		8/10/2022		91	37	9/16/2022	2022	CH2M		13	Completed earlier than planned	
Site 17	Site 17 NP Pilot Study Tech Memo #1	Final Deliverable		Completed		9/16/2022		76	15	10/1/2022	2023	CH2M		13	Completed earlier than planned	
Site 17	Site 17 NP Pilot Study Tech Memo #2	Contractor Report Development		Completed		11/20/2021		123	123	3/23/2022	2022	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #2	Navy Review Pre-Draft		Completed		3/23/2022		31	61	5/23/2022	2022	CH2M		6	Wating on Navy's comments	
Site 17	Site 17 NP Pilot Study Tech Memo #2	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		5/23/2022		32	49	7/11/2022	2022	CH2M		12	Though a hard copy was submitted to MDE on 6/15/22, the electronic version was not submitted to the Team until 7/11/22 because of oversight.	
Site 17	Site 17 NP Pilot Study Tech Memo #2	Navy & Regulatory Review Draft		Completed		7/11/2022		60	107	10/26/2022	2023	CH2M		7	Longer MDE review time	
Site 17	Site 17 NP Pilot Study Tech Memo #2	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		10/26/2022		91	43	12/8/2022	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #2	Final Deliverable		Completed		12/8/2022		1	1	12/9/2022	2023	CH2M				
Site 17	Site 17 NP Plume Pilot Study Event 3 Fieldwork	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Completed		9/27/2021		182	91	12/27/2021	2022	CH2M		12	Completed earlier than planned	
Site 17	Site 17 NP Pilot Study Tech Memo #3	Contractor Report Development		Completed		12/27/2021		122	151	5/27/2022	2022	CH2M		12	Prioritization of deliverables	
Site 17	Site 17 NP Pilot Study Tech Memo #3	Navy Review Pre-Draft		Completed		5/27/2022		32	32	6/28/2022	2022	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #3	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		6/28/2022		30	22	7/20/2022	2022	CH2M		13	Completed earlier than planned.	
Site 17	Site 17 NP Pilot Study Tech Memo #3	Navy & Regulatory Review Draft		Completed		7/20/2022		61	98	10/26/2022	2023	CH2M		7	Longer MDE review time	
Site 17	Site 17 NP Pilot Study Tech Memo #3	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		10/26/2022		91	54	12/19/2022	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #3	Final Deliverable		Completed		12/19/2022		1	1	12/20/2022	2023	CH2M				
Site 17	Site 17 SAP Addendum North Plume Pilot Study	Contractor Report Development		Completed		5/16/2022		35	18	6/3/2022	2022	CH2M		13	Completed earlier than planned.	
Site 17	Site 17 SAP Addendum North Plume Pilot Study	Navy Review Pre-Draft		Completed		6/3/2022		23	45	7/18/2022	2022	CH2M		6	Longer review time by Navy chemist.	
Site 17	Site 17 SAP Addendum North Plume Pilot Study	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		7/18/2022		19	21	8/8/2022	2022	CH2M				
Site 17	Site 17 SAP Addendum North Plume Pilot Study	Regulatory Review Draft		Completed		8/8/2022		49	80	10/27/2022	2023	CH2M		7	Longer MDE review time	
Site 17	Site 17 SAP Addendum North Plume Pilot Study	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		10/27/2022		16	53	12/19/2022	2023	CH2M		12	Prioritization of other deliverables	
Site 17	Site 17 SAP Addendum North Plume Pilot Study	Final Deliverable		Completed		12/19/2022		1	12	12/31/2022	2023	CH2M				
Site 17	Site 17 NP Plume Pilot Study Event 4 Fieldwork	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Completed		4/4/2022	6/6/2022	182	140	10/24/2022	2023	CH2M		12	Laboratory issues	
Site 17	Site 17 NP Pilot Study Tech Memo #4	Contractor Report Development		Completed		10/24/2022		122	122	2/23/2023	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #4	Navy Review Pre-Draft		Completed		2/23/2023		32	55	4/19/2023	2023	CH2M		12	Reviewed by NSFIH RPM	
Site 17	Site 17 NP Pilot Study Tech Memo #4	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Not needed		4/19/2023		30	0	4/19/2023	2023	CH2M		12	Duration changed to 0 because EPA and MDE will not review	
Site 17	Site 17 NP Pilot Study Tech Memo #4	Navy & Regulatory Review Draft	Priority due to expiring funds in June 2024	Ongoing		4/19/2023		61	120	8/17/2023	2023	CH2M		12	Ongoing because the Navy will review though the regulators will not	

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Site 17	Site 17 NP Pilot Study Tech Memo #4	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	Priority due to expiring funds in June 2024			8/17/2023		93	32	9/18/2023	2023	CH2M		12	Decreased duration because only Navy comments will be addressed	
Site 17	Site 17 NP Pilot Study Tech Memo #4	Final Deliverable	Priority due to expiring funds in June 2024			9/18/2023		1	1	9/19/2023	2023	CH2M				
Site 17	Site 17 NP Plume Pilot Study Event 5 Fieldwork	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Completed		9/26/2022		182	182	3/27/2023	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #5	Contractor Report Development		Completed		3/27/2023		122	122	7/27/2023	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #5	Navy Review Pre-Draft	Priority due to expiring funds in June 2024	Ongoing		7/27/2023		32	32	8/28/2023	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #5	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Priority due to expiring funds in June 2024			8/28/2023		30	30	9/27/2023	2023	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #5	Navy & Regulatory Review Draft		Not needed		9/27/2023		61	0	9/27/2023	2023	CH2M		12	Duration changed to 0 because EPA and MDE will not review	
Site 17	Site 17 NP Pilot Study Tech Memo #5	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Not needed		9/27/2023		91	0	9/27/2023	2023	CH2M		12	Duration changed to 0 because EPA and MDE will not review	
Site 17	Site 17 NP Pilot Study Tech Memo #5	Final Deliverable	Priority due to expiring funds in June 2024			9/27/2023		1	1	9/28/2023	2023	CH2M				
Site 17	Site 17 NP Plume Pilot Study Event 6 Fieldwork	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Ongoing/fieldwork has been completed		4/3/2023		182	182	10/2/2023	2024	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #6	Contractor Report Development	Priority due to expiring funds in June 2024			10/2/2023		122	122	2/1/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #6	Navy Review Pre-Draft	Priority due to expiring funds in June 2024			2/1/2024		32	32	3/4/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #6	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Priority due to expiring funds in June 2024			3/4/2024		30	30	4/3/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study Tech Memo #6	Navy & Regulatory Review Draft		Not needed		4/3/2024		61	0	4/3/2024	2024	CH2M		12	Duration changed to 0 because EPA MDE will not review	
Site 17	Site 17 NP Pilot Study Tech Memo #6	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Not needed		4/3/2024		91	0	4/3/2024	2024	CH2M		12	Duration changed to 0 because EPA and MDE will not review.	
Site 17	Site 17 NP Pilot Study Tech Memo #6	Final Deliverable	Priority due to expiring funds in June 2024			4/3/2024		1	1	4/4/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study End-cap Report	Contractor Report Development		Not started		4/4/2024		120	120	8/2/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study End-cap Report	Navy Review Pre-Draft				8/2/2024		31	31	9/2/2024	2024	CH2M				
Site 17	Site 17 NP Pilot Study End-cap Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				9/2/2024		31	31	10/3/2024	2025	CH2M				
Site 17	Site 17 NP Pilot Study End-cap Report	Navy & Regulatory Review Draft				10/3/2024		60	60	12/2/2024	2025	CH2M	1			
Site 17	Site 17 NP Pilot Study End-cap Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				12/2/2024		150	150	5/1/2025	2025	CH2M				
Site 17	Site 17 NP Pilot Study End-cap Report	Final Deliverable				5/1/2025		1	1	5/2/2025	2025	CH2M				
Site 17	Site 17 South Plume Delineation SAP	Contractor Report Development		Completed		9/30/2022		181	181	3/30/2023	2023	CH2M			New to schedule	
Site 17	Site 17 South Plume Delineation SAP	Navy Review Pre-Draft		Completed		3/30/2023		32	112	7/20/2023	2023	CH2M		6	Longer review time by Navy RPM	
Site 17	Site 17 South Plume Delineation SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Ongoing		7/20/2023		30	32	8/21/2023	2023	CH2M				
Site 17	Site 17 South Plume Delineation SAP	Regulatory Review Draft				8/21/2023		63	63	10/23/2023	2024	CH2M	1			
Site 17	Site 17 South Plume Delineation SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				10/23/2023		150	150	3/21/2024	2024	CH2M				
Site 17	Site 17 South Plume Delineation SAP	Final Deliverable				3/21/2024		3	3	3/24/2024	2024	CH2M				
Site 17	Site 17 South Plume Fieldwork	Fieldwork				1/15/2024		91	91	4/15/2024	2024	CH2M			Work will be done in 2 phases.	
Site 17	Site 17 South Plume Fieldwork	Laboratory Analysis				4/15/2024		30	30	5/15/2024	2024	CH2M				
Site 17	Site 17 South Plume Fieldwork	Data Validation				5/15/2024		30	30	6/14/2024	2024	CH2M				

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Site 17	Site 17 South Plume Fieldwork	Data Loading and Verification				6/14/2024		31	31	7/15/2024	2024	CH2M				
Site 17	Site 17 South Plume Report	Contractor Report Development				7/15/2024		182	182	1/13/2025	2025	CH2M				
Site 17	Site 17 South Plume Report	Navy & Regulatory Review Draft				1/13/2025		60	60	3/14/2025	2025	CH2M	1			
Site 17	Site 17 South Plume Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				3/14/2025		150	150	8/11/2025	2025	CH2M				
Site 17	Site 17 South Plume Report	Final Deliverable				8/11/2025		1	1	8/12/2025	2025	CH2M				
Site 17	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/26/2026		365	365	1/26/2027	2027	CH2M		12	New to schedule as of Q4 2023	
Site 17	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/26/2027		365	365	1/26/2028	2028	CH2M		12	New to schedule as of Q4 2023	
UXO 18	UXO 18 (Water Site) - Future Work	SAP/QAPP, ESS/ESSDR, RI, FS			45	9/11/2023		1200	1200	12/24/2026	2027	None				
UXO 19	UXO 19 QAPP for DGM & Intrusive Investigation	Contractor Report Development	Funds expire in June 2023	Completed	46	3/7/2022		182	451	6/1/2023	2023	CH2M		12	6/15/2023	
UXO 19	UXO 19 QAPP for DGM & Intrusive Investigation	Navy Review Pre-Draft		Completed		6/1/2023		32	49	7/20/2023	2023	CH2M		6	Longer Navy review time	
UXO 19	UXO 19 QAPP for DGM & Intrusive Investigation	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Ongoing		7/20/2023		35	35	8/24/2023	2023	CH2M				
UXO 19	UXO 19 QAPP for DGM & Intrusive Investigation	Regulatory Review Draft				8/24/2023		60	60	10/23/2023	2024	CH2M	1			
UXO 19	UXO 19 QAPP for DGM & Intrusive Investigation	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				10/23/2023		151	151	3/22/2024	2024	CH2M		12	Decreased to use up expiring funds.	
UXO 19	UXO 19 QAPP for DGM & Intrusive Investigation	Final Deliverable				3/22/2024		3	3	3/25/2024	2024	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	Contractor Report Development		Completed		5/30/2022	11/28/2022	91	212	6/28/2023	2023	CH2M		12	Priotitization of other deliverables	
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	Navy Review Pre-Draft		Completed		6/28/2023		31	34	8/1/2023	2023	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	Respond to comments, Navy (RPM & Base POC) Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Ongoing		8/1/2023		30	30	8/31/2023	2023	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	LANT Review Draft_V1				8/31/2023		32	32	10/2/2023	2024	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	Respond to comments, LANT Review Redlined Draft_V1 & RTCs, obtain approval, & prepare draft V2 for NOSSA				10/2/2023		31	31	11/2/2023	2024	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	NOSSA Review Draft_V2				11/2/2023		61	61	1/2/2024	2024	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	Respond to comments, NOSSA Review Redlined Draft_V2 & RTCs, obtain approval, & prepare final for DDESB				1/2/2024		34	34	2/5/2024	2024	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	DDESB Review Final				2/5/2024		63	63	4/8/2024	2024	CH2M				
UXO 19	UXO 19 ESS for DGM & Intrusive Investigation	Resolve and obtain approval from DDESB				4/8/2024		30	30	5/8/2024	2024	CH2M				
UXO 19	UXO 19 DGM	Fieldwork				1/15/2024	7/8/2024	7	7	7/15/2024	2024	CH2M		12	Depends on funding	
UXO 19	UXO 19 Intrusive Investigation	Fieldwork				7/15/2024		45	45	8/29/2024	2024	CH2M				
UXO 19	UXO 19 DGM Report	Contractor Report Development				8/29/2024		180	180	2/25/2025	2025	CH2M				
UXO 19	UXO 19 DGM Report	Navy Review Pre-Draft				2/25/2025		30	30	3/27/2025	2025	CH2M				
UXO 19	UXO 19 DGM Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				3/27/2025		32	32	4/28/2025	2025	CH2M				
UXO 19	UXO 19 DGM Report	Regulatory Review Draft				4/28/2025		60	60	6/27/2025	2025	CH2M	1			
UXO 19	UXO 19 DGM Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/27/2025		90	90	9/25/2025	2025	CH2M				
UXO 19	UXO 19 DGM Report	Final Deliverable				9/25/2025		1	1	9/26/2025	2025	CH2M				
UXO 19	Feasibility Study (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				9/26/2025		451	451	12/21/2026	2027	CH2M		12	New to schedule as of Q4 2023	
UXO 19	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/21/2026		367	367	12/23/2027	2028	CH2M		12	New to schedule as of Q4 2023	
UXO 19	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/23/2027		365	365	12/22/2028	2029	CH2M		12	New to schedule as of Q4 2023	
UXO 20	RI Report	Contractor Report Development	Funds expire in June 2023	Completed	32	9/27/2021		128	263	6/17/2022	2022	CH2M		12	Due to prioritization of deliverables	
UXO 20	RI Report	Internal Navy Review Pre-Draft	Funds expire in June 2023	Not funded		6/17/2022		35	0	6/17/2022	2022	CH2M		12	A pre-draft version was not funded.	
UXO 20	RI Report	Response to Comments	Funds expire in June 2023	Not funded		6/17/2022		14	0	6/17/2022	2022	CH2M		12	Decreased duration b/c of funds expiring	

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UXO 20	RI Report	Internal Navy Review Draft	Funds expire in June 2023	Not funded		6/17/2022		14	0	6/17/2022	2022	CH2M		12	Decreased duration b/c of funds expiring	
UXO 20	RI Report	Regulatory Review Draft	Funds expire in June 2023	Completed		6/17/2022		63	67	8/23/2022	2022	CH2M		12	This version (revised draft) is for Navy & regulatory review). Decreased duration b/c of funds expiring	
UXO 20	RI Report	Response to Comments	Funds expire in June 2023	Completed		8/23/2022		35	36	9/28/2022	2022	CH2M		12	Decreased duration b/c of funds expiring	
UXO 20	RI Report	Regulatory Review Draft Final	Funds expire in June 2023	Completed		9/28/2022		63	51	11/18/2022	2023	CH2M		12	Decreased duration b/c of funds expiring	
UXO 20	RI Report	Response to Comments	Funds expire in June 2023	Completed. For 2nd round of comments from EPA.		11/18/2022		37	49	1/6/2023	2023	CH2M		12	Delay due to multiple rounds of comments from EPA	
UXO 20	RI Report	Regulatory Concurrence Final	Funds expire in June 2023	Completed		1/6/2023		35	40	2/15/2023	2023	CH2M		12	Delay due to multiple rounds of comments from EPA	
UXO 20	RI Report	Final Deliverable	Funds expire in June 2023	Completed		2/15/2023		7	12	2/27/2023	2023	CH2M				
UXO 20	Remedial Action Alternatives Analysis	Contractor Report Development		Ongoing		1/15/2023	4/10/2023	93	182	10/9/2023	2024	CH2M		12	New to the Schedule; added Q2. Delay due to preparation of an SRG TM for IHIRT review/approval before attaching it to the RAA for Navy review.	
UXO 20	Remedial Action Alternatives Analysis	Navy Review of Draft Document				10/9/2023		30	30	11/8/2023	2024	CH2M				
UXO 20	Remedial Action Alternatives Analysis	Contractor Preparation of Responses to Navy Comments				11/8/2023		14	14	11/22/2023	2024	CH2M				
UXO 20	Remedial Action Alternatives Analysis	Navy Review of RTCs and Approval				11/22/2023		14	14	12/6/2023	2024	CH2M				
UXO 20	Remedial Action Alternatives Analysis	Prepare Final Document				12/6/2023		14	14	12/20/2023	2024	CH2M				
UXO 20	Remedial Action Alternatives Analysis	Submit Final Document				12/20/2023		1	1	12/21/2023	2024	CH2M				
UXO 20	Feasibility Study Report	Contractor Report Development				12/21/2023		182	182	6/20/2024	2024	CH2M				
UXO 20	Feasibility Study Report	Navy Review Pre-Draft				6/20/2024		33	33	7/23/2024	2024	CH2M				
UXO 20	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				7/23/2024		30	30	8/22/2024	2024	CH2M				
UXO 20	Feasibility Study Report	Regulatory Review Draft				8/22/2024		62	62	10/23/2024	2025	CH2M	1			
UXO 20	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				10/23/2024		152	152	3/24/2025	2025	CH2M				
UXO 20	Feasibility Study Report	Final Deliverable				3/24/2025		7	7	3/31/2025	2025	CH2M				
UXO 20	PRAP	Contractor Report Development				3/31/2025		91	91	6/30/2025	2025	CH2M				
UXO 20	PRAP	Navy Review Draft				6/30/2025		31	31	7/31/2025	2025	CH2M				
UXO 20	PRAP	Response to Comments				7/31/2025		14	14	8/14/2025	2025	CH2M				
UXO 20	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				8/14/2025		14	14	8/28/2025	2025	CH2M				
UXO 20	PRAP	Regulatory (tech support) Review Draft_V1				8/28/2025		63	63	10/30/2025	2026	CH2M	1			
UXO 20	PRAP	Response to Comments				10/30/2025		32	32	12/1/2025	2026	CH2M				
UXO 20	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/1/2025		30	30	12/31/2025	2026	CH2M				
UXO 20	PRAP	Regulatory (EPA legal) Review Draft_V2				12/31/2025		61	61	3/2/2026	2026	CH2M				
UXO 20	PRAP	Response to Comments				3/2/2026		30	30	4/1/2026	2026	CH2M				
UXO 20	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				4/1/2026		33	33	5/4/2026	2026	CH2M				
UXO 20	PRAP	Regulatory Concurrence Draft				5/4/2026		30	30	6/3/2026	2026	CH2M				
UXO 20	PRAP	Final Deliverable				6/3/2026		1	1	6/4/2026	2026	CH2M				
UXO 20	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				6/4/2026		365	365	6/4/2027	2027	CH2M				
UXO 20	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				6/4/2027		367	367	6/5/2028	2028	CH2M				
UXO 20	Construction - Remedial Action (future)	Remedial action plans and construction				6/5/2028		365	365	6/5/2029	2029	CH2M				
UXO 20	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				6/5/2029		365	365	6/5/2030	2030	CH2M				
UXO 20	LUC (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				6/5/2030		365	365	6/5/2031	2031	CH2M				
UXO 20	LTM (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				6/5/2031		425	425	8/3/2032	2032	CH2M				
UXO 21	PRAP	Contractor Report Development		Completed	33	9/1/2023	6/5/2023	94	50	7/25/2023	2023	AECOM		12	MOD was awarded on May 25 2023. Completed earlier than projected.	
UXO 21	PRAP	Navy Review Draft		Ongoing		7/25/2023		37	37	8/31/2023	2023	AECOM				
UXO 21	PRAP	Response to Comments		Not needed		8/31/2023		14	0	8/31/2023	2023	AECOM		12	Version not needed because regulators will review concurrently with Navy.	

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 21	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval		Not needed		8/31/2023		14	0	8/31/2023	2023	AECOM				
UXO 21	PRAP	Regulatory (tech support) Review Draft_V1		Ongoing		7/25/2023		63	63	9/26/2023	2023	AECOM		12	Regulators are reviewing concurrently with Navy	
UXO 21	PRAP	Response to Comments				9/26/2023		35	35	10/31/2023	2024	AECOM				
UXO 21	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				10/31/2023		35	35	12/5/2023	2024	AECOM				
UXO 21	PRAP	Regulatory (EPA legal) Review Draft_V2				12/5/2023		63	63	2/6/2024	2024	AECOM				
UXO 21	PRAP	Response to Comments				2/6/2024		35	35	3/12/2024	2024	AECOM				
UXO 21	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				3/12/2024		33	35	4/16/2024	2024	AECOM				
UXO 21	PRAP	Regulatory Concurrence Draft				4/16/2024		35	35	5/21/2024	2024	AECOM				
UXO 21	PRAP	Final Deliverable				5/21/2024		7	7	5/28/2024	2024	AECOM				
UXO 21	ROD	Contractor Report Development				5/28/2024		123	123	9/28/2024	2024	AECOM				
UXO 21	ROD	Navy Review Draft				9/28/2024		32	32	10/30/2024	2025	AECOM				
UXO 21	ROD	Response to Comments				10/30/2024		14	14	11/13/2024	2025	AECOM				
UXO 21	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/13/2024		14	14	11/27/2024	2025	AECOM				
UXO 21	ROD	Regulatory (tech support) Review Draft_V1				11/27/2024		63	63	1/29/2025	2025	AECOM	1			
UXO 21	ROD	Response to Comments				1/29/2025		31	31	3/1/2025	2025	AECOM				
UXO 21	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/1/2025		31	31	4/1/2025	2025	AECOM				
UXO 21	ROD	Regulatory (EPA legal) Review Draft_V2				4/1/2025		63	63	6/3/2025	2025	AECOM				
UXO 21	ROD	Response to Comments				6/3/2025		30	30	7/3/2025	2025	AECOM				
UXO 21	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/3/2025		33	33	8/5/2025	2025	AECOM				
UXO 21	ROD	Regulatory Concurrence Draft				8/5/2025		30	30	9/4/2025	2025	AECOM				
UXO 21	ROD	Final Deliverable				9/4/2025		1	1	9/5/2025	2025	AECOM				
UXO 21	ROD	Navy and EPA Signatures				9/5/2025		60	60	11/4/2025	2026	AECOM				
Site 21	Round 17 - LTM Fieldwork	Sampling Fieldwork		Completed		7/1/2022	8/15/2022	14	14	8/29/2022	2022	Meadows		12	Delay in approval to work off existing work plans and SAPs because MMA SAP will not be submitted in time.	
Site 21	Round 17 - LTM Fieldwork	Laboratory Analysis		Completed		8/29/2022		30	30	9/28/2022	2022	Meadows				
Site 21	Round 17 - LTM Fieldwork	Data Validation		Completed		9/28/2022		33	33	10/31/2022	2023	Meadows				
Site 21	Round 17 - LTM Fieldwork	Data Loading and Verification		Completed		10/31/2022		30	30	11/30/2022	2023	Meadows				
Site 21	Round 17 - LTM Event Report	Contractor Report Development		Ongoing		11/1/2022		121	303	8/31/2023	2023	Meadows		12	Acquiring and compiling historic LTM data to to present in the report (to comply with LTMP requirements and support future statistical analysis)	
Site 21	Round 17 - LTM Event Report	Internal Navy Review Draft				8/31/2023		32	32	10/2/2023	2024	Meadows				
Site 21	Round 17 - LTM Event Report	Respond to comments, Navy Review Redlined Draft & RTCs, obtain approval, & prepare final				10/2/2023		60	60	12/1/2023	2024	Meadows				
Site 21	Round 17 - LTM Event Report	Final Deliverable				12/1/2023		3	3	12/4/2023	2024	Meadows				
Site 21	Round 18 - LTM Fieldwork	Sampling Fieldwork		Completed		12/12/2022		14	14	12/26/2022	2023	Meadows				
Site 21	Round 18 - LTM Fieldwork	Laboratory Analysis		Completed		12/26/2022		30	30	1/25/2023	2023	Meadows				
Site 21	Round 18 - LTM Fieldwork	Data Validation		Completed		1/25/2023		33	2	1/27/2023	2023	Meadows				
Site 21	Round 18 - LTM Fieldwork	Data Loading and Verification		Completed		1/27/2023		31	10	2/6/2023	2023	Meadows				
Site 21	Round 18 - LTM Annual/End-of-Sequence Report	Contractor Report Development		Ongoing		2/28/2023	2/6/2023	121	308	12/11/2023	2024	Meadows		12	Delay in previous report due to historic data acquisition anticipated to impact this report	
Site 21	Round 18 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				12/11/2023		35	35	1/15/2024	2024	Meadows				
Site 21	Round 18 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				1/15/2024		49	49	3/4/2024	2024	Meadows				
Site 21	Round 18 - LTM Annual/End-of-Sequence Report	Regulator Review				3/4/2024		60	60	5/3/2024	2024	Meadows	1			
Site 21	Round 18 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				5/3/2024		62	62	7/4/2024	2024	Meadows				
Site 21	Round 18 - LTM Annual/End-of-Sequence Report	Final Deliverable				7/4/2024		3	3	7/7/2024	2024	Meadows				
Site 21	Round 19 - LTM Fieldwork	Sampling Fieldwork		Completed		3/13/2023	3/27/2023	14	1	3/28/2023	2023	Meadows				
Site 21	Round 19 - LTM Fieldwork	Laboratory Analysis		Completed		3/28/2023		32	10	4/7/2023	2023	Meadows				
Site 21	Round 19 - LTM Fieldwork	Data Validation		Completed		4/7/2023		31	17	4/24/2023	2023	Meadows				
Site 21	Round 19 - LTM Fieldwork	Data Loading and Verification		Completed		4/24/2023		33	3	4/27/2023	2023	Meadows				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 21	Round 19 - LTM Event Report	Contractor Report Development		Ongoing		5/29/2023	4/27/2023	120	308	2/29/2024	2024	Meadows		12	Delay in previous report due to historic data acquisition anticipated to impact this report	
Site 21	Round 19 - LTM Event Report	Internal Navy Review Draft				2/29/2024		32	32	4/1/2024	2024	Meadows				
Site 21	Round 19 - LTM Event Report	Respond to comments, Navy Review Redlined Draft & RTCs, obtain approval, & prepare final				4/1/2024		60	60	5/31/2024	2024	Meadows				
Site 21	Round 19 - LTM Event Report	Final Deliverable				5/31/2024		1	1	6/1/2024	2024	Meadows				
Site 21	Round 20 - LTM Fieldwork	Sampling Fieldwork				9/11/2023		14	14	9/25/2023	2023	Meadows				
Site 21	Round 20 - LTM Fieldwork	Laboratory Analysis				9/25/2023		30	30	10/25/2023	2024	Meadows				
Site 21	Round 20 - LTM Fieldwork	Data Validation				10/25/2023		33	33	11/27/2023	2024	Meadows				
Site 21	Round 20 - LTM Fieldwork	Data Loading and Verification				11/27/2023		31	31	12/28/2023	2024	Meadows				
Site 21	Round 20 - LTM Annual/End-of-Sequence Report	Contractor Report Development				11/28/2023		122	122	3/29/2024	2024	Meadows				
Site 21	Round 20 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				3/29/2024		31	31	4/29/2024	2024	Meadows				
Site 21	Round 20 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/29/2024		46	46	6/14/2024	2024	Meadows				
Site 21	Round 20 - LTM Annual/End-of-Sequence Report	Regulator Review				6/14/2024		60	60	8/13/2024	2024	Meadows	1			
Site 21	Round 20 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/13/2024		62	62	10/14/2024	2025	Meadows				
Site 21	Round 20 - LTM Annual/End-of-Sequence Report	Final Deliverable				10/14/2024		1	1	10/15/2024	2025	Meadows				
UXO 23	Feasibility Study Report	Contractor Report Development			47	9/1/2023	1/8/2024	180	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 results approach.	
UXO 23	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		35	35	8/12/2024	2024	AECOM				
UXO 23	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/12/2024		35	35	9/16/2024	2024	AECOM				
UXO 23	Feasibility Study Report	Regulatory Review Draft				9/16/2024		63	63	11/18/2024	2025	AECOM	1			
UXO 23	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/18/2024		154	154	4/21/2025	2025	AECOM				
UXO 23	Feasibility Study Report	Final Deliverable				4/21/2025		5	7	4/28/2025	2025	AECOM				
UXO 23	PRAP	Contractor Report Development				4/28/2025		91	91	7/28/2025	2025	AECOM				
UXO 23	PRAP	Navy Review Draft				7/28/2025		35	35	9/1/2025	2025	AECOM				
UXO 23	PRAP	Response to Comments				9/1/2025		14	14	9/15/2025	2025	AECOM				
UXO 23	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				9/15/2025		14	14	9/29/2025	2025	AECOM				
UXO 23	PRAP	Regulatory (tech support) Review Draft_V1				9/29/2025		63	63	12/1/2025	2026	AECOM	1			
UXO 23	PRAP	Response to Comments				12/1/2025		30	30	12/31/2025	2026	AECOM				
UXO 23	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/31/2025		33	33	2/2/2026	2026	AECOM				
UXO 23	PRAP	Regulatory (EPA legal) Review Draft_V2				2/2/2026		60	60	4/3/2026	2026	AECOM				
UXO 23	PRAP	Response to Comments				4/3/2026		31	31	5/4/2026	2026	AECOM				
UXO 23	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				5/4/2026		32	32	6/5/2026	2026	AECOM				
UXO 23	PRAP	Regulatory Concurrence Draft				6/5/2026		31	31	7/6/2026	2026	AECOM				
UXO 23	PRAP	Final Deliverable				7/6/2026		1	1	7/7/2026	2026	AECOM				
UXO 23	ROD	Contractor Report Development				7/7/2026		120	120	11/4/2026	2027	AECOM				
UXO 23	ROD	Navy Review Draft				11/4/2026		33	33	12/7/2026	2027	AECOM				
UXO 23	ROD	Response to Comments				12/7/2026		14	14	12/21/2026	2027	AECOM				
UXO 23	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				12/21/2026		14	14	1/4/2027	2027	AECOM				
UXO 23	ROD	Regulatory (tech support) Review Draft_V1				1/4/2027		60	60	3/5/2027	2027	AECOM				
UXO 23	ROD	Response to Comments				3/5/2027		31	31	4/5/2027	2027	AECOM				
UXO 23	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				4/5/2027		30	30	5/5/2027	2027	AECOM				
UXO 23	ROD	Regulatory (EPA legal) Review Draft_V2				5/5/2027		61	61	7/5/2027	2027	AECOM				
UXO 23	ROD	Response to Comments				7/5/2027		30	30	8/4/2027	2027	AECOM				
UXO 23	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				8/4/2027		30	30	9/3/2027	2027	AECOM				
UXO 23	ROD	Regulatory Concurrence Draft				9/3/2027		31	31	10/4/2027	2028	AECOM				
UXO 23	ROD	Final Deliverable				10/4/2027		1	1	10/5/2027	2028	AECOM				
UXO 23	ROD	Navy and EPA Signatures				10/5/2027		62	62	12/6/2027	2028	AECOM				
UXO 23	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/6/2027		365	365	12/5/2028	2029	AECOM				
UXO 23	Construction - Remedial Action (future)	Remedial action plans and construction				12/5/2028		365	365	12/5/2029	2030	AECOM				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 23	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/5/2029		365	365	12/5/2030	2031	AECOM				
UXO 26	General Sampling and Analysis Plan	Contractor Report Development				12/7/2022		180	72	2/17/2023	2023	AECOM		12	Amendment to UXO 26 SAP. EPA requested additional sampling to further define nature and extent during the Dec 2022 Partnering meeting. SAP is being revised to support "data gap" sampling.	
UXO 26	General Sampling and Analysis Plan	Navy Review Pre-Draft		Completed		2/17/2023		30	39	3/28/2023	2023	AECOM				
UXO 26	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		3/28/2023		32	10	4/7/2023	2023	AECOM				
UXO 26	General Sampling and Analysis Plan	Regulatory Review Draft		Ongoing		4/7/2023		60	96	7/12/2023	2023	AECOM		7	EPA comments received; MDE comments received 7/12.	
UXO 26	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Ongoing		7/12/2023		151	44	8/25/2023	2023	AECOM				
UXO 26	General Sampling and Analysis Plan	Final Deliverable				8/25/2023		1	1	8/26/2023	2023	AECOM				
UXO 26	RI or SSP Fieldwork	Sampling Fieldwork		Ongoing	48	11/1/2021	9/11/2023	181	14	9/25/2023	2023	AECOM		12	EPA requested additional sampling to further define nature and extent during the Dec 2022 Partnering meeting. The QAPP addend	
UXO 26	RI or SSP Fieldwork	Laboratory Analysis				9/25/2023		35	35	10/30/2023	2024	AECOM				
UXO 26	RI or SSP Fieldwork	Data Validation				10/30/2023		35	35	12/4/2023	2024	AECOM				
UXO 26	RI or SSP Fieldwork	Data Loading and Verification				12/4/2023		91	91	3/4/2024	2024	AECOM				
UXO 26	RI Report	Contractor Report Development				3/4/2024		120	120	7/2/2024	2024	AECOM				
UXO 26	RI Report	Internal Navy Review Pre-Draft				7/2/2024		31	31	8/2/2024	2024	AECOM				
UXO 26	RI Report	Response to Comments				8/2/2024		14	14	8/16/2024	2024	AECOM				
UXO 26	RI Report	Internal Navy Review Draft				8/16/2024		14	14	8/30/2024	2024	AECOM				
UXO 26	RI Report	Regulatory Review Draft				8/30/2024		60	60	10/29/2024	2025	AECOM	1			
UXO 26	RI Report	Response to Comments				10/29/2024		31	31	11/29/2024	2025	AECOM				
UXO 26	RI Report	Regulatory Review Draft Final				11/29/2024		60	60	1/28/2025	2025	AECOM				
UXO 26	RI Report	Response to Comments				1/28/2025		31	31	2/28/2025	2025	AECOM				
UXO 26	RI Report	Regulatory Concurrence Final				2/28/2025		31	31	3/31/2025	2025	AECOM				
UXO 26	RI Report	Final Deliverable				3/31/2025		1	1	4/1/2025	2025	AECOM				
UXO 26	Feasibility Study Report	Contractor Report Development				4/1/2025		181	181	9/29/2025	2025	AECOM				
UXO 26	Feasibility Study Report	Navy Review Pre-Draft				9/29/2025		32	32	10/31/2025	2026	AECOM				
UXO 26	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/31/2025		35	35	12/5/2025	2026	AECOM				
UXO 26	Feasibility Study Report	Regulatory Review Draft				12/5/2025		60	60	2/3/2026	2026	AECOM	1			
UXO 26	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				2/3/2026		150	150	7/3/2026	2026	AECOM				
UXO 26	Feasibility Study Report	Final Deliverable				7/3/2026		3	3	7/6/2026	2026	AECOM				
UXO 26	PRAP	Contractor Report Development				7/6/2026		91	91	10/5/2026	2027	AECOM				
UXO 26	PRAP	Navy Review Draft				10/5/2026		30	30	11/4/2026	2027	AECOM				
UXO 26	PRAP	Response to Comments				11/4/2026		14	14	11/18/2026	2027	AECOM				
UXO 26	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				11/18/2026		14	14	12/2/2026	2027	AECOM				
UXO 26	PRAP	Regulatory (tech support) Review Draft_V1				12/2/2026		61	61	2/1/2027	2027	AECOM				
UXO 26	PRAP	Response to Comments				2/1/2027		30	30	3/3/2027	2027	AECOM				
UXO 26	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/3/2027		30	30	4/2/2027	2027	AECOM				
UXO 26	PRAP	Regulatory (EPA legal) Review Draft_V2				4/2/2027		60	60	6/1/2027	2027	AECOM				
UXO 26	PRAP	Response to Comments				6/1/2027		30	30	7/1/2027	2027	AECOM				
UXO 26	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/1/2027		32	32	8/2/2027	2027	AECOM				
UXO 26	PRAP	Regulatory Concurrence Draft				8/2/2027		30	30	9/1/2027	2027	AECOM				
UXO 26	PRAP	Final Deliverable				9/1/2027		1	1	9/2/2027	2027	AECOM				
UXO 26	ROD	Contractor Report Development				9/2/2027		120	120	12/31/2027	2028	AECOM				
UXO 26	ROD	Navy Review Draft				12/31/2027		31	31	1/31/2028	2028	AECOM				
UXO 26	ROD	Response to Comments				1/31/2028		14	14	2/14/2028	2028	AECOM				
UXO 26	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				2/14/2028		14	14	2/28/2028	2028	AECOM				
UXO 26	ROD	Regulatory (tech support) Review Draft_V1				2/28/2028		60	60	4/28/2028	2028	AECOM				
UXO 26	ROD	Response to Comments				4/28/2028		31	31	5/29/2028	2028	AECOM				
UXO 26	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				5/29/2028		30	30	6/28/2028	2028	AECOM				
UXO 26	ROD	Regulatory (EPA legal) Review Draft_V2				6/28/2028		61	61	8/28/2028	2028	AECOM				
UXO 26	ROD	Response to Comments				8/28/2028		30	30	9/27/2028	2028	AECOM				
UXO 26	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				9/27/2028		30	30	10/27/2028	2029	AECOM				
UXO 26	ROD	Regulatory Concurrence Draft				10/27/2028		31	31	11/27/2028	2029	AECOM				
UXO 26	ROD	Final Deliverable				11/27/2028		1	1	11/28/2028	2029	AECOM				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 26	ROD	Navy and EPA Signatures				11/28/2028		62	62	1/29/2029	2029	AECOM				
UXO 26	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/29/2029		365	365	1/29/2030	2030	AECOM				
UXO 26	Construction - Remedial Action (future)	Remedial action plans and construction				1/29/2030		365	365	1/29/2031	2031	AECOM				
UXO 26	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/29/2031		365	365	1/29/2032	2032	AECOM				
UXO 27	UXO 27 (Water Site) - Future Work	SAP/QAPP, ESS/ESSDR, RI, FS			49	9/11/2023		1201	1201	12/25/2026	2027	None				
UXO 28	Feasibility Study Report	Contractor Report Development			50	9/1/2023	1/8/2024	180	182	7/8/2024	2024	AECOM		12	Report start contingent upon UXO 26 results and approach.	
UXO 28	Feasibility Study Report	Navy Review Pre-Draft				7/8/2024		35	35	8/12/2024	2024	AECOM				
UXO 28	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/12/2024		35	35	9/16/2024	2024	AECOM				
UXO 28	Feasibility Study Report	Regulatory Review Draft				9/16/2024		63	63	11/18/2024	2025	AECOM	1			
UXO 28	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/18/2024		154	154	4/21/2025	2025	AECOM				
UXO 28	Feasibility Study Report	Final Deliverable				4/21/2025		5	7	4/28/2025	2025	AECOM				
UXO 28	PRAP	Contractor Report Development				4/28/2025		91	91	7/28/2025	2025	AECOM				
UXO 28	PRAP	Navy Review Draft				7/28/2025		35	35	9/1/2025	2025	AECOM				
UXO 28	PRAP	Response to Comments				9/1/2025		14	14	9/15/2025	2025	AECOM				
UXO 28	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				9/15/2025		14	14	9/29/2025	2025	AECOM				
UXO 28	PRAP	Regulatory (tech support) Review Draft_V1				9/29/2025		60	60	11/28/2025	2026	AECOM	1			
UXO 28	PRAP	Response to Comments				11/28/2025		31	31	12/29/2025	2026	AECOM				
UXO 28	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				12/29/2025		35	35	2/2/2026	2026	AECOM				
UXO 28	PRAP	Regulatory (EPA legal) Review Draft_V2				2/2/2026		60	60	4/3/2026	2026	AECOM				
UXO 28	PRAP	Response to Comments				4/3/2026		31	31	5/4/2026	2026	AECOM				
UXO 28	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				5/4/2026		30	30	6/3/2026	2026	AECOM				
UXO 28	PRAP	Regulatory Concurrence Draft				6/3/2026		30	30	7/3/2026	2026	AECOM				
UXO 28	PRAP	Final Deliverable				7/3/2026		3	3	7/6/2026	2026	AECOM				
UXO 28	ROD	Contractor Report Development				7/6/2026		120	120	11/3/2026	2027	AECOM				
UXO 28	ROD	Navy Review Draft				11/3/2026		30	30	12/3/2026	2027	AECOM				
UXO 28	ROD	Response to Comments				12/3/2026		14	14	12/17/2026	2027	AECOM				
UXO 28	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				12/17/2026		14	14	12/31/2026	2027	AECOM				
UXO 28	ROD	Regulatory (tech support) Review Draft_V1				12/31/2026		60	60	3/1/2027	2027	AECOM				
UXO 28	ROD	Response to Comments				3/1/2027		30	30	3/31/2027	2027	AECOM				
UXO 28	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				3/31/2027		30	30	4/30/2027	2027	AECOM				
UXO 28	ROD	Regulatory (EPA legal) Review Draft_V2				4/30/2027		60	60	6/29/2027	2027	AECOM				
UXO 28	ROD	Response to Comments				6/29/2027		30	30	7/29/2027	2027	AECOM				
UXO 28	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				7/29/2027		32	32	8/30/2027	2027	AECOM				
UXO 28	ROD	Regulatory Concurrence Draft				8/30/2027		30	30	9/29/2027	2027	AECOM				
UXO 28	ROD	Final Deliverable				9/29/2027		1	1	9/30/2027	2027	AECOM				
UXO 28	ROD	Navy and EPA Signatures				9/30/2027		60	60	11/29/2027	2028	AECOM				
UXO 28	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/29/2027		365	365	11/28/2028	2029	AECOM				
UXO 28	Construction - Remedial Action (future)	Remedial action plans and construction				11/28/2028		365	365	11/28/2029	2030	AECOM				
UXO 28	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/28/2029		365	365	11/28/2030	2031	AECOM				
Site 28	LTM Fieldwork	Sampling Fieldwork		Completed - Y2	21	9/22/2021		63	1	9/23/2021	2021	CH2M				
Site 28	LTM Fieldwork	Laboratory Analysis		Completed - Y2		9/23/2021		35	35	10/28/2021	2022	CH2M				
Site 28	LTM Fieldwork	Data Validation		Completed - Y2		10/28/2021		35	35	12/2/2021	2022	CH2M				
Site 28	LTM Fieldwork	Data Loading and Verification		Completed - Y2		12/2/2021		35	35	1/6/2022	2022	CH2M				
Site 28	LTM Annual/End-of-Sequence Report	Contractor Report Development		Completed - Y2		1/6/2022		120	131	5/17/2022	2022	CH2M		12	Prioritization of deliverables	
Site 28	LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft		Not funded		5/17/2022		31	0	5/17/2022	2022	CH2M		12	A pre-draft version was not funded.	
Site 28	LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Not funded		5/17/2022		45	0	5/17/2022	2022	CH2M				
Site 28	LTM Annual/End-of-Sequence Report	Regulator Review		Completed		5/17/2022		63	251	1/23/2023	2023	CH2M		12	This version (draft) is for Navy & regulatory review). Longer review time by MDE	
Site 28	LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		1/23/2023		60	36	2/28/2023	2023	CH2M		13	Completed earlier than planned	
Site 28	LTM Annual/End-of-Sequence Report	Final Deliverable		Completed		2/28/2023		3	3	3/3/2023	2023	CH2M				
Site 28	Site 28 SAP Addendum	Contractor Report Development		Completed		4/10/2023		181	100	7/19/2023	2023	CH2M		12	New to the scheule; added Q3. SAP addendum is to change labs.	

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 28	Site 28 SAP Addendum	Navy and Navy Chemist Review		Ongoing		7/19/2023		30	30	8/18/2023	2023	CH2M				
Site 28	Site 28 SAP Addendum	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval,				8/18/2023		47	47	10/4/2023	2024	CH2M				
Site 28	Site 28 SAP Addendum	Regulatory Review Draft				10/4/2023		61	61	12/4/2023	2024	CH2M	1			
Site 28	Site 28 SAP Addendum	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, &				12/4/2023		150	150	5/2/2024	2024	CH2M				
Site 28	Site 28 SAP Addendum	Final Deliverable				5/2/2024		1	1	5/3/2024	2024	CH2M				
Site 28	Site 28 Fieldwork	Complete Sampling Fieldwork	Funds expire in June 2023	Completed		5/8/2023		90	11	5/19/2023	2023	CH2M		12	Obtained approval from IHIRT to conduct the fieldwork.	
Site 28	Site 28 Fieldwork	Laboratory Analysis		Completed		5/19/2023		31	32	6/20/2023	2023	CH2M				
Site 28	Site 28 Fieldwork	Data Validation		Completed		6/20/2023		30	30	7/20/2023	2023	CH2M				
Site 28	Site 28 Fieldwork	Data Loading and Verification		Ongoing		7/20/2023		90	90	10/18/2023	2024	CH2M				
Site 28	Site 28 Report	Contractor Report Development				10/18/2023		120	120	2/15/2024	2024	CH2M				
Site 28	Site 28 Report	Navy Review Pre-Draft				2/15/2024		33	33	3/19/2024	2024	CH2M				
Site 28	Site 28 Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval,				3/19/2024		45	45	5/3/2024	2024	CH2M				
Site 28	Site 28 Report	Regulatory Review Draft				5/3/2024		60	60	7/2/2024	2024	CH2M	1			
Site 28	Site 28 Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, &				7/2/2024		150	150	11/29/2024	2025	CH2M				
Site 28	Site 28 Report	Final Deliverable				11/29/2024		1	1	11/30/2024	2025	CH2M				
UXO 30	RI or SSP Fieldwork	Sampling Fieldwork	Funds expire in June 2023	Completed	51	10/25/2021		182	480	2/17/2023	2023	CH2M		12	Delay is caused by an additional characterization of the	
UXO 30	RI or SSP Fieldwork	Laboratory Analysis		Ongoing		2/17/2023		35	180	8/16/2023	2023	CH2M		12	Delays due to MWs being sampled in Feb 2023 and lab.	
UXO 30	RI or SSP Fieldwork	Data Validation				8/16/2023		35	35	9/20/2023	2023	CH2M				
UXO 30	RI or SSP Fieldwork	Data Loading and Verification				9/20/2023		91	30	10/20/2023	2024	CH2M				
UXO 30	RI Report	Contractor Report Development				10/20/2023		125	125	2/22/2024	2024	CH2M				
UXO 30	RI Report	Internal Navy Review Pre-Draft				2/22/2024		32	32	3/25/2024	2024	CH2M				
UXO 30	RI Report	Response to Comments				3/25/2024		14	14	4/8/2024	2024	CH2M				
UXO 30	RI Report	Internal Navy Review Draft				4/8/2024		14	14	4/22/2024	2024	CH2M				
UXO 30	RI Report	Regulatory Review Draft				4/22/2024		63	63	6/24/2024	2024	CH2M	1			
UXO 30	RI Report	Response to Comments				6/24/2024		30	30	7/24/2024	2024	CH2M				
UXO 30	RI Report	Regulatory Review Draft Final				7/24/2024		61	61	9/23/2024	2024	CH2M				
UXO 30	RI Report	Response to Comments				9/23/2024		30	30	10/23/2024	2025	CH2M				
UXO 30	RI Report	Regulatory Concurrence Final				10/23/2024		33	33	11/25/2024	2025	CH2M				
UXO 30	RI Report	Final Deliverable				11/25/2024		3	3	11/28/2024	2025	CH2M				
UXO 30	Feasibility Study Report	Contractor Report Development				11/28/2024		182	182	5/29/2025	2025	CH2M				
UXO 30	Feasibility Study Report	Navy Review Pre-Draft				5/29/2025		32	32	6/30/2025	2025	CH2M				
UXO 30	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/30/2025		30	30	7/30/2025	2025	CH2M				
UXO 30	Feasibility Study Report	Regulatory Review Draft				7/30/2025		61	61	9/29/2025	2025	CH2M	1			
UXO 30	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/29/2025		150	150	2/26/2026	2026	CH2M				
UXO 30	Feasibility Study Report	Final Deliverable				2/26/2026		4	4	3/2/2026	2026	CH2M				
UXO 30	PRAP	Contractor Report Development				3/2/2026		91	91	6/1/2026	2026	CH2M				
UXO 30	PRAP	Navy Review Draft				6/1/2026		30	30	7/1/2026	2026	CH2M				
UXO 30	PRAP	Response to Comments				7/1/2026		14	14	7/15/2026	2026	CH2M				
UXO 30	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				7/15/2026		14	14	7/29/2026	2026	CH2M				
UXO 30	PRAP	Regulatory (tech support) Review Draft_V1				7/29/2026		61	61	9/28/2026	2026	CH2M				
UXO 30	PRAP	Response to Comments				9/28/2026		30	30	10/28/2026	2027	CH2M				
UXO 30	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				10/28/2026		30	30	11/27/2026	2027	CH2M				
UXO 30	PRAP	Regulatory (EPA legal) Review Draft_V2				11/27/2026		60	60	1/26/2027	2027	CH2M				
UXO 30	PRAP	Response to Comments				1/26/2027		30	30	2/25/2027	2027	CH2M				
UXO 30	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				2/25/2027		32	32	3/29/2027	2027	CH2M				
UXO 30	PRAP	Regulatory Concurrence Draft				3/29/2027		30	30	4/28/2027	2027	CH2M				
UXO 30	PRAP	Final Deliverable				4/28/2027		1	1	4/29/2027	2027	CH2M				
UXO 30	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				4/29/2027		365	365	4/28/2028	2028	CH2M				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
UXO 30	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				4/28/2028		367	367	4/30/2029	2029	CH2M				
UXO 30	Construction - Remedial Action (future)	Remedial action plans and construction				4/30/2029		365	365	4/30/2030	2030	CH2M				
UXO 30	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				4/30/2030		365	365	4/30/2031	2031	CH2M				
UXO 31	UXO 31 (Water Site) - Future Work	SAP/QAPP, ESS/ESSDR, RI, FS			52	9/11/2023		1202	1202	12/26/2026	2027	None				
UXO 32	LUCs Report	Site LUCs Inspection Fieldwork		Completed		9/30/2022	9/12/2022	11	7	9/19/2022	2022	Meadows		12	Updated to coincide with Site 42 groundwater sampling.	
UXO 32	LUCs Report	Contractor Report Development		Completed		9/19/2022		63	87	12/15/2022	2023	Meadows				
UXO 32	LUCs Report	Navy and Regulator Review draft		Completed		12/15/2022		60	95	3/20/2023	2023	Meadows				
UXO 32	LUCs Report	Respond to comments, Navy & regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Not needed		3/20/2023		63	0	3/20/2023	2023	Meadows		12	IHIRT review not required	
UXO 32	LUCs Report	Final Deliverable		Completed		3/20/2023		3	0	3/20/2023	2023	Meadows				
UXO 32	LUCs Report	Site LUCs Inspection Fieldwork				9/12/2023		7	7	9/19/2023	2023	Meadows				
UXO 32	LUCs Report	Contractor Report Development				9/19/2023		62	62	11/20/2023	2024	Meadows				
UXO 32	LUCs Report	Navy and Regulator Review draft				11/20/2023		60	60	1/19/2024	2024	Meadows	1			
UXO 32	LUCs Report	Respond to comments, Navy & regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/19/2024		62	62	3/21/2024	2024	Meadows				
UXO 32	LUCs Report	Final Deliverable				3/21/2024		1	1	3/22/2024	2024	Meadows				
UXO 33	UXO 33 (Water Site) - Future Work	SAP/QAPP, ESS/ESSDR, RI, FS				9/11/2023		1200	1200	12/24/2026	2027	None				
Site 36	Round 16 - LTM Fieldwork	Sampling Fieldwork		Completed		7/1/2022	8/15/2022	14	14	8/29/2022	2022	Meadows		12	Delay in approval to work off existing work plans and SAPs because MMA SAP will not be submitted in time.	
Site 36	Round 16 - LTM Fieldwork	Laboratory Analysis		Completed		8/29/2022		30	30	9/28/2022	2022	Meadows				
Site 36	Round 16 - LTM Fieldwork	Data Validation		Completed		9/28/2022		33	33	10/31/2022	2023	Meadows				
Site 36	Round 16 - LTM Fieldwork	Data Loading and Verification		Completed		10/31/2022		77	77	1/16/2023	2023	Meadows				
Site 36	Round 16 - LTM Event Report	Contractor Report Development		Ongoing		10/29/2022		121	306	8/31/2023	2023	Meadows		12	Acquiring and compiling historic LTM data to to present in the report (to comply with LTMP requirements and support future statistical analysis)	
Site 36	Round 16 - LTM Event Report	Internal Navy Review Draft				8/31/2023		32	32	10/2/2023	2024	Meadows				
Site 36	Round 16 - LTM Event Report	Respond to comments, Navy Review Redlined Draft & RTCs, obtain approval, & prepare final				10/2/2023		60	60	12/1/2023	2024	Meadows				
Site 36	Round 16 - LTM Event Report	Final Deliverable				12/1/2023		3	3	12/4/2023	2024	Meadows				
Site 36	Round 17 - LTM Fieldwork	Sampling Fieldwork				12/12/2022		14	14	12/26/2022	2023	Meadows				
Site 36	Round 17 - LTM Fieldwork	Laboratory Analysis		Completed		12/26/2022		30	30	1/25/2023	2023	Meadows				
Site 36	Round 17 - LTM Fieldwork	Data Validation		Completed		1/25/2023		33	2	1/27/2023	2023	Meadows				
Site 36	Round 17 - LTM Fieldwork	Data Loading and Verification		Completed		1/27/2023		31	10	2/6/2023	2023	Meadows				
Site 36	Round 17 - LTM Annual/End-of-Sequence Report	Contractor Report Development		Ongoing		2/28/2023	2/6/2023	120	308	12/11/2023	2024	Meadows		12	Delay in previous report due to historic data acquisition anticipated to impact this report	
Site 36	Round 17 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				12/11/2023		35	35	1/15/2024	2024	Meadows				
Site 36	Round 17 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				1/15/2024		49	49	3/4/2024	2024	Meadows				
Site 36	Round 17 - LTM Annual/End-of-Sequence Report	Regulator Review				3/4/2024		60	60	5/3/2024	2024	Meadows	1			
Site 36	Round 17 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				5/3/2024		60	60	7/2/2024	2024	Meadows				
Site 36	Round 17 - LTM Annual/End-of-Sequence Report	Final Deliverable				7/2/2024		3	3	7/5/2024	2024	Meadows				
Site 36	Round 18 - LTM Fieldwork	Sampling Fieldwork		Completed		3/13/2023		14	1	3/14/2023	2023	Meadows				
Site 36	Round 18 - LTM Fieldwork	Laboratory Analysis		Completed		3/14/2023		31	13	3/27/2023	2023	Meadows				
Site 36	Round 18 - LTM Fieldwork	Data Validation		Completed		3/27/2023		30	14	4/10/2023	2023	Meadows				
Site 36	Round 18 - LTM Fieldwork	Data Loading and Verification		Completed		4/10/2023		55	3	4/13/2023	2023	Meadows				
Site 36	Round 18 - LTM Event Report	Contractor Report Development		Ongoing		5/27/2023	4/27/2023	123	308	2/29/2024	2024	Meadows		12	Delay in previous report due to historic data acquisition anticipated to impact this report.	
Site 36	Round 18 - LTM Event Report	Internal Navy Review Draft				2/29/2024		32	32	4/1/2024	2024	Meadows				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 36	Round 18 - LTM Event Report	Respond to comments, Navy Review Redlined Draft & RTCs, obtain approval, & prepare final				4/1/2024		63	63	6/3/2024	2024	Meadows				
Site 36	Round 18 - LTM Event Report	Final Deliverable				6/3/2024		1	1	6/4/2024	2024	Meadows				
Site 36	Round 19 - LTM Fieldwork	Sampling Fieldwork				9/11/2023		14	14	9/25/2023	2023	Meadows				
Site 36	Round 19 - LTM Fieldwork	Laboratory Analysis				9/25/2023		30	30	10/25/2023	2024	Meadows				
Site 36	Round 19 - LTM Fieldwork	Data Validation				10/25/2023		33	33	11/27/2023	2024	Meadows				
Site 36	Round 19 - LTM Fieldwork	Data Loading and Verification				11/27/2023		31	31	12/28/2023	2024	Meadows				
Site 36	Round 19 - LTM Annual/End-of-Sequence Report	Contractor Report Development				11/27/2023		120	120	3/26/2024	2024	Meadows				
Site 36	Round 19 - LTM Annual/End-of-Sequence Report	Internal Navy Review Pre-Draft				3/26/2024		31	31	4/26/2024	2024	Meadows				
Site 36	Round 19 - LTM Annual/End-of-Sequence Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/26/2024		46	46	6/11/2024	2024	Meadows				
Site 36	Round 19 - LTM Annual/End-of-Sequence Report	Regulator Review				6/11/2024		62	62	8/12/2024	2024	Meadows	1			
Site 36	Round 19 - LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/12/2024		63	63	10/14/2024	2025	Meadows				
Site 36	Round 19 - LTM Annual/End-of-Sequence Report	Final Deliverable				10/14/2024		43	43	11/26/2024	2025	Meadows				
Site 38	Site 38 Groundwater Evaluation Report	Contractor Report Development		Ongoing	24	8/8/2021		125	771	9/18/2023	2023	Tetra Tech		12	Prioritization of deliverables and coordination with FYR trend analysis	
Site 38	Site 38 Groundwater Evaluation Report	Regulatory Review Draft				9/18/2023		63	77	12/4/2023	2024	Tetra Tech	1			
Site 38	Site 38 Groundwater Evaluation Report	RTCs and Develop Final				12/4/2023		35	35	1/8/2024	2024	Tetra Tech				
Site 38	Site 38 Groundwater Evaluation Report	Final Deliverable				1/8/2024		7	7	1/15/2024	2024	Tetra Tech				
Site 38	LTRA report	Contractor Report Development				1/15/2024		63	63	3/18/2024	2024	Tetra Tech				
Site 38	LTRA report	Navy Review Pre-Draft				3/18/2024		31	31	4/18/2024	2024	Tetra Tech				
Site 38	LTRA report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/18/2024		32	32	5/20/2024	2024	Tetra Tech				
Site 38	LTRA report	Regulatory Review Draft				5/20/2024		63	63	7/22/2024	2024	Tetra Tech	1			
Site 38	LTRA report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				7/22/2024		60	60	9/20/2024	2024	Tetra Tech				
Site 38	LTRA report	Final Deliverable				9/20/2024		3	3	9/23/2024	2024	Tetra Tech				
Site 42	Round 37 - LTM Fieldwork	Sampling Fieldwork		Completed		7/1/2022	9/12/2022	14	14	9/26/2022	2022	Meadows		12	On-schedule; previous date was a placeholder.	
Site 42	Round 37 - LTM Fieldwork	Laboratory Analysis		Completed		9/26/2022		30	30	10/26/2022	2023	Meadows				
Site 42	Round 37 - LTM Fieldwork	Data Validation		Completed		10/26/2022		30	30	11/25/2022	2023	Meadows				
Site 42	Round 37 - LTM Fieldwork	Data Loading and Verification		Completed		11/25/2022		77	77	2/10/2023	2023	Meadows				
Site 42	Round 37 - LTM Event Report	Contractor Report Development		Ongoing		11/26/2022		121	293	9/15/2023	2023	Meadows		12	Acquiring and compiling historic LTM data to present in the report (to comply with LTMP requirements and support future statistical analysis)	
Site 42	Round 37 - LTM Event Report	Internal Navy Review Pre-Draft				9/15/2023		31	31	10/16/2023	2024	Meadows				
Site 42	Round 37 - LTM Event Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/16/2023		49	49	12/4/2023	2024	Meadows				
Site 42	Round 37 - LTM Event Report	Regulator Review				12/4/2023		60	60	2/2/2024	2024	Meadows	1			
Site 42	Round 37 - LTM Event Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				2/2/2024		60	60	4/2/2024	2024	Meadows				
Site 42	Round 37 - LTM Event Report	Final Deliverable				4/2/2024		1	1	4/3/2024	2024	Meadows				
Site 42	Round 38 - LTM Fieldwork	Sampling Fieldwork				6/12/2023	7/24/2023	16	7	7/31/2023	2023	Meadows		12	Previous start date was incorrect	
Site 42	Round 38 - LTM Fieldwork	Laboratory Analysis				7/31/2023		30	30	8/30/2023	2023	Meadows				
Site 42	Round 38 - LTM Fieldwork	Data Validation				8/30/2023		30	30	9/29/2023	2023	Meadows				
Site 42	Round 38 - LTM Fieldwork	Data Loading and Verification				9/29/2023		31	31	10/30/2023	2024	Meadows				
Site 42	Round 38 - LTM Event Report	Contractor Report Development				8/24/2023		120	120	12/22/2023	2024	Meadows				
Site 42	Round 38 - LTM Event Report	Internal Navy Review Pre-Draft				12/22/2023		31	31	1/22/2024	2024	Meadows				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 42	Round 38 - LTM Event Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				1/22/2024		46	46	3/8/2024	2024	Meadows				
Site 42	Round 38 - LTM Event Report	Regulator Review				3/8/2024		60	60	5/7/2024	2024	Meadows	1			
Site 42	Round 38 - LTM Event Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				5/7/2024		62	62	7/8/2024	2024	Meadows				
Site 42	Round 38 - LTM Event Report	Final Deliverable				7/8/2024		1	1	7/9/2024	2024	Meadows				
Site 43	Feasibility Study Report	Contractor Report Development		Ongoing		6/15/2021	6/15/2022	183	432	8/21/2023	2023	Tetra Tech		12	Coordination with removal action and/or pilot study and incorporation of ESS results	
Site 43	Feasibility Study Report	Navy Review Pre-Draft				8/21/2023		34	0	8/21/2023	2023	Tetra Tech		12	Version not needed/scoped	
Site 43	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/21/2023		31	0	8/21/2023	2023	Tetra Tech		12	Version not needed/scoped	
Site 43	Feasibility Study Report	Regulatory Review Draft				8/21/2023		63	63	10/23/2023	2024	Tetra Tech	1			
Site 43	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				10/23/2023		151	151	3/22/2024	2024	Tetra Tech				
Site 43	Feasibility Study Report	Final Deliverable				3/22/2024		5	7	3/29/2024	2024	Tetra Tech				
Site 43	Site 43 NTCRA Work Plan	Regulatory Review Draft		Completed		4/20/2022		30	50	6/9/2022	2022	AGVIQ		7	Regulator delays were encountered due to multiple reviews of the E&S control plan and the final approval by MDE.	
Site 43	Site 43 NTCRA Work Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		6/9/2022		33	53	8/1/2022	2022	AGVIQ		7	Regulator delays were encountered due to multiple reviews of the E&S control plan and the final approval by MDE.	
Site 43	Site 43 NTCRA Work Plan	Final Deliverable		Completed		8/1/2022		7	15	8/16/2022	2022	AGVIQ		12	See note above for delay	
Site 43	Site 43 NTCRA Construction Fieldwork	Construction Fieldwork				8/16/2022	11/6/2023	91	91	2/5/2024	2024	AGVIQ		12	Field mobilization dependent on NSFIH and field resource schedules	
Site 43	Site 43 NTCRA CCR	Contractor Report Development				2/5/2024		63	63	4/8/2024	2024	AGVIQ				
Site 43	Site 43 NTCRA CCR	Regulatory Review Draft				4/8/2024		63	63	6/10/2024	2024	AGVIQ	1			
Site 43	Site 43 NTCRA CCR	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/10/2024		31	31	7/11/2024	2024	AGVIQ				
Site 43	Site 43 NTCRA CCR	Final Deliverable				7/11/2024		30	30	8/10/2024	2024	AGVIQ				
Site 43	PRAP	Contractor Report Development				1/10/2023	12/1/2023	91	91	3/1/2024	2024	Tetra Tech		12	Updated to follow FS schedule	
Site 43	PRAP	Navy Review Draft				3/1/2024		31	31	4/1/2024	2024	Tetra Tech				
Site 43	PRAP	Response to Comments				4/1/2024		14	14	4/15/2024	2024	Tetra Tech				
Site 43	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				4/15/2024		14	14	4/29/2024	2024	Tetra Tech				
Site 43	PRAP	Regulatory (tech support) Review Draft_V1				4/29/2024		63	63	7/1/2024	2024	Tetra Tech	1			
Site 43	PRAP	Response to Comments				7/1/2024		30	30	7/31/2024	2024	Tetra Tech				
Site 43	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				7/31/2024		33	33	9/2/2024	2024	Tetra Tech				
Site 43	PRAP	Regulatory (EPA legal) Review Draft_V2				9/2/2024		63	63	11/4/2024	2025	Tetra Tech				
Site 43	PRAP	Response to Comments				11/4/2024		31	31	12/5/2024	2025	Tetra Tech				
Site 43	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				12/5/2024		32	32	1/6/2025	2025	Tetra Tech				
Site 43	PRAP	Regulatory Concurrence Draft				1/6/2025		31	31	2/6/2025	2025	Tetra Tech				
Site 43	PRAP	Final Deliverable				2/6/2025		4	4	2/10/2025	2025	Tetra Tech				
Site 43	ROD	Contractor Report Development				2/10/2025		122	122	6/12/2025	2025	Tetra Tech				
Site 43	ROD	Navy Review Draft				6/12/2025		35	35	7/17/2025	2025	Tetra Tech				
Site 43	ROD	Response to Comments				7/17/2025		14	14	7/31/2025	2025	Tetra Tech				
Site 43	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				7/31/2025		14	14	8/14/2025	2025	Tetra Tech				
Site 43	ROD	Regulatory (tech support) Review Draft_V1				8/14/2025		60	60	10/13/2025	2026	Tetra Tech	1			
Site 43	ROD	Response to Comments				10/13/2025		31	31	11/13/2025	2026	Tetra Tech				
Site 43	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				11/13/2025		32	32	12/15/2025	2026	Tetra Tech				
Site 43	ROD	Regulatory (EPA legal) Review Draft_V2				12/15/2025		63	63	2/16/2026	2026	Tetra Tech				
Site 43	ROD	Response to Comments				2/16/2026		30	30	3/18/2026	2026	Tetra Tech				
Site 43	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				3/18/2026		33	33	4/20/2026	2026	Tetra Tech				
Site 43	ROD	Regulatory Concurrence Draft				4/20/2026		31	31	5/21/2026	2026	Tetra Tech				
Site 43	ROD	Final Deliverable				5/21/2026		1	1	5/22/2026	2026	Tetra Tech				
Site 43	ROD	Navy and EPA Signatures				5/22/2026		62	62	7/23/2026	2026	Tetra Tech				
Site 43	Remedial Design	Contractor Report Development				7/23/2026		120	120	11/20/2026	2027	Tetra Tech				
Site 43	Remedial Design	Navy Review Pre-Draft (35%)				11/20/2026		31	31	12/21/2026	2027	Tetra Tech				
Site 43	Remedial Design	Respond to comments, Navy Review Redlined Pre-Draft (35%) & RTCs, obtain approval, & prepare draft (100%)				12/21/2026		32	32	1/22/2027	2027	Tetra Tech				
Site 43	Remedial Design	Regulatory Review Draft (100%)				1/22/2027		60	60	3/23/2027	2027	Tetra Tech				

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Site 43	Remedial Design	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				3/23/2027		150	150	8/20/2027	2027	Tetra Tech				
Site 43	Remedial Design	Final Deliverable				8/20/2027		1	1	8/21/2027	2027	Tetra Tech				
Site 43	Site 43 Pilot Study	Pilot study plans, construction, & report				6/1/2022		369	700	5/1/2024	2024	Tetra Tech		12	Includes post-injection LTM	
Site 47	Site 47 Annual Monitoring Report (Year 8, 2021)	Contractor Report Development		Completed	7	8/23/2021		120	120	12/21/2021	2022	CH2M				
Site 47	Site 47 Annual Monitoring Report (Year 8, 2021)	Navy & Regulatory Review Draft		Completed		12/21/2021		62	224	8/2/2022	2022	CH2M		7	Delay due to longer review time by MDE.	
Site 47	Site 47 Annual Monitoring Report (Year 8, 2021)	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		8/2/2022		152	105	11/15/2022	2023	CH2M		12	Will be completed earlier than planned b/c regulatory comments were minimal.	
Site 47	Site 47 Annual Monitoring Report (Year 8, 2021)	Final Deliverable		Completed		11/15/2022		3	3	11/18/2022	2023	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 9, 2022)	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Not needed		4/25/2022		151	0	4/25/2022	2022	CH2M		12	Will not be completed in 2022 due to change of lab; a new SAP will be prepared.	
Site 47	Site 47 Annual Monitoring Fieldwork (Year 9, 2022)	Contractor Report Development		Not needed		4/25/2022		122	0	4/25/2022	2022	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 9, 2022)	Navy & Regulatory Review Draft		Not needed		4/25/2022		63	0	4/25/2022	2022	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 9, 2022)	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Not needed		4/25/2022		150	0	4/25/2022	2022	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 9, 2022)	Final Deliverable		Not needed		4/25/2022		1	0	4/25/2022	2022	CH2M				
Site 47	Site 47 Performance Monitoring & Mercury Delineation SAP	Contractor Report Development		Completed		6/13/2022		105	102	9/23/2022	2022	CH2M				
Site 47	Site 47 Performance Monitoring & Mercury Delineation SAP	Navy Review Pre-Draft		Completed		9/23/2022		21	25	10/18/2022	2023	CH2M				
Site 47	Site 47 Performance Monitoring & Mercury Delineation SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		10/18/2022		17	91	1/17/2023	2023	CH2M		12	Delay due to resolving significant comments from the Navy chemist	
Site 47	Site 47 Performance Monitoring & Mercury Delineation SAP	Regulatory Review Draft		Completed		1/17/2023		63	148	6/14/2023	2023	CH2M		7	Longer review time by MDE	
Site 47	Site 47 Performance Monitoring & Mercury Delineation SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		6/14/2023		21	12	6/26/2023	2023	CH2M		13	Completed earlier than planned	
Site 47	Site 47 Performance Monitoring & Mercury Delineation SAP	Final Deliverable		Completed		6/26/2023		1	1	6/27/2023	2023	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 10, 2023)	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Ongoing		4/24/2023	5/26/2023	150	150	10/23/2023	2024	CH2M		12	Delay due to site access	
Site 47	Site 47 Annual Monitoring Fieldwork (Year 10, 2023)	Contractor Report Development	Priority due to expiring funds in June 2024			10/23/2023		120	120	2/20/2024	2024	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 10, 2023)	Navy & Regulatory Review Draft	Priority due to expiring funds in June 2024			2/20/2024		62	62	4/22/2024	2024	CH2M	1			
Site 47	Site 47 Annual Monitoring Fieldwork (Year 10, 2023)	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				4/22/2024		151	151	9/20/2024	2024	CH2M				
Site 47	Site 47 Annual Monitoring Fieldwork (Year 10, 2023)	Final Deliverable				9/20/2024		1	1	9/21/2024	2024	CH2M				
Site 47	Site 47 Post RA Groundwater Investigation Report	Contractor Report Development		Completed		8/2/2021		120	108	11/18/2021	2022	CH2M		12	Completed earlier than planned	
Site 47	Site 47 Post RA Groundwater Investigation Report	Navy & Regulatory Review Draft		Completed		11/18/2021		62	257	8/2/2022	2022	CH2M		7	Delay due to longer review time by MDE	
Site 47	Site 47 Post RA Groundwater Investigation Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		8/2/2022		156	107	11/17/2022	2023	CH2M		12	Will be completed earlier than planned b/c regulatory comments were minimal.	
Site 47	Site 47 Post RA Groundwater Investigation Report	Final Deliverable		Completed		11/17/2022		1	1	11/18/2022	2023	CH2M				
Site 47	General Sampling and Analysis Plan	Contractor Report Development		Pilot study - Completed		5/9/2022		181	105	8/22/2022	2022	CH2M		12	SAP durations are decreased b/c of funds expiring in Jun 2023	

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Site 47	General Sampling and Analysis Plan	Navy Review Pre-Draft		Completed		8/22/2022		32	39	9/30/2022	2022	CH2M				
Site 47	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		9/30/2022		35	35	11/4/2022	2023	CH2M				
Site 47	General Sampling and Analysis Plan	Regulatory Review Draft		Completed		11/4/2022		66	116	2/28/2023	2023	CH2M		12	Longer review by MDE	
Site 47	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		2/28/2023		151	49	4/18/2023	2023	CH2M		13	Completed earlier than planned	
Site 47	General Sampling and Analysis Plan	Final Deliverable		Completed		4/18/2023		1	1	4/19/2023	2023	CH2M				
Site 47	Site 47 Pilot Study Fieldwork	Complete Baseline Sampling and Injection		Ongoing (baseline completed)		4/19/2023	11/14/2022	182	385	12/4/2023	2024	CH2M		12	Delay is due to building operations/site access	
Site 47	Site 47 Pilot Study Fieldwork	Complete Perfromance Monitoring				12/4/2023	3/13/2023	241	360	3/7/2024	2024	CH2M		12	For 3-, 6-, 9-, and 12-month post-injection sampling	
Site 47	Site 47 Pilot Study Fieldwork	Laboratory Analysis & QC				3/7/2024		123	123	7/8/2024	2024	CH2M				
Site 47	Site 47 Pilot Study Fieldwork	Data Validation, QC, data load				7/8/2024		63	63	9/9/2024	2024	CH2M				
Site 47	Site 47 Pilot Study Report	Contractor Report Development				9/9/2024		126	126	1/13/2025	2025	CH2M				
Site 47	Site 47 Pilot Study Report	Regulatory Review Draft				1/13/2025		63	63	3/17/2025	2025	CH2M	1			
Site 47	Site 47 Pilot Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				3/17/2025		151	151	8/15/2025	2025	CH2M				
Site 47	Site 47 Pilot Study Report	Final Deliverable				8/15/2025		3	3	8/18/2025	2025	CH2M				
Site 47	Feasibility Study (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				8/18/2025		450	450	11/11/2026	2027	CH2M		12	New to the schedule as of Q4 2023	
Site 47	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/11/2026		365	365	11/11/2027	2028	CH2M		12	New to the schedule as of Q4 2023	
Site 47	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/11/2027		365	365	11/10/2028	2029	CH2M		12	New to the schedule as of Q4 2023	
Site 47	LTM (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/10/2028		367	367	11/12/2029	2030	CH2M				
Site 57	Site 57 VI SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Ongoing	1	10/29/2021	11/17/2022	31	280	8/24/2023	2023	Tetra Tech		12	Limited access to source area building and lab changes during SAP review	
Site 57	Site 57 VI SAP	Regulatory Review Draft				8/24/2023		62	62	10/25/2023	2024	Tetra Tech	1	12	Lab changes during SAP review	
Site 57	Site 57 VI SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				10/25/2023		155	33	11/27/2023	2024	Tetra Tech				
Site 57	Site 57 VI SAP	Final Deliverable				11/27/2023		1	1	11/28/2023	2024	Tetra Tech				
Site 57	Site 57 VI Fieldwork	Sampling Fieldwork				11/28/2023	12/4/2023	63	63	2/5/2024	2024	Tetra Tech		6	Must capture winter/heating season	
Site 57	Site 57 VI Fieldwork	Laboratory Analysis				2/5/2024		30	30	3/6/2024	2024	Tetra Tech				
Site 57	Site 57 VI Fieldwork	Data Validation				3/6/2024		30	15	3/21/2024	2024	Tetra Tech				
Site 57	Site 57 VI Fieldwork	Data Loading and Verification				3/21/2024		92	32	4/22/2024	2024	Tetra Tech				
Site 57	Site 57 VI Report	Contractor Report Development				4/22/2024		121	91	7/22/2024	2024	Tetra Tech				
Site 57	Site 57 VI Report	Regulatory Review Draft				7/22/2024		60	60	9/20/2024	2024	Tetra Tech	1			
Site 57	Site 57 VI Report	Response to Comments				9/20/2024		31	31	10/21/2024	2025	Tetra Tech				
Site 57	Site 57 VI Report	Regulatory Review Draft Final				10/21/2024		60	60	12/20/2024	2025	Tetra Tech				
Site 57	Site 57 VI Report	Response to Comments				12/20/2024		31	31	1/20/2025	2025	Tetra Tech				
Site 57	Site 57 VI Report	Regulatory Concurrence Final				1/20/2025		30	30	2/19/2025	2025	Tetra Tech				
Site 57	Site 57 VI Report	Final Deliverable				2/19/2025		1	1	2/20/2025	2025	Tetra Tech				
Site 57	LTM Annual/End-of-Sequence Report	Regulator Review		Completed		9/23/2021		60	344	9/2/2022	2022	Meadows		7	Delay due to regulatory review time.	
Site 57	LTM Annual/End-of-Sequence Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		9/2/2022	9/20/2022	63	182	3/21/2023	2023	Meadows		8	First round RTCs submitted 1/3/22. Received 2nd round of EPA comments on 9/20/22. Coordination with Navy on 2nd round of RTCs. MDE had no comments on the document.	
Site 57	LTM Annual/End-of-Sequence Report	Final Deliverable		Completed		3/21/2023		3	0	3/21/2023	2023	Meadows				
Site 57	Site 57 Clay Layer Investigation Fieldwork	Complete Fieldwork, Lab Analysis, DV, Data Load & Verification		Completed		5/3/2021		301	260	1/18/2022	2022	CH2M		13	Completed earlier than planned	
Site 57	Site 57 Clay Layer Investigation Report	Contractor Report Development		Ongoing		1/18/2022	4/15/2022	123	488	8/16/2023	2023	CH2M		12	Prioritization of deliverables and PFAS	
Site 57	Site 57 Clay Layer Investigation Report	Internal Navy Review Pre-Draft				8/16/2023		35	35	9/20/2023	2023	CH2M				
Site 57	Site 57 Clay Layer Investigation Report	Response to Comments				9/20/2023		14	14	10/4/2023	2024	CH2M				
Site 57	Site 57 Clay Layer Investigation Report	Internal Navy Review Draft				10/4/2023		14	14	10/18/2023	2024	CH2M				
Site 57	Site 57 Clay Layer Investigation Report	Regulatory Review Draft				10/18/2023		63	63	12/20/2023	2024	CH2M	1			
Site 57	Site 57 Clay Layer Investigation Report	Response to Comments				12/20/2023		33	33	1/22/2024	2024	CH2M				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 57	Site 57 Clay Layer Investigation Report	Regulatory Review Draft Final				1/22/2024		60	60	3/22/2024	2024	CH2M				
Site 57	Site 57 Clay Layer Investigation Report	Response to Comments				3/22/2024		31	31	4/22/2024	2024	CH2M				
Site 57	Site 57 Clay Layer Investigation Report	Regulatory Concurrence Final				4/22/2024		32	32	5/24/2024	2024	CH2M				
Site 57	Site 57 Clay Layer Investigation Report	Final Deliverable				5/24/2024		3	3	5/27/2024	2024	CH2M				
Site 57	SRG Tech Memo	Contractor Report Development				5/27/2024		122	122	9/26/2024	2024	CH2M				
Site 57	SRG Tech Memo	Navy Review Pre-Draft				9/26/2024		32	32	10/28/2024	2025	CH2M				
Site 57	SRG Tech Memo	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/28/2024		35	35	12/2/2024	2025	CH2M				
Site 57	SRG Tech Memo	Navy & Regulatory Review Draft				12/2/2024		60	60	1/31/2025	2025	CH2M	1			
Site 57	SRG Tech Memo	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/31/2025		90	90	5/1/2025	2025	CH2M				
Site 57	SRG Tech Memo	Final Deliverable				5/1/2025		1	1	5/2/2025	2025	CH2M				
Site 57	Remedial Action Alternatives Analysis	Contractor Report Development				5/2/2025		90	90	7/31/2025	2025	CH2M				
Site 57	Remedial Action Alternatives Analysis	Navy Review of Draft Document				7/31/2025		32	32	9/1/2025	2025	CH2M				
Site 57	Remedial Action Alternatives Analysis	Contractor Preparation of Responses to Navy Comments				9/1/2025		14	14	9/15/2025	2025	CH2M				
Site 57	Remedial Action Alternatives Analysis	Navy Review of RTCs and Approval				9/15/2025		14	14	9/29/2025	2025	CH2M				
Site 57	Remedial Action Alternatives Analysis	Prepare Final Document				9/29/2025		14	14	10/13/2025	2026	CH2M				
Site 57	Remedial Action Alternatives Analysis	Submit Final Document				10/13/2025		1	1	10/14/2025	2026	CH2M				
Site 57	Feasibility Study (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				10/14/2025		450	450	1/7/2027	2027	CH2M		12	New to schedule as of Q4 2023	
Site 57	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/7/2027		365	365	1/7/2028	2028	CH2M		12	New to schedule as of Q4 2023	
Site 57	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				1/7/2028		367	367	1/8/2029	2029	CH2M		12	New to schedule as of Q4 2023	
Site 57	Engineering Evaluation/ Cost Analyis	Contractor Report Development		Will not be needed		1/8/2029		122	0	1/8/2029	2029	CH2M		12	Will not be done because the removal action will not be feasible as it would be down to 40 feet bgs	
Site 57	Engineering Evaluation/ Cost Analyis	Navy Review Pre-Draft		Will not be needed		1/8/2029		32	0	1/8/2029	2029	CH2M				
Site 57	Engineering Evaluation/ Cost Analyis	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Will not be needed		1/8/2029		32	0	1/8/2029	2029	CH2M				
Site 57	Engineering Evaluation/ Cost Analyis	Navy & Regulatory Review Draft		Will not be needed		1/8/2029		60	0	1/8/2029	2029	CH2M				
Site 57	Engineering Evaluation/ Cost Analyis	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Will not be needed		1/8/2029		91	0	1/8/2029	2029	CH2M				
Site 57	Engineering Evaluation/ Cost Analyis	Final Deliverable		Will not be needed		1/8/2029		3	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Contractor Report Development		Will not be needed		1/8/2029		122	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Navy Review Pre-Draft		Will not be needed		1/8/2029		32	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Will not be needed		1/8/2029		31	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Navy & Regulatory Review Draft		Will not be needed		1/8/2029		63	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Will not be needed		1/8/2029		91	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Final Deliverable		Will not be needed		1/8/2029		1	0	1/8/2029	2029	CH2M				
Site 57	Action Memorandum	Navy Signature		Will not be needed		1/8/2029		222	6	1/14/2029	2029	CH2M				
Site 66	General Sampling and Analysis Plan	Contractor Report Development	Funds expire in June 2023	Completed	17	9/25/2021		184	521	2/28/2023	2023	CH2M		12	Due to prioritization of deliverables and PFAS. Further delay due to removal of radiological work from the SAP.	
Site 66	General Sampling and Analysis Plan	Navy Review Pre-Draft	Funds expire in June 2023	Completed		2/28/2023		36	29	3/29/2023	2023	CH2M		12	Decreased duration b/c of expiring funds in Jun 2023.	
Site 66	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Funds expire in June 2023	Completed		3/29/2023		35	76	6/13/2023	2023	CH2M		12	Increased duration b/c of multiple rounds of comments.	
Site 66	General Sampling and Analysis Plan	Regulatory Review Draft		Ongoing		6/13/2023		68	62	8/14/2023	2023	CH2M				
Site 66	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/14/2023		150	60	10/13/2023	2024	CH2M				
Site 66	General Sampling and Analysis Plan	Final Deliverable				10/13/2023		4	6	10/19/2023	2024	CH2M		12		

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 66	RI or SSP Fieldwork	Sampling Fieldwork	Funds expire in June 2023	Completed except for test pits		7/18/2022		182	480	11/10/2023	2024	CH2M		12	B/c of funds expiring in Jun 2023, the IHIRT agreed for all field activities to be completed before finalization of the SAP. The only work remaining is excavation of the test pits, which require an ESCP. This increased the duration for field activities.	
Site 66	RI or SSP Fieldwork	Laboratory Analysis				11/10/2023		32	32	12/12/2023	2024	CH2M				
Site 66	RI or SSP Fieldwork	Data Validation				12/12/2023		31	31	1/12/2024	2024	CH2M				
Site 66	RI or SSP Fieldwork	Data Loading and Verification				1/12/2024		95	35	2/16/2024	2024	CH2M				
Site 66	RI Report	Contractor Report Development				2/16/2024		122	122	6/17/2024	2024	CH2M				
Site 66	RI Report	Internal Navy Review Pre-Draft				6/17/2024		31	31	7/18/2024	2024	CH2M				
Site 66	RI Report	Response to Comments				7/18/2024		14	14	8/1/2024	2024	CH2M				
Site 66	RI Report	Internal Navy Review Draft				8/1/2024		14	14	8/15/2024	2024	CH2M				
Site 66	RI Report	Regulatory Review Draft				8/15/2024		60	60	10/14/2024	2025	CH2M	1			
Site 66	RI Report	Response to Comments				10/14/2024		31	31	11/14/2024	2025	CH2M				
Site 66	RI Report	Regulatory Review Draft Final				11/14/2024		60	60	1/13/2025	2025	CH2M				
Site 66	RI Report	Response to Comments				1/13/2025		31	31	2/13/2025	2025	CH2M				
Site 66	RI Report	Regulatory Concurrence Final				2/13/2025		32	32	3/17/2025	2025	CH2M				
Site 66	RI Report	Final Deliverable				3/17/2025		1	1	3/18/2025	2025	CH2M				
Site 66	SRG Tech Memo	Contractor Report Development				3/18/2025		120	120	7/16/2025	2025	CH2M				
Site 66	SRG Tech Memo	Navy Review Pre-Draft				7/16/2025		33	33	8/18/2025	2025	CH2M				
Site 66	SRG Tech Memo	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/18/2025		32	32	9/19/2025	2025	CH2M				
Site 66	SRG Tech Memo	Navy & Regulatory Review Draft				9/19/2025		60	60	11/18/2025	2026	CH2M	1			
Site 66	SRG Tech Memo	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/18/2025		90	90	2/16/2026	2026	CH2M				
Site 66	SRG Tech Memo	Final Deliverable				2/16/2026		1	1	2/17/2026	2026	CH2M				
Site 66	Remedial Action Alternatives Analysis	Contractor Report Development				2/17/2026		90	90	5/18/2026	2026	CH2M				
Site 66	Remedial Action Alternatives Analysis	Navy Review of Draft Document				5/18/2026		32	32	6/19/2026	2026	CH2M				
Site 66	Remedial Action Alternatives Analysis	Contractor Preparation of Responses to Navy Comments				6/19/2026		14	14	7/3/2026	2026	CH2M				
Site 66	Remedial Action Alternatives Analysis	Navy Review of RTCs and Approval				7/3/2026		14	14	7/17/2026	2026	CH2M				
Site 66	Remedial Action Alternatives Analysis	Prepare Final Document				7/17/2026		14	14	7/31/2026	2026	CH2M				
Site 66	Remedial Action Alternatives Analysis	Submit Final Document				7/31/2026		3	3	8/3/2026	2026	CH2M				
Site 66	Feasibility Study Report	Contractor Report Development				8/3/2026		182	182	2/1/2027	2027	CH2M				
Site 66	Feasibility Study Report	Navy Review Pre-Draft				2/1/2027		30	30	3/3/2027	2027	CH2M				
Site 66	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				3/3/2027		33	33	4/5/2027	2027	CH2M				
Site 66	Feasibility Study Report	Regulatory Review Draft				4/5/2027		63	63	6/7/2027	2027	CH2M				
Site 66	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/7/2027		150	150	11/4/2027	2028	CH2M				
Site 66	Feasibility Study Report	Final Deliverable				11/4/2027		1	1	11/5/2027	2028	CH2M				
Site 66	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/5/2027		367	367	11/6/2028	2029	CH2M				
Site 66	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/6/2028		365	365	11/6/2029	2030	CH2M				
Site 66	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/6/2029		367	367	11/8/2030	2031	CH2M				
Site 66	LUC (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/8/2030		367	367	11/10/2031	2032	CH2M				
Site 66	LTM (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/10/2031		365	365	11/9/2032	2033	CH2M				
Site 66	Construction - Remedial Action (future)	Remedial action plans and construction				11/9/2032		365	365	11/9/2033	2034	CH2M				
Site 66	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				11/9/2033		591	591	6/23/2035	2035	CH2M				
Site 67	RI Report	Regulatory Review Draft		Completed	28	5/1/2021		65	65	7/5/2021	2021	Tetra Tech				
Site 67	RI Report	Response to Comments		Not needed		7/5/2021		35	0	7/5/2021	2021	Tetra Tech		12	Coordination with removal action. Also, additional investigation and BERA and funding required. RTCs overcome by additional SAP scoping and follow-on RI work. See below.	

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 67	RI Report	Regulatory Review Draft Final		Not needed		7/5/2021		63	0	7/5/2021	2021	Tetra Tech		12	Wait to re-assess risks after removal action. Additional investigation required. A new RI report has been added below after a SAP and fieldwork.	
Site 67	RI Report	Response to Comments		Not needed		7/5/2021		35	0	7/5/2021	2021	Tetra Tech				
Site 67	RI Report	Regulatory Concurrence Final		Not needed		7/5/2021		35	0	7/5/2021	2021	Tetra Tech				
Site 67	RI Report	Final Deliverable		Not needed		7/5/2021		33	0	7/5/2021	2021	Tetra Tech				
Site 67	Site 67 NTCRA	Construction Fieldwork		Ongoing		2/1/2021		531	983	10/12/2023	2024	AGVIQ		12	Re-mobilization dependent on subcontractor and field resource schedules	
Site 67	Site 67 NTCRA CCR	Contractor Report Development		Completed		10/12/2023	1/15/2023	64	148	6/12/2023	2023	AGVIQ		12	The report will be prepared with information available from fieldwork conducted to-date. The report will be updated when all fieldwork is complete.	
Site 67	Site 67 NTCRA CCR	Navy Review Pre-Draft		Ongoing		6/12/2023		30	80	8/31/2023	2023			6	Awaiting Navy comments	
Site 67	Site 67 NTCRA CCR	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare Draft				8/31/2023		15	15	9/15/2023	2023					
Site 67	Site 67 NTCRA CCR	Regulatory Review Draft				9/15/2023		61	61	11/15/2023	2024	AGVIQ	1			
Site 67	Site 67 NTCRA CCR	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/15/2023		33	33	12/18/2023	2024	AGVIQ				
Site 67	Site 67 NTCRA CCR	Final Deliverable				12/18/2023		30	30	1/17/2024	2024	AGVIQ				
Site 67	General Sampling and Analysis Plan	Contractor Report Development		Ongoing		3/1/2023		182	182	8/30/2023	2023	Tetra Tech		12	Phase 4 RI BERA. New to schedule as of Q4 2023	
Site 67	General Sampling and Analysis Plan	Navy Review Pre-Draft				8/30/2023		30	30	9/29/2023	2023	Tetra Tech				
Site 67	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				9/29/2023		31	31	10/30/2023	2024	Tetra Tech				
Site 67	General Sampling and Analysis Plan	Regulatory Review Draft				10/30/2023		60	60	12/29/2023	2024	Tetra Tech	1			
Site 67	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				12/29/2023		150	150	5/27/2024	2024	Tetra Tech				
Site 67	General Sampling and Analysis Plan	Final Deliverable				5/27/2024		3	3	5/30/2024	2024	Tetra Tech				
Site 67	RI or SSP Fieldwork	Sampling Fieldwork				5/30/2024		182	182	11/28/2024	2025	Tetra Tech		12	Phase 4 RI BERA. New to schedule as of Q4 2023	
Site 67	RI or SSP Fieldwork	Laboratory Analysis				11/28/2024		32	32	12/30/2024	2025	Tetra Tech				
Site 67	RI or SSP Fieldwork	Data Validation				12/30/2024		30	30	1/29/2025	2025	Tetra Tech				
Site 67	RI or SSP Fieldwork	Data Loading and Verification				1/29/2025		90	90	4/29/2025	2025	Tetra Tech				
Site 67	RI Report	Contractor Report Development				4/29/2025		120	120	8/27/2025	2025	Tetra Tech		12	Phase 4 RI BERA. New to schedule as of Q4 2023	
Site 67	RI Report	Internal Navy Review Pre-Draft				8/27/2025		33	33	9/29/2025	2025	Tetra Tech				
Site 67	RI Report	Response to Comments				9/29/2025		14	14	10/13/2025	2026	Tetra Tech				
Site 67	RI Report	Internal Navy Review Draft				10/13/2025		14	14	10/27/2025	2026	Tetra Tech				
Site 67	RI Report	Regulatory Review Draft				10/27/2025		60	60	12/26/2025	2026	Tetra Tech				
Site 67	RI Report	Response to Comments				12/26/2025		31	31	1/26/2026	2026	Tetra Tech				
Site 67	RI Report	Regulatory Review Draft Final				1/26/2026		60	60	3/27/2026	2026	Tetra Tech				
Site 67	RI Report	Response to Comments				3/27/2026		31	31	4/27/2026	2026	Tetra Tech				
Site 67	RI Report	Regulatory Concurrence Final				4/27/2026		30	30	5/27/2026	2026	Tetra Tech				
Site 67	RI Report	Final Deliverable				5/27/2026		4	4	5/31/2026	2026	Tetra Tech				
Site 67	Feasibility Study Report	Contractor Report Development				9/27/2022	2/1/2026	183	183	8/3/2026	2026	Tetra Tech		12	Updated to follow RI schedule	
Site 67	Feasibility Study Report	Navy Review Pre-Draft				8/3/2026		31	31	9/3/2026	2026	Tetra Tech				
Site 67	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				9/3/2026		32	32	10/5/2026	2027	Tetra Tech				
Site 67	Feasibility Study Report	Regulatory Review Draft				10/5/2026		60	60	12/4/2026	2027	Tetra Tech				
Site 67	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				12/4/2026		150	150	5/3/2027	2027	Tetra Tech				
Site 67	Feasibility Study Report	Final Deliverable				5/3/2027		3	3	5/6/2027	2027	Tetra Tech				
Site 67	PRAP	Contractor Report Development				5/6/2027		91	91	8/5/2027	2027	Tetra Tech				
Site 67	PRAP	Navy Review Draft				8/5/2027		32	32	9/6/2027	2027	Tetra Tech				
Site 67	PRAP	Response to Comments				9/6/2027		14	14	9/20/2027	2027	Tetra Tech				
Site 67	PRAP	Navy Review Redlined Pre-draft & RTCs, & obtain approval				9/20/2027		14	14	10/4/2027	2028	Tetra Tech				
Site 67	PRAP	Regulatory (tech support) Review Draft_V1				10/4/2027		63	63	12/6/2027	2028	Tetra Tech				
Site 67	PRAP	Response to Comments				12/6/2027		31	31	1/6/2028	2028	Tetra Tech				
Site 67	PRAP	Regulatory (tech support) Review & approve revised redlined Draft_V1				1/6/2028		32	32	2/7/2028	2028	Tetra Tech				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 67	PRAP	Regulatory (EPA legal) Review Draft_V2				2/7/2028		63	63	4/10/2028	2028	Tetra Tech				
Site 67	PRAP	Response to Comments				4/10/2028		30	30	5/10/2028	2028	Tetra Tech				
Site 67	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				5/10/2028		33	33	6/12/2028	2028	Tetra Tech				
Site 67	PRAP	Regulatory Concurrence Draft				6/12/2028		30	30	7/12/2028	2028	Tetra Tech				
Site 67	PRAP	Final Deliverable				7/12/2028		1	1	7/13/2028	2028	Tetra Tech				
Site 67	ROD	Contractor Report Development				7/13/2028		120	120	11/10/2028	2029	Tetra Tech				
Site 67	ROD	Navy Review Draft				11/10/2028		31	31	12/11/2028	2029	Tetra Tech				
Site 67	ROD	Response to Comments				12/11/2028		14	14	12/25/2028	2029	Tetra Tech				
Site 67	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval				12/25/2028		14	14	1/8/2029	2029	Tetra Tech				
Site 67	ROD	Regulatory (tech support) Review Draft_V1				1/8/2029		60	60	3/9/2029	2029	Tetra Tech				
Site 67	ROD	Response to Comments				3/9/2029		31	31	4/9/2029	2029	Tetra Tech				
Site 67	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1				4/9/2029		30	30	5/9/2029	2029	Tetra Tech				
Site 67	ROD	Regulatory (EPA legal) Review Draft_V2				5/9/2029		61	61	7/9/2029	2029	Tetra Tech				
Site 67	ROD	Response to Comments				7/9/2029		30	30	8/8/2029	2029	Tetra Tech				
Site 67	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2				8/8/2029		30	30	9/7/2029	2029	Tetra Tech				
Site 67	ROD	Regulatory Concurrence Draft				9/7/2029		31	31	10/8/2029	2030	Tetra Tech				
Site 67	ROD	Final Deliverable				10/8/2029		1	1	10/9/2029	2030	Tetra Tech				
Site 67	ROD	Navy and EPA Signatures				10/9/2029		62	62	12/10/2029	2030	Tetra Tech				
Site 67	Site 67 Remedial Design	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/10/2029		365	365	12/10/2030	2031	Tetra Tech				
Site 67	LUC (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/10/2030		365	365	12/10/2031	2032	Tetra Tech				
Site 67	LTM (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/10/2031		365	365	12/9/2032	2033	Tetra Tech				
Site 67	Site 67 Remedial Action	Work plan, construction, and report				12/9/2032		750	750	12/29/2034	2035	Tetra Tech				
Site 67	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/29/2034		367	367	12/31/2035	2036	Tetra Tech				
Site 68	SSP Report	Contractor Report Development		Completed		6/1/2021	11/1/2021	126	322	9/19/2022	2022	Tetra Tech		12	Laboratory delay	
Site 68	SSP Report	Internal Navy Review Pre-Draft		Not needed		9/19/2022		35	0	9/19/2022	2022	Tetra Tech		12	Version not needed/scoped	
Site 68	SSP Report	Response to Comments		Not needed		9/19/2022		14	0	9/19/2022	2022	Tetra Tech		12	Version not needed/scoped	
Site 68	SSP Report	Internal Navy Review Draft		Not needed		9/19/2022		50	0	9/19/2022	2022	Tetra Tech				
Site 68	SSP Report	Regulatory Review Draft		Completed		9/19/2022		64	91	12/19/2022	2023	Tetra Tech		6		
Site 68	SSP Report	Response to Comments		Completed		12/19/2022		35	150	5/18/2023	2023	Tetra Tech				
Site 68	SSP Report	Regulatory Review Draft Final		Ongoing		5/18/2023		63	90	8/16/2023	2023	Tetra Tech		9	EPA tech review time	
Site 68	SSP Report	Response to Comments				8/16/2023		35	0	8/16/2023	2023	Tetra Tech				
Site 68	SSP Report	Regulatory Concurrence Final				8/16/2023		35	21	9/6/2023	2023	Tetra Tech				
Site 68	SSP Report	Final Deliverable				9/6/2023		5	1	9/7/2023	2023	Tetra Tech				
Site 68	Site 68 NTCRA Work Plan	Contractor Report Development		Completed		1/18/2023		31	118	5/16/2023	2023	AGVIQ		12	New deliverable as of Q2 2023	
Site 68	Site 68 NTCRA Work Plan	Navy and Regulatory Review Draft		Ongoing		5/16/2023		62	190	11/22/2023	2024	AGVIQ		12	The Navy has reviewed and provided comments. Regulators will review the document following review of the SSP and EE/CA.	
Site 68	Site 68 NTCRA Work Plan	Respond to comments, Navy & Regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/22/2023		33	33	12/25/2023	2024	AGVIQ				
Site 68	Site 68 NTCRA Work Plan	Final Deliverable				12/25/2023		1	1	12/26/2023	2024	AGVIQ				
Site 68	Site 68 Erosion and Sediment Control Plan	Contractor Report Development		Completed		3/24/2023		30	46	5/9/2023	2023	AGVIQ		12	New deliverable as of Q3 2023	
Site 68	Site 68 Erosion and Sediment Control Plan	Review for MDE via Expeditor		Ongoing		5/9/2023		61	104	8/21/2023	2023	AGVIQ		12	Initial comments received 5/31/23 and responded to 6/30/23. Second round of comments received 7/12/23. Responses sent 7/20/23. Review underway.	
Site 68	Site 68 Erosion and Sediment Control Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/21/2023		33	63	10/23/2023	2024	AGVIQ				
Site 68	Site 68 Erosion and Sediment Control Plan	Final Deliverable				10/23/2023		1	16	11/8/2023	2024	AGVIQ				
Site 68	Site 68 Sampling and Analysis Plan	Contractor Report Development		Completed		2/21/2023		32	78	5/10/2023	2023	AGVIQ		12	New deliverable as of Q3 2023	
Site 68	Site 68 Sampling and Analysis Plan	Navy Review Pre-Draft		Completed		5/10/2023		30	37	6/16/2023	2023	AGVIQ				
Site 68	Site 68 Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		6/16/2023		15	5	6/21/2023	2023	AGVIQ				
Site 68	Site 68 Sampling and Analysis Plan	Navy & Regulatory Review Draft				6/21/2023		40	154	11/22/2023	2024	AGVIQ	1	12	The Navy has reviewed and provided approval. Regulators will review the document following review of the SSP and EE/CA.	
Site 68	Site 68 Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/22/2023		20	14	12/6/2023	2024	AGVIQ				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 68	Site 68 Sampling and Analysis Plan	Final Deliverable				12/6/2023		1	1	12/7/2023	2024	AGVIQ				
Site 68	Site 68 NTCRA and Site Restoration	Pre-construction Activities				8/17/2023		20	20	9/6/2023	2023	AGVIQ		12	New to schedule as of Q3 2023	
Site 68	Site 68 NTCRA and Site Restoration	Mobilization and Pre-excavation Activities				9/6/2023		12	12	9/18/2023	2023	AGVIQ				
Site 68	Site 68 NTCRA and Site Restoration	Excavation and Restoration				9/18/2023		46	46	11/3/2023	2024	AGVIQ				
Site 68	Site 68 Construction Completion Report	Contractor Report Development				11/20/2023		44	44	1/3/2024	2024	AGVIQ		12	New deliverable as of Q3 2023	
Site 68	Site 68 Construction Completion Report	Navy and Regulatory Review				1/3/2024		84	84	3/27/2024	2024	AGVIQ	1			
Site 68	Site 68 Construction Completion Report	Response to Comments				3/27/2024		20	20	4/16/2024	2024	AGVIQ				
Site 68	Site 68 Construction Completion Report	Final Deliverable				4/16/2024		20	20	5/6/2024	2024	AGVIQ				
Site 68	Engineering Evaluation/ Cost Analyis	Contractor Report Development		Completed		2/1/2022		122	241	9/30/2022	2022	Tetra Tech				
Site 68	Engineering Evaluation/ Cost Analyis	Navy Review Pre-Draft		Not needed		9/30/2022		31	0	9/30/2022	2022	Tetra Tech		12	Version not needed/scoped	
Site 68	Engineering Evaluation/ Cost Analyis	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Not needed		9/30/2022		35	0	9/30/2022	2022	Tetra Tech		12	Version not needed/scoped	
Site 68	Engineering Evaluation/ Cost Analyis	Navy & Regulatory Review Draft		Completed		9/30/2022		63	103	1/11/2023	2023	Tetra Tech		7	6/8/2023	
Site 68	Engineering Evaluation/ Cost Analyis	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Ongoing		1/11/2023		92	250	9/18/2023	2023	Tetra Tech		9	EPA tech support review	
Site 68	Engineering Evaluation/ Cost Analyis	Final Deliverable				9/18/2023		3	3	9/21/2023	2023	Tetra Tech				
Site 68	Action Memorandum	Contractor Report Development				9/21/2023	5/18/2023	127	130	9/25/2023	2023	Tetra Tech		12	Updated to match EE/CA schedule	
Site 68	Action Memorandum	Navy Review Pre-Draft				9/25/2023		31	0	9/25/2023	2023	Tetra Tech		12	Version not needed	
Site 68	Action Memorandum	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				9/25/2023		78	0	9/25/2023	2023	Tetra Tech		12	Version not needed	
Site 68	Action Memorandum	Navy & Regulatory Review Draft				9/25/2023		61	45	11/9/2023	2024	Tetra Tech	1			
Site 68	Action Memorandum	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				11/9/2023		96	35	12/14/2023	2024	Tetra Tech				
Site 68	Action Memorandum	Final Deliverable				12/14/2023		1	1	12/15/2023	2024	Tetra Tech				
Site 68	Action Memorandum	Navy Signature				12/15/2023		34	34	1/18/2024	2024	Tetra Tech				
Site 68	Construction - Removal Action (future)	Removal action plans and construction				1/18/2024		367	367	1/19/2025	2025	Tetra Tech				
Site 69	PRAP	Regulatory (EPA legal) Review & approve revised redlined Draft_V2		Completed	36	11/22/2021		30	30	12/22/2021	2022	Tetra Tech				
Site 69	PRAP	Regulatory Concurrence Draft		Completed		12/22/2021		31	19	1/10/2022	2022	Tetra Tech				
Site 69	PRAP	Final Deliverable		Completed		1/10/2022		3	3	1/13/2022	2022	Tetra Tech				
Site 69	ROD	Contractor Report Development		Completed		1/13/2022	12/1/2021	123	61	1/31/2022	2022	Tetra Tech				
Site 69	ROD	Navy Review Draft		Completed		1/31/2022		31	31	3/3/2022	2022	Tetra Tech				
Site 69	ROD	Response to Comments		Completed		3/3/2022		14	14	3/17/2022	2022	Tetra Tech				
Site 69	ROD	Navy Review Redlined Pre-draft & RTCs, & obtain approval		Completed		3/17/2022		14	14	3/31/2022	2022	Tetra Tech				
Site 69	ROD	Regulatory (tech support) Review Draft_V1		Completed		3/31/2022	1/31/2022	64	200	8/19/2022	2022	Tetra Tech		7	Concurrent Navy and regulatory review. Additional time for MDE review.	
Site 69	ROD	Response to Comments		Completed		8/19/2022		34	46	10/4/2022	2023	Tetra Tech				
Site 69	ROD	Regulatory (tech support) Review & approve revised redlined Draft_V1		Completed		10/4/2022		34	0	10/4/2022	2023	Tetra Tech		12	This is the V2 review	
Site 69	ROD	Regulatory (EPA legal) Review Draft_V2		Completed		10/4/2022		63	63	12/6/2022	2023	Tetra Tech				
Site 69	ROD	Response to Comments		Completed		12/6/2022		35	14	12/20/2022	2023	Tetra Tech				
Site 69	ROD	Regulatory (EPA legal) Review & approve revised redlined Draft_V2		Completed		12/20/2022		34	13	1/2/2023	2023	Tetra Tech				
Site 69	ROD	Regulatory Concurrence Draft		Completed		1/2/2023		31	15	1/17/2023	2023	Tetra Tech				
Site 69	ROD	Final Deliverable		Completed		1/17/2023		1	1	1/18/2023	2023	Tetra Tech				
Site 69	ROD	Navy and EPA Signatures		Completed		1/18/2023		62	106	5/4/2023	2023	Tetra Tech		2	6/8/2023	
Site 69	Remedial Design	Contractor Report Development		Ongoing		5/4/2023		120	120	9/1/2023	2023	Tetra Tech		12	This RD is an LTM plan for groundwater.	
Site 69	Remedial Design	Navy Review Pre-Draft (35%)				9/1/2023		33	33	10/4/2023	2024	Tetra Tech				
Site 69	Remedial Design	Respond to comments, Navy Review Redlined Pre-Draft (35%) & RTCs, obtain approval, & prepare draft (100%)				10/4/2023		34	34	11/7/2023	2024	Tetra Tech				
Site 69	Remedial Design	Regulatory Review Draft (100%)				11/7/2023		62	62	1/8/2024	2024	Tetra Tech	1			
Site 69	Remedial Design	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/8/2024		150	150	6/6/2024	2024	Tetra Tech				
Site 69	Remedial Design	Final Deliverable				6/6/2024		4	4	6/10/2024	2024	Tetra Tech				
Site 69	LUC RD	Contractor Report Development		Ongoing		6/10/2024	7/5/2023	63	63	9/6/2023	2023	Tetra Tech		12	Preparing LUC RD concurrent with LTM Plan	

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Site 69	LUC RD	Navy Review Pre-Draft				9/6/2023		30	30	10/6/2023	2024	Tetra Tech				
Site 69	LUC RD	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/6/2023		33	33	11/8/2023	2024	Tetra Tech				
Site 69	LUC RD	Regulatory Review Draft				11/8/2023		61	61	1/8/2024	2024	Tetra Tech	1			
Site 69	LUC RD	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/8/2024		63	63	3/11/2024	2024	Tetra Tech				
Site 69	LUC RD	Final Deliverable				3/11/2024		2	2	3/13/2024	2024	Tetra Tech				
Site 69	Site 69 Soil Remedial Action Work Plan	Contractor Report Development				3/13/2024		30	30	4/12/2024	2024	None		12	New to schedule as of Q4 2023. Contractor not yet determined.	
Site 69	Site 69 Soil Remedial Action Work Plan	Navy and Regulatory Review Draft				4/12/2024		61	61	6/12/2024	2024	None	1			
Site 69	Site 69 Soil Remedial Action Work Plan	Respond to comments, Navy & Regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/12/2024		61	61	8/12/2024	2024	None				
Site 69	Site 69 Soil Remedial Action Work Plan	Final Deliverable				8/12/2024		3	3	8/15/2024	2024	None				
Site 69	Site 69 Remedial Action	Construction Fieldwork				8/15/2024		182	182	2/13/2025	2025	None		12	New to schedule as of Q4 2023. Contractor not yet determined.	
Site 69	Site 69 CCR	Contractor Report Development				2/13/2025		60	60	4/14/2025	2025	None		12	New to schedule as of Q4 2023. Contractor not yet determined.	
Site 69	Site 69 CCR	Regulatory Review Draft				4/14/2025		60	60	6/13/2025	2025	None	1			
Site 69	Site 69 CCR	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/13/2025		62	62	8/14/2025	2025	None				
Site 69	Site 69 CCR	Final Deliverable				8/14/2025		32	32	9/15/2025	2025	None				
Site 69	RACR	Contractor Report Development				9/15/2025		63	63	11/17/2025	2026	Tetra Tech				
Site 69	RACR	Navy Review Pre-Draft				11/17/2025		35	35	12/22/2025	2026	Tetra Tech				
Site 69	RACR	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				12/22/2025		31	31	1/22/2026	2026	Tetra Tech				
Site 69	RACR	Regulatory Review Draft				1/22/2026		63	63	3/26/2026	2026	Tetra Tech	1			
Site 69	RACR	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				3/26/2026		63	63	5/28/2026	2026	Tetra Tech				
Site 69	RACR	Final Deliverable				5/28/2026		4	4	6/1/2026	2026	Tetra Tech				
Site 70	RI SAP Addendum	Contractor Report Development		Ongoing	26	4/1/2021	3/1/2023	181	181	8/29/2023	2023	Tetra Tech		12	Additional data gaps identified in summer 2022. Additional funding was received.	
Site 70	RI SAP Addendum	Navy Review Pre-Draft				8/29/2023		34	34	10/2/2023	2024	Tetra Tech				
Site 70	RI SAP Addendum	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				10/2/2023		32	32	11/3/2023	2024	Tetra Tech				
Site 70	RI SAP Addendum	Regulatory Review Draft				11/3/2023		62	62	1/4/2024	2024	Tetra Tech	1	12	Lab change during review, additional scoping session	
Site 70	RI SAP Addendum	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/4/2024		151	46	2/19/2024	2024	Tetra Tech				
Site 70	RI SAP Addendum	Final Deliverable				2/19/2024		1	3	2/22/2024	2024	Tetra Tech				
Site 70	RI or SSP Fieldwork	Sampling Fieldwork				2/22/2024		182	60	4/22/2024	2024	Tetra Tech				
Site 70	RI or SSP Fieldwork	Laboratory Analysis				4/22/2024		32	32	5/24/2024	2024	Tetra Tech				
Site 70	RI or SSP Fieldwork	Data Validation				5/24/2024		35	35	6/28/2024	2024	Tetra Tech				
Site 70	RI or SSP Fieldwork	Data Loading and Verification				6/28/2024		91	91	9/27/2024	2024	Tetra Tech				
Site 70	RI Report	Contractor Report Development				9/27/2024		122	122	1/27/2025	2025	Tetra Tech				
Site 70	RI Report	Internal Navy Review Pre-Draft				1/27/2025		30	0	1/27/2025	2025	Tetra Tech		12	Version not needed/scoped	
Site 70	RI Report	Response to Comments				1/27/2025		14	0	1/27/2025	2025	Tetra Tech		12	Version not needed/scoped	
Site 70	RI Report	Internal Navy Review Draft				1/27/2025		14	0	1/27/2025	2025	Tetra Tech		12	Version not needed/scoped	
Site 70	RI Report	Regulatory Review Draft				1/27/2025		63	63	3/31/2025	2025	Tetra Tech	1			
Site 70	RI Report	Response to Comments				3/31/2025		30	30	4/30/2025	2025	Tetra Tech				
Site 70	RI Report	Regulatory Review Draft Final				4/30/2025		61	61	6/30/2025	2025	Tetra Tech				
Site 70	RI Report	Response to Comments				6/30/2025		30	30	7/30/2025	2025	Tetra Tech				
Site 70	RI Report	Regulatory Concurrence Final				7/30/2025		33	33	9/1/2025	2025	Tetra Tech				
Site 70	RI Report	Final Deliverable				9/1/2025		3	3	9/4/2025	2025	Tetra Tech				
Site 70	Feasibility Study Report	Contractor Report Development				9/4/2025		182	182	3/5/2026	2026	Tetra Tech				
Site 70	Feasibility Study Report	Navy Review Pre-Draft				3/5/2026		32	32	4/6/2026	2026	Tetra Tech				
Site 70	Feasibility Study Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/6/2026		30	30	5/6/2026	2026	Tetra Tech				
Site 70	Feasibility Study Report	Regulatory Review Draft				5/6/2026		61	61	7/6/2026	2026	Tetra Tech				
Site 70	Feasibility Study Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				7/6/2026		150	150	12/3/2026	2027	Tetra Tech				
Site 70	Feasibility Study Report	Final Deliverable				12/3/2026		4	4	12/7/2026	2027	Tetra Tech				
Site 70	PRAP (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/7/2026		365	365	12/7/2027	2028	Tetra Tech				
Site 70	ROD (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/7/2027		365	365	12/6/2028	2029	Tetra Tech				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 70	Remedial Design (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/6/2028		365	365	12/6/2029	2030	Tetra Tech				
Site 70	LUC (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/6/2029		368	368	12/9/2030	2031	Tetra Tech				
Site 70	LTM (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/9/2030		365	365	12/9/2031	2032	Tetra Tech				
Site 70	Construction - Remedial Action (future)	Remedial action plans and construction				12/9/2031		367	367	12/10/2032	2033	Tetra Tech				
Site 70	RACR (future)	Pre-draft, Draft, and Final. Includes Navy and regulatory reviews				12/10/2032		365	365	12/10/2033	2034	Tetra Tech				
Site 71	PFAS PA Report	Contractor Report Development		Completed		6/10/2021		124	124	10/12/2021	2022	CH2M				
Site 71	PFAS PA Report	Navy RPM Review Pre-Draft_V1		Completed		10/12/2021		62	62	12/13/2021	2022	CH2M				
Site 71	PFAS PA Report	Respond to Comments & obtain RPM's approval		Completed		12/13/2021		30	23	1/5/2022	2022	CH2M		13	Navy RPM & NSFIH review completed earlier than planned	
Site 71	PFAS PA Report	Navy SME Review Pre-Draft_V2		Completed		1/5/2022		30	27	2/1/2022	2022	CH2M				
Site 71	PFAS PA Report	Respond to comments, Navy SME Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft		Completed		2/1/2022		31	65	4/7/2022	2022	CH2M		12	B/c of extensive LANT SMEs comments	
Site 71	PFAS PA Report	Regulatory Review Draft		Completed		4/7/2022		60	120	8/5/2022	2022	CH2M		7	Longer review time by MDE	
Site 71	PFAS PA Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		8/5/2022		150	228	3/21/2023	2023	CH2M		12	Delay due to multiple rounds of comments from EPA.	
Site 71	PFAS PA Report	Final Deliverable		Completed		3/21/2023		1	1	3/22/2023	2023	CH2M				
Site 71	General Sampling and Analysis Plan	Contractor Report Development	PFAS & Funds expire in June 2023	Completed		2/14/2022		181	172	8/5/2022	2022	CH2M		12	PFAS SI needs to be completed by Sep 2023 to meet congressional mandate	
Site 71	General Sampling and Analysis Plan	Navy Review Pre-Draft	PFAS & Funds expire in June 2023	Completed		8/5/2022		32	42	9/16/2022	2022	CH2M				
Site 71	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	PFAS & Funds expire in June 2023	Completed		9/16/2022		30	41	10/27/2022	2023	CH2M				
Site 71	General Sampling and Analysis Plan	Regulatory Review Draft	PFAS & Funds expire in June 2023	Completed		10/27/2022		62	106	2/10/2023	2023	CH2M		7	Longer review time by MDE	
Site 71	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	PFAS & Funds expire in June 2023	Completed		2/10/2023		151	122	6/12/2023	2023	CH2M				
Site 71	General Sampling and Analysis Plan	Final Deliverable	PFAS & Funds expire in June 2023	Completed		6/12/2023		4	3	6/15/2023	2023	CH2M				
Site 71	PFAS SI Fieldwork	Complete Sampling Fieldwork	PFAS fieldwork & report to be completed in Sep 2022	Completed		10/24/2022	10/31/2022	93	91	1/30/2023	2023	CH2M		12	Need to obtain regulatory approval to start intrusive fieldwork before finalization of SAP	
Site 71	PFAS SI Fieldwork	Laboratory Analysis & QC	PFAS fieldwork & report to be completed in Sep 2022	Completed		1/30/2023		62	32	3/3/2023	2023	CH2M				
Site 71	PFAS SI Fieldwork	Data Validation, QC, data load	PFAS fieldwork & report to be completed in Sep 2022	Completed		3/3/2023		60	30	4/2/2023	2023	CH2M				
Site 71	PFAS SI Investigation Report	Contractor Report Development	PFAS fieldwork & report to be completed in Sep 2022	Completed		4/2/2023	2/6/2023	120	95	5/12/2023	2023	CH2M		12	Expedited report preparation to allow Navy SMEs to review the report in a timely manner.	
Site 71	PFAS SI Investigation Report	Navy Review Pre-Draft	N=1; LANT SMEs to review	Completed		5/12/2023		34	75	7/26/2023	2023	CH2M		6	Longer Navy review time	
Site 71	PFAS SI Investigation Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	PFAS fieldwork & report to be completed in Sep 2022	Completed		7/26/2023		31	5	7/31/2023	2023	CH2M		12	LANT SMEs have approved the report. Waiting on Navy RPM comments.	
Site 71	PFAS SI Investigation Report	Regulatory Review Draft	PFAS fieldwork & report to be completed in Sep 2022	Ongoing		7/31/2023		63	56	9/25/2023	2023	CH2M		12	Requesting an expedited regulatory review time	
Site 71	PFAS SI Investigation Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	PFAS fieldwork & report to be completed in Sep 2022			9/25/2023		151	30	10/25/2023	2024	CH2M				
Site 71	PFAS SI Investigation Report	Final Deliverable	PFAS fieldwork & report to be completed in Sep 2022			10/25/2023		1	1	10/26/2023	2024	CH2M				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 1	Sampling Fieldwork (Round 1)		Completed	54	11/17/2021		7	7	11/24/2021	2022	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 1	Laboratory Analysis & QC (Round 1)		Completed		11/24/2021		33	127	3/31/2022	2022	AECOM		12	Laboratory delays	

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Stump Neck MRP SASRs	UXO 15 Fieldwork Round 1	Data Validation (Round 1)		Completed		3/31/2022		35	35	5/5/2022	2022	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 1	Data Loading and Verification (Round 1)		Completed		5/5/2022		36	56	6/30/2022	2022	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 1	IDW Removal (Round 1)		Completed		6/30/2022		92	91	9/29/2022	2022	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 2	Sampling Fieldwork (Round 2)		Completed		9/29/2022	7/12/2022	7	7	7/19/2022	2022	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 2	Laboratory Analysis & QC (Round 2)		Completed		7/19/2022		36	104	10/31/2022	2023	AECOM		12	Anticipated laboratory delay	
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 2	Data Validation (Round 2)		Completed		10/31/2022		32	32	12/2/2022	2023	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 2	Data Loading and Verification (Round 2)		Completed		12/2/2022		35	35	1/6/2023	2023	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 2	IDW Removal (Round 2)		Not needed		1/6/2023		91	0	1/6/2023	2023	AECOM		12	No IDW was generated.	
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 3	Sampling Fieldwork (Round 3)				1/6/2023	9/11/2023	7	7	9/18/2023	2023	AECOM		12	Fieldwork will be conducted in conjunction with the additional sampling at UXO 26	
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 3	Laboratory Analysis & QC (Round 3)				9/18/2023		34	63	11/20/2023	2024	AECOM		12	Anticipated laboratory delay	
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 3	Data Validation (Round 3)				11/20/2023		30	30	12/20/2023	2024	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 3	Data Loading and Verification (Round 3)				12/20/2023		33	33	1/22/2024	2024	AECOM				
Stump Neck MRP SASRs	UXO 15 Fieldwork Round 3	IDW Removal (Round 3)				1/22/2024		91	91	4/22/2024	2024	AECOM				
Stump Neck MRP SASRs	UXO 15 Technical Memo	Contractor Report Development				4/22/2024		91	91	7/22/2024	2024	AECOM				
Stump Neck MRP SASRs	UXO 15 Technical Memo	Navy and Regulatory Review Draft				7/22/2024		63	63	9/23/2024	2024	AECOM	1			
Stump Neck MRP SASRs	UXO 15 Technical Memo	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/23/2024		150	150	2/20/2025	2025	AECOM				
Stump Neck MRP SASRs	UXO 15 Technical Memo	Final Deliverable				2/20/2025		1	1	2/21/2025	2025	AECOM				
Basewide ESS	Sites 17, 43, 47, & 57 ESS Tech Memo	Contractor Report Development		Completed		8/30/2022		122	297	6/23/2023	2023	Meadows/Burns & McDonnell		12	Delay in data acquisition/verification; additional time added for internal review prior to pre-draft submittal	
Basewide ESS	Sites 17, 43, 47, & 57 ESS Tech Memo	Internal Navy Review Pre-Draft		Ongoing		6/23/2023		32	62	8/24/2023	2023	Meadows/Burns & McDonnell				
Basewide ESS	Sites 17, 43, 47, & 57 ESS Tech Memo	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				8/24/2023		49	49	10/12/2023	2024	Meadows/Burns & McDonnell				
Basewide ESS	Sites 17, 43, 47, & 57 ESS Tech Memo	Regulator Review				10/12/2023		63	63	12/14/2023	2024	Meadows/Burns & McDonnell	1			
Basewide ESS	Sites 17, 43, 47, & 57 ESS Tech Memo	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				12/14/2023		62	62	2/14/2024	2024	Meadows/Burns & McDonnell				
Basewide ESS	Sites 17, 43, 47, & 57 ESS Tech Memo	Final Deliverable				2/14/2024		1	1	2/15/2024	2024	Meadows/Burns & McDonnell				
Site 72	General Sampling and Analysis Plan	Contractor Report Development				11/6/2023		183	182	5/6/2024	2024	CH2M		12	New to schedule as of Q4 2023	
Site 72	General Sampling and Analysis Plan	Navy Review Pre-Draft				5/6/2024		30	30	6/5/2024	2024	CH2M				
Site 72	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2024		30	30	7/5/2024	2024	CH2M				
Site 72	General Sampling and Analysis Plan	Regulatory Review Draft				7/5/2024		60	60	9/3/2024	2024	CH2M	1			
Site 72	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/3/2024		150	150	1/31/2025	2025	CH2M				
Site 72	General Sampling and Analysis Plan	Final Deliverable				1/31/2025		4	4	2/4/2025	2025	CH2M				
Site 72	RI or SSP Fieldwork	Sampling Fieldwork				2/4/2025		182	182	8/5/2025	2025	CH2M		12	New to schedule as of Q4 2023	
Site 72	RI or SSP Fieldwork	Laboratory Analysis				8/5/2025		30	30	9/4/2025	2025	CH2M				
Site 72	RI or SSP Fieldwork	Data Validation				9/4/2025		32	32	10/6/2025	2026	CH2M				
Site 72	RI or SSP Fieldwork	Data Loading and Verification				10/6/2025		91	91	1/5/2026	2026	CH2M				
Site 72	PFAS RI Report	Contractor Report Development				1/5/2026		120	120	5/5/2026	2026	CH2M		12	New to schedule as of Q4 2023	
Site 72	PFAS RI Report	Navy Review Pre-Draft				5/5/2026		31	31	6/5/2026	2026	CH2M				
Site 72	PFAS RI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2026		31	31	7/6/2026	2026	CH2M				
Site 72	PFAS RI Report	Regulatory Review Draft				7/6/2026		63	63	9/7/2026	2026	CH2M				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 72	PFAS RI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/7/2026		150	150	2/4/2027	2027	CH2M				
Site 72	PFAS RI Report	Final Deliverable				2/4/2027		1	1	2/5/2027	2027	CH2M				
Site 76	General Sampling and Analysis Plan	Contractor Report Development				11/6/2023		183	182	5/6/2024	2024	CH2M		12	New to schedule as of Q4 2023	
Site 76	General Sampling and Analysis Plan	Navy Review Pre-Draft				5/6/2024		30	30	6/5/2024	2024	CH2M				
Site 76	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2024		30	30	7/5/2024	2024	CH2M				
Site 76	General Sampling and Analysis Plan	Regulatory Review Draft				7/5/2024		60	60	9/3/2024	2024	CH2M	0		Combined with Site 72 for regulatory review	
Site 76	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/3/2024		150	150	1/31/2025	2025	CH2M				
Site 76	General Sampling and Analysis Plan	Final Deliverable				1/31/2025		3	3	2/3/2025	2025	CH2M				
Site 76	RI or SSP Fieldwork	Sampling Fieldwork				2/3/2025		182	182	8/4/2025	2025	CH2M		12	New to schedule as of Q4 2023	
Site 76	RI or SSP Fieldwork	Laboratory Analysis				8/4/2025		30	30	9/3/2025	2025	CH2M				
Site 76	RI or SSP Fieldwork	Data Validation				9/3/2025		33	33	10/6/2025	2026	CH2M				
Site 76	RI or SSP Fieldwork	Data Loading and Verification				10/6/2025		91	91	1/5/2026	2026	CH2M				
Site 76	PFAS RI Report	Contractor Report Development				1/5/2026		120	120	5/5/2026	2026	CH2M		12	New to schedule as of Q4 2023	
Site 76	PFAS RI Report	Navy Review Pre-Draft				5/5/2026		30	30	6/4/2026	2026	CH2M				
Site 76	PFAS RI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/4/2026		32	32	7/6/2026	2026	CH2M				
Site 76	PFAS RI Report	Regulatory Review Draft				7/6/2026		60	60	9/4/2026	2026	CH2M				
Site 76	PFAS RI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/4/2026		150	150	2/1/2027	2027	CH2M				
Site 76	PFAS RI Report	Final Deliverable				2/1/2027		1	1	2/2/2027	2027	CH2M				
Site 75	General Sampling and Analysis Plan	Contractor Report Development				11/6/2023		184	182	5/6/2024	2024	CH2M		12	New to schedule as of Q4 2023	
Site 75	General Sampling and Analysis Plan	Navy Review Pre-Draft				5/6/2024		30	30	6/5/2024	2024	CH2M				
Site 75	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2024		33	33	7/8/2024	2024	CH2M				
Site 75	General Sampling and Analysis Plan	Regulatory Review Draft				7/8/2024		60	60	9/6/2024	2024	CH2M	0		Combined with Site 72 for regulatory review	
Site 75	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/6/2024		150	150	2/3/2025	2025	CH2M				
Site 75	General Sampling and Analysis Plan	Final Deliverable				2/3/2025		3	3	2/6/2025	2025	CH2M				
Site 75	RI or SSP Fieldwork	Sampling Fieldwork				2/6/2025		182	182	8/7/2025	2025	CH2M		12	New to schedule as of Q4 2023	
Site 75	RI or SSP Fieldwork	Laboratory Analysis				8/7/2025		32	32	9/8/2025	2025	CH2M				
Site 75	RI or SSP Fieldwork	Data Validation				9/8/2025		35	35	10/13/2025	2026	CH2M				
Site 75	RI or SSP Fieldwork	Data Loading and Verification				10/13/2025		91	91	1/12/2026	2026	CH2M				
Site 75	PFAS RI Report	Contractor Report Development				1/12/2026		120	120	5/12/2026	2026	CH2M		12	New to schedule as of Q4 2023	
Site 75	PFAS RI Report	Navy Review Pre-Draft				5/12/2026		30	30	6/11/2026	2026	CH2M				
Site 75	PFAS RI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/11/2026		32	32	7/13/2026	2026	CH2M				
Site 75	PFAS RI Report	Regulatory Review Draft				7/13/2026		60	60	9/11/2026	2026	CH2M				
Site 75	PFAS RI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/11/2026		150	150	2/8/2027	2027	CH2M				
Site 75	PFAS RI Report	Final Deliverable				2/8/2027		1	1	2/9/2027	2027	CH2M				
Site 74	General Sampling and Analysis Plan	Contractor Report Development				11/6/2023		184	182	5/6/2024	2024	CH2M		12	New to schedule as of Q4 2023	
Site 74	General Sampling and Analysis Plan	Navy Review Pre-Draft				5/6/2024		30	30	6/5/2024	2024	CH2M				
Site 74	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2024		33	33	7/8/2024	2024	CH2M				
Site 74	General Sampling and Analysis Plan	Regulatory Review Draft				7/8/2024		60	60	9/6/2024	2024	CH2M	0		Combined with Site 72 for regulatory review	
Site 74	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/6/2024		150	150	2/3/2025	2025	CH2M				
Site 74	General Sampling and Analysis Plan	Final Deliverable				2/3/2025		3	3	2/6/2025	2025	CH2M				
Site 74	RI or SSP Fieldwork	Sampling Fieldwork				2/6/2025		182	182	8/7/2025	2025	CH2M		12	New to schedule as of Q4 2023	
Site 74	RI or SSP Fieldwork	Laboratory Analysis				8/7/2025		32	32	9/8/2025	2025	CH2M				
Site 74	RI or SSP Fieldwork	Data Validation				9/8/2025		35	35	10/13/2025	2026	CH2M				
Site 74	RI or SSP Fieldwork	Data Loading and Verification				10/13/2025		91	91	1/12/2026	2026	CH2M				
Site 74	PFAS RI Report	Contractor Report Development				1/12/2026		120	120	5/12/2026	2026	CH2M		12	New to schedule as of Q4 2023	

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Site 74	PFAS RI Report	Navy Review Pre-Draft				5/12/2026		30	30	6/11/2026	2026	CH2M				
Site 74	PFAS RI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/11/2026		32	32	7/13/2026	2026	CH2M				
Site 74	PFAS RI Report	Regulatory Review Draft				7/13/2026		60	60	9/11/2026	2026	CH2M				
Site 74	PFAS RI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/11/2026		150	150	2/8/2027	2027	CH2M				
Site 74	PFAS RI Report	Final Deliverable				2/8/2027		1	1	2/9/2027	2027	CH2M				
Site 73	General Sampling and Analysis Plan	Contractor Report Development				11/6/2023		184	182	5/6/2024	2024	CH2M		12	New to schedule as of Q4 2023	
Site 73	General Sampling and Analysis Plan	Navy Review Pre-Draft				5/6/2024		30	30	6/5/2024	2024	CH2M				
Site 73	General Sampling and Analysis Plan	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2024		33	33	7/8/2024	2024	CH2M				
Site 73	General Sampling and Analysis Plan	Regulatory Review Draft				7/8/2024		60	60	9/6/2024	2024	CH2M	0		Combined with Site 72 for regulatory review	
Site 73	General Sampling and Analysis Plan	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/6/2024		150	150	2/3/2025	2025	CH2M				
Site 73	General Sampling and Analysis Plan	Final Deliverable				2/3/2025		3	3	2/6/2025	2025	CH2M				
Site 73	RI or SSP Fieldwork	Sampling Fieldwork				2/6/2025		182	182	8/7/2025	2025	CH2M		12	New to schedule as of Q4 2023	
Site 73	RI or SSP Fieldwork	Laboratory Analysis				8/7/2025		32	32	9/8/2025	2025	CH2M				
Site 73	RI or SSP Fieldwork	Data Validation				9/8/2025		35	35	10/13/2025	2026	CH2M				
Site 73	RI or SSP Fieldwork	Data Loading and Verification				10/13/2025		91	91	1/12/2026	2026	CH2M				
Site 73	PFAS RI Report	Contractor Report Development				1/12/2026		120	120	5/12/2026	2026	CH2M		12	New to schedule as of Q4 2023	
Site 73	PFAS RI Report	Navy Review Pre-Draft				5/12/2026		30	30	6/11/2026	2026	CH2M				
Site 73	PFAS RI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/11/2026		32	32	7/13/2026	2026	CH2M				
Site 73	PFAS RI Report	Regulatory Review Draft				7/13/2026		60	60	9/11/2026	2026	CH2M				
Site 73	PFAS RI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/11/2026		150	150	2/8/2027	2027	CH2M				
Site 73	PFAS RI Report	Final Deliverable				2/8/2027		1	1	2/9/2027	2027	CH2M				
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Site LUCs Inspection Fieldwork		Completed		3/21/2022	8/29/2022	7	1	8/30/2022	2022	Meadows		12	Delay to coincide with LTM groundwater sampling event	
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Contractor Report Development		Completed		8/30/2022		62	106	12/14/2022	2023	Meadows				
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Navy and Regulator Review draft		Completed		12/14/2022		62	97	3/21/2023	2023	Meadows		12	IHIRT review not needed	
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Respond to comments, Navy & regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Completed		3/21/2023		60	0	3/21/2023	2023	Meadows				
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Final Deliverable		Completed		3/21/2023		1	0	3/21/2023	2023	Meadows				
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Site LUCs Inspection Fieldwork				3/21/2023	9/12/2023	7	7	9/19/2023	2023	Meadows		12	Inspection schedule changed to coincide with UXO 32	
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Contractor Report Development				9/19/2023		62	62	11/20/2023	2024	Meadows				
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Navy and Regulator Review draft				11/20/2023		60	60	1/19/2024	2024	Meadows	1			
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Respond to comments, Navy & regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				1/19/2024		60	60	3/19/2024	2024	Meadows				
Sites 14, 15, 16, 49, 50, 53, 54, 55	LUCs Report	Final Deliverable				3/19/2024		1	1	3/20/2024	2024	Meadows				
Green Water Area	Green Water Area DGM QAPP	Contractor Report Development		Completed		8/30/2022		120	104	12/12/2022	2023	CH2M			New to the schedule; included to use up expiring funds	
Green Water Area	Green Water Area DGM QAPP	Navy and Navy MR Lead Review	Funds expire in June 2023	Completed		12/12/2022		35	36	1/17/2023	2023	CH2M				
Green Water Area	Green Water Area DGM QAPP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Funds expire in June 2023	Completed		1/17/2023		45	55	3/13/2023	2023	CH2M		12	Decreased duration to get the fieldwork completed before the end of June 2023	
Green Water Area	Green Water Area DGM QAPP	Regulatory Review Draft	Funds expire in June 2023	Completed		3/13/2023		62	59	5/11/2023	2023	CH2M				
Green Water Area	Green Water Area DGM QAPP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final		Ongoing. Submitted RTCs on 5/17/23		5/11/2023		91	109	8/28/2023	2023	CH2M				

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Green Water Area	Green Water Area DGM QAPP	Final Deliverable				8/28/2023		1	1	8/29/2023	2023	CH2M				
Green Water Area	Green Water Area DGM Fieldwork	Complete Fieldwork	Funds expire in June 2023	Completed		8/29/2023	4/24/2023	14	11	5/5/2023	2023	CH2M				
Green Water Area	Green Water Area DGM Report	Contractor Report Development				7/11/2023	8/14/2023	122	122	12/14/2023	2024	CH2M		12	Per the QAPP, tech memos need to be prepared and submitted before report preparation	
Green Water Area	Green Water Area DGM Report	Navy Review Pre-Draft				12/14/2023		32	32	1/15/2024	2024	CH2M				
Green Water Area	Green Water Area DGM Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				1/15/2024		49	49	3/4/2024	2024	CH2M				
Green Water Area	Green Water Area DGM Report	Regulatory Review Draft				3/4/2024		60	60	5/3/2024	2024	CH2M	1			
Green Water Area	Green Water Area DGM Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				5/3/2024		90	90	8/1/2024	2024	CH2M				
Green Water Area	Green Water Area DGM Report	Final Deliverable				8/1/2024		1	1	8/2/2024	2024	CH2M				
Green Water Area	Green Water Area SSP SAP	Contractor Report Development				11/6/2023		182	182	5/6/2024	2024	CH2M		12	New to schedule as of Q4 2023	
Green Water Area	Green Water Area SSP SAP	Navy and Navy Chemist Review				5/6/2024		30	30	6/5/2024	2024	CH2M				
Green Water Area	Green Water Area SSP SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				6/5/2024		47	47	7/22/2024	2024	CH2M				
Green Water Area	Green Water Area SSP SAP	Regulatory Review Draft				7/22/2024		60	60	9/20/2024	2024	CH2M	1			
Green Water Area	Green Water Area SSP SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				9/20/2024		150	150	2/17/2025	2025	CH2M				
Green Water Area	Green Water Area SSP SAP	Final Deliverable				2/17/2025		1	1	2/18/2025	2025	CH2M				
Green Water Area	Green Water Area SSP Fieldwork	Complete Sampling Fieldwork				2/18/2025		90	90	5/19/2025	2025	CH2M		12	New to schedule as of Q4 2023	
Green Water Area	Green Water Area SSP Fieldwork	Laboratory Analysis				5/19/2025		30	30	6/18/2025	2025	CH2M				
Green Water Area	Green Water Area SSP Fieldwork	Data Validation				6/18/2025		30	30	7/18/2025	2025	CH2M				
Green Water Area	Green Water Area SSP Fieldwork	Data Loading and Verification				7/18/2025		90	90	10/16/2025	2026	CH2M				
Green Water Area	Green Water Area SSP Report	Contractor Report Development				10/16/2025		120	120	2/13/2026	2026	CH2M		12	New to schedule as of Q4 2023	
Green Water Area	Green Water Area SSP Report	Navy Review Pre-Draft				2/13/2026		31	31	3/16/2026	2026	CH2M				
Green Water Area	Green Water Area SSP Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				3/16/2026		45	45	4/30/2026	2026	CH2M				
Green Water Area	Green Water Area SSP Report	Regulatory Review Draft				4/30/2026		60	60	6/29/2026	2026	CH2M				
Green Water Area	Green Water Area SSP Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				6/29/2026		150	150	11/26/2026	2027	CH2M				
Green Water Area	Green Water Area SSP Report	Final Deliverable				11/26/2026		1	1	11/27/2026	2027	CH2M				
Former Fly Ash Area	Former Fly Ash SSP SAP	Contractor Report Development	Funds expire in June 2023	Completed		6/30/2022		181	119	10/27/2022	2023	CH2M				
Former Fly Ash Area	Former Fly Ash SSP SAP	Navy and Navy Chemist Review	Funds expire in June 2023	Completed		10/27/2022		30	33	11/29/2022	2023	CH2M				
Former Fly Ash Area	Former Fly Ash SSP SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft	Funds expire in June 2023	Completed		11/29/2022		47	72	2/9/2023	2023	CH2M		12	Delay due to multiple rounds of comments	
Former Fly Ash Area	Former Fly Ash SSP SAP	Regulatory Review Draft	Funds expire in June 2023	Completed		2/9/2023		60	57	4/7/2023	2023	CH2M		13	Completed earlier than planned	
Former Fly Ash Area	Former Fly Ash SSP SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final	Funds expire in June 2023	Completed		4/7/2023		150	10	4/17/2023	2023	CH2M		13	Completed earlier than planned	
Former Fly Ash Area	Former Fly Ash SSP SAP	Final Deliverable	Funds expire in June 2023	Completed		4/17/2023		1	1	4/18/2023	2023	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Fieldwork	Complete Sampling Fieldwork	Funds expire in June 2023	Completed		4/18/2023	4/10/2023	90	35	5/15/2023	2023	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Fieldwork	Laboratory Analysis	Funds expire in June 2023	Completed		5/15/2023		30	32	6/16/2023	2023	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Fieldwork	Data Validation		Ongoing		6/16/2023	7/20/2023	30	35	8/24/2023	2023	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Fieldwork	Data Loading and Verification				8/24/2023		90	90	11/22/2023	2024	CH2M				

TABLE 4-1
SCHEDULE (FY23-24)
NSFIH, INDIAN HEAD, MD

Site	Goal	Milestone	Priority	Status	EPA Operational Unit Number	Planned Start Date	Revised/Actual Start Date	Planned Duration	Expected/Actual Duration	Expected/Actual End Date	FY	Contractor	Number of Draft for	Revision Reason	Notes	Date of last note
Former Fly Ash Area	Former Fly Ash SSP Report	Contractor Report Development				11/22/2023		120	120	3/21/2024	2024	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Report	Navy Review Pre-Draft				3/21/2024		32	32	4/22/2024	2024	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/22/2024		45	45	6/6/2024	2024	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Report	Regulatory Review Draft				6/6/2024		60	60	8/5/2024	2024	CH2M	1			
Former Fly Ash Area	Former Fly Ash SSP Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/5/2024		150	150	1/2/2025	2025	CH2M				
Former Fly Ash Area	Former Fly Ash SSP Report	Final Deliverable				1/2/2025		1	1	1/3/2025	2025	CH2M				
Basewide PCB	PCB PA Report	Records Review and Interview Process		Ongoing		1/23/2023		183	220	8/31/2023	2023	CH2M		12	Need to complete interviews and site visits	
Basewide PCB	PCB PA Report	Contractor Report Development				8/31/2023		120	120	12/29/2023	2024	CH2M				
Basewide PCB	PCB PA Report	Navy and LANT SME/QDR Review				12/29/2023		31	31	1/29/2024	2024	CH2M				
Basewide PCB	PCB PA Report	Respond to comments, Navy and LANT SME/QDR Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				1/29/2024		32	32	3/1/2024	2024	CH2M				
Basewide PCB	PCB PA Report	Regulatory Review Draft				3/1/2024		63	63	5/3/2024	2024	CH2M	1			
Basewide PCB	PCB PA Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				5/3/2024		150	150	9/30/2024	2024	CH2M				
Basewide PCB	PCB PA Report	Final Deliverable				9/30/2024		1	1	10/1/2024	2025	CH2M				
Basewide PCB	PCB SI SAP	Contractor Report Development				10/1/2024		181	181	3/31/2025	2025	CH2M				
Basewide PCB	PCB SI SAP	Navy and Navy Chemist Review				3/31/2025		30	30	4/30/2025	2025	CH2M				
Basewide PCB	PCB SI SAP	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				4/30/2025		47	47	6/16/2025	2025	CH2M				
Basewide PCB	PCB SI SAP	Regulatory Review Draft				6/16/2025		60	60	8/15/2025	2025	CH2M	1			
Basewide PCB	PCB SI SAP	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				8/15/2025		150	150	1/12/2026	2026	CH2M				
Basewide PCB	PCB SI SAP	Final Deliverable				1/12/2026		1	1	1/13/2026	2026	CH2M				
Basewide PCB	PCB SI Fieldwork	Complete Sampling Fieldwork				1/13/2026		90	90	4/13/2026	2026	CH2M				
Basewide PCB	PCB SI Fieldwork	Laboratory Analysis				4/13/2026		30	30	5/13/2026	2026	CH2M				
Basewide PCB	PCB SI Fieldwork	Data Validation				5/13/2026		30	30	6/12/2026	2026	CH2M				
Basewide PCB	PCB SI Fieldwork	Data Loading and Verification				6/12/2026		90	90	9/10/2026	2026	CH2M				
Basewide PCB	PCB SI Report	Contractor Report Development				9/10/2026		120	120	1/8/2027	2027	CH2M				
Basewide PCB	PCB SI Report	Navy Review Pre-Draft				1/8/2027		31	31	2/8/2027	2027	CH2M				
Basewide PCB	PCB SI Report	Respond to comments, Navy Review Redlined Pre-Draft & RTCs, obtain approval, & prepare draft				2/8/2027		45	45	3/25/2027	2027	CH2M				
Basewide PCB	PCB SI Report	Regulatory Review Draft				3/25/2027		60	60	5/24/2027	2027	CH2M				
Basewide PCB	PCB SI Report	Respond to comments, regulatory Review Redlined Draft & RTCs, obtain approval, & prepare final				5/24/2027		150	150	10/21/2027	2028	CH2M				
Basewide PCB	PCB SI Report	Final Deliverable				10/21/2027		1	1	10/22/2027	2028	CH2M				

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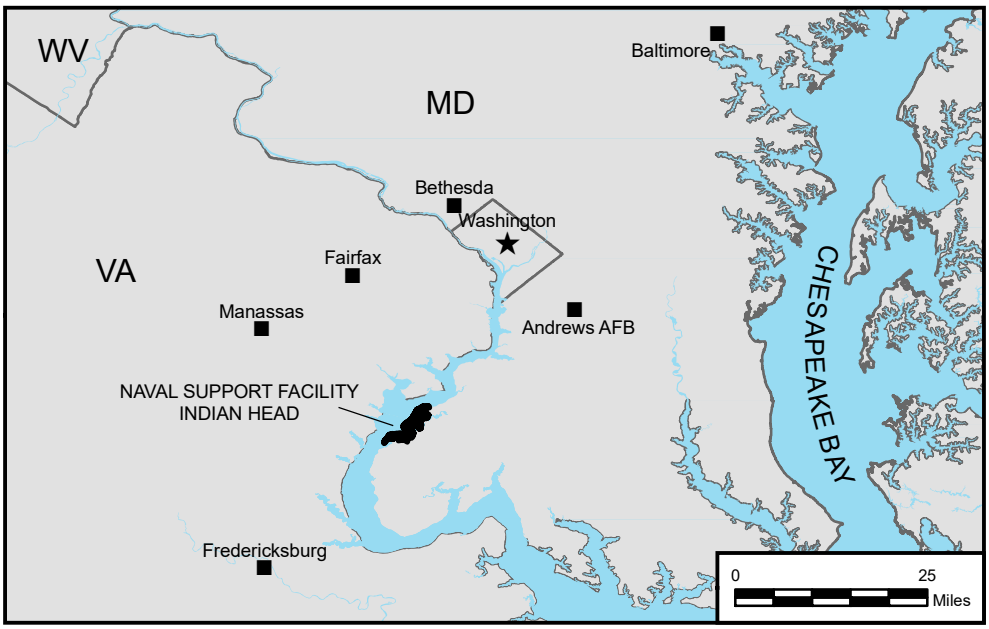
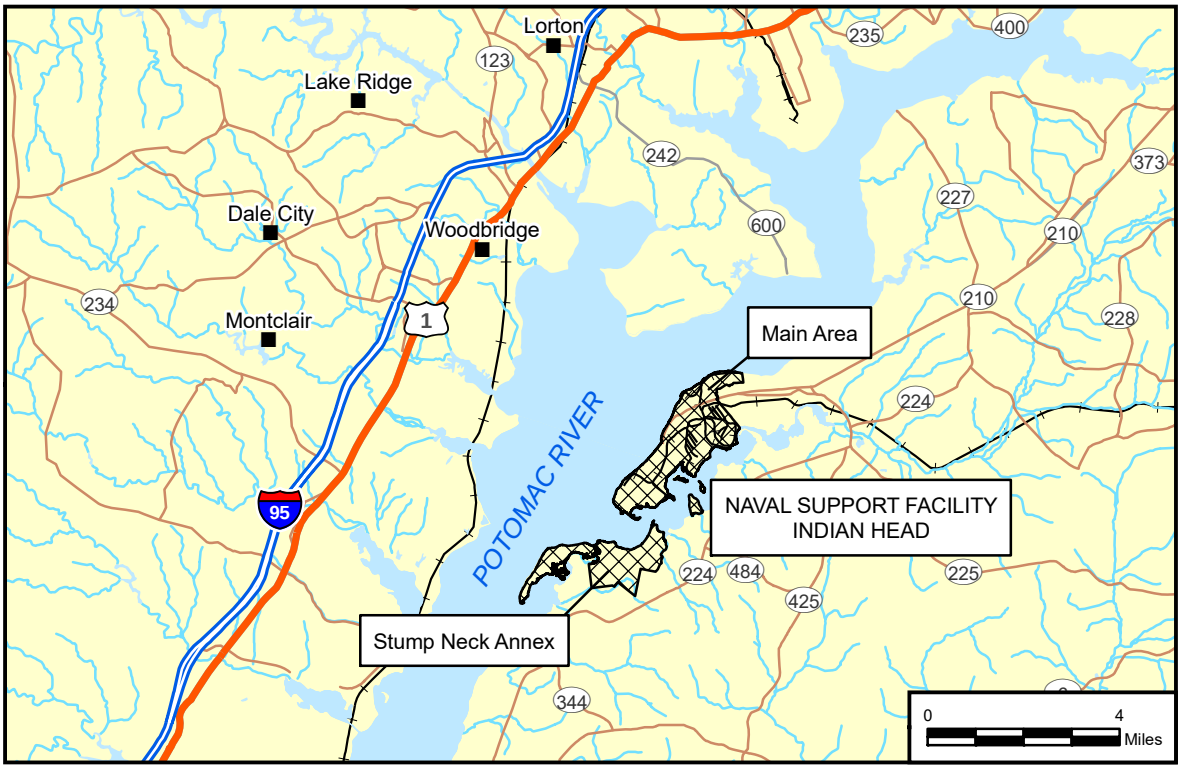


Legend

- City
- Limited Access
- Highway
- Major Road
- Local Road
- Rivers
- Railroads



DRAWN BY K. MOORE	DATE 03/20/09	TETRA TECH	CONTRACT NUMBER CTO JU14
CHECKED BY E. CORACK	DATE 06/20/11	FACILITY LOCATION MAP NAVAL SUPPORT FACILITY INDIAN HEAD INDIAN HEAD, MARYLAND	APPROVED BY E. CORACK DATE 06/20/11
DRAWN BY J. ENGLISH	DATE 06/21/11		APPROVED BY — DATE —
SCALE AS NOTED			FIGURE NO. FIGURE 1-1 REV 0

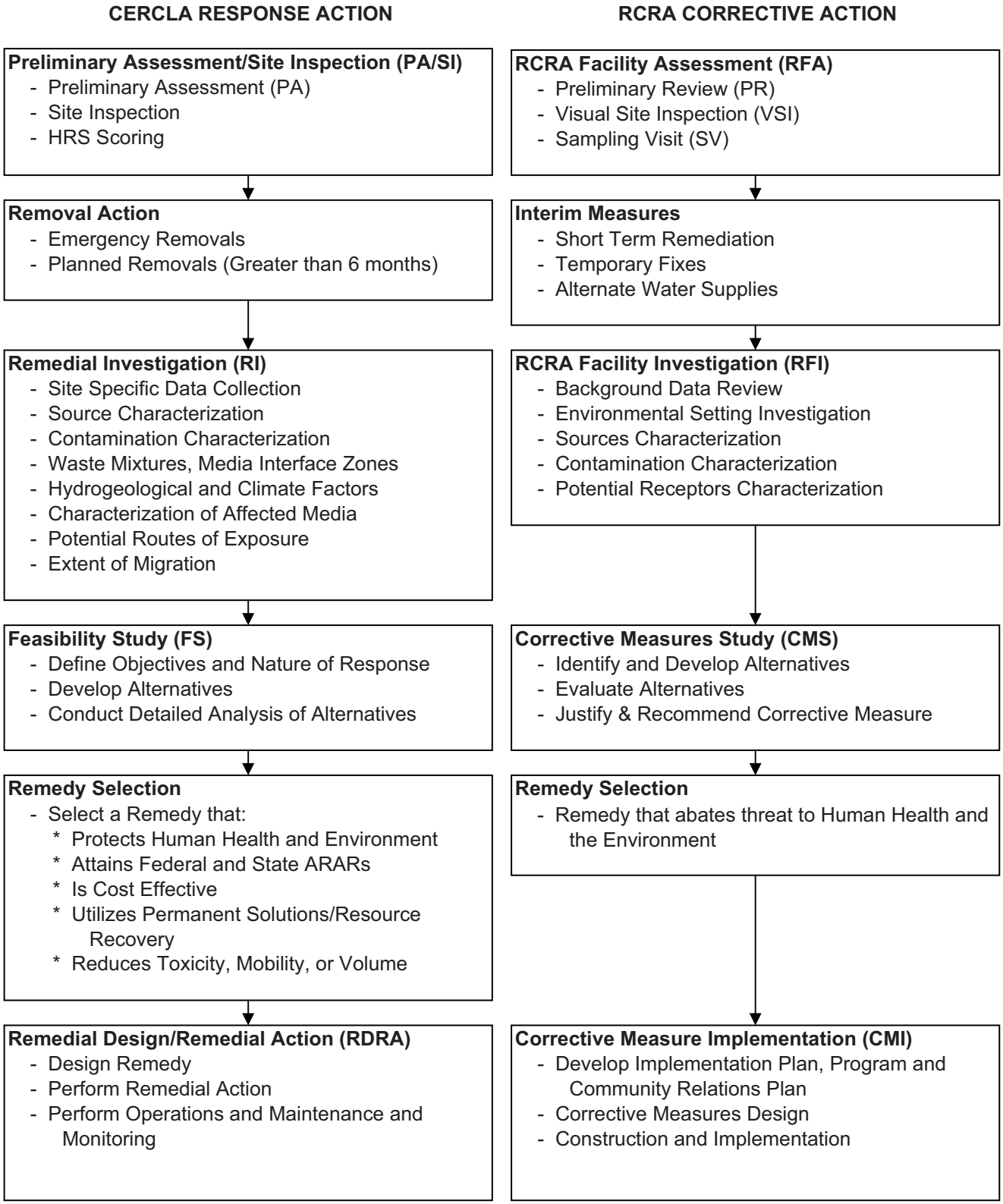
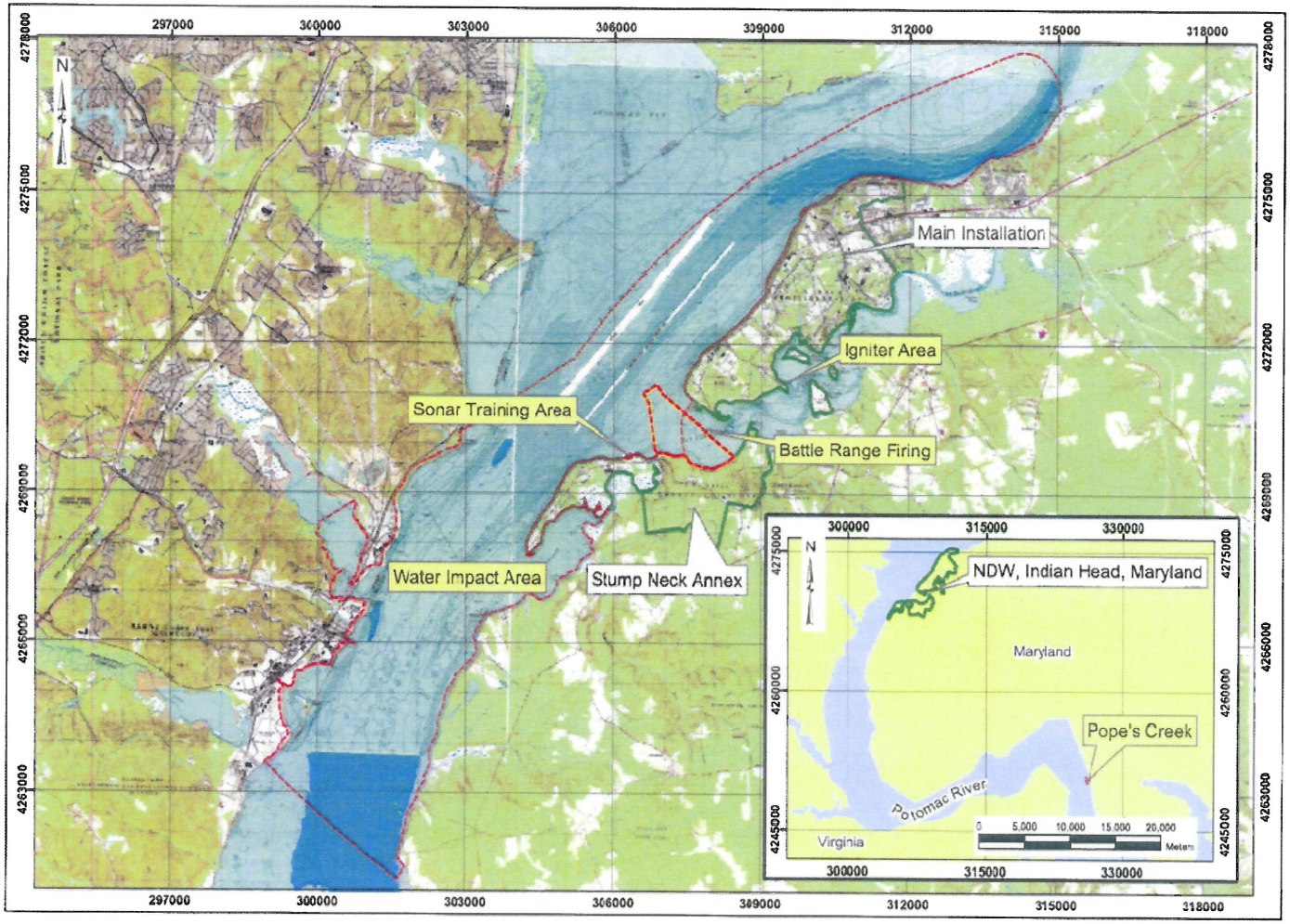


FIGURE 1-2
CERCLA PROCESS VS. RCRA PROCESS
NAVAL SUPPORT FACILITY INDIAN HEAD
INDIAN HEAD, MARYLAND



Water Area Munitions Study
NDW, Indian Head, Maryland

MALCOLM PIRNIE

Figure 1-3
Area Location Map

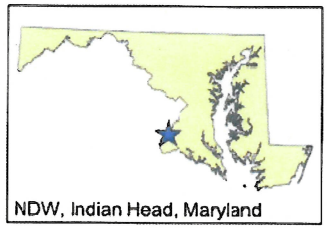
- Installation Boundary
- Sonar Training Area
- Battle Range Firing
- Water Impact Area
- Igniter Area
- Popes Creek

0 1,250 2,500 3,750 5,000 Meters

Data Source: USGS. 7.5 Minute Series
Topographic Survey - Bathymetric Map
Indian Head, MD-VA, 1981
Quantico, VA-MD, 1981

Coordinate System: UTM Zone 18N
Datum: NAD 83
Units: Meters

Contract: N62472-02-D-1300
Edition: Final Water Area Munitions Study
Date: February 2005



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IR SITE KEY

1 Thorium Spill
2 Waste Crank Case Oil Applied to Torrence Road
3 Nitroglycerin Explosion, Nitration Building Area
4 Lloyd Road Oil Spill Sites
5 X-Ray Building 731
6 Building 1349, Hypo Spill
7 Building 682, HMX Spill
8 Building 766, Mercury Deposits
9 Patterson Avenue, Oil Spill
11 Caffee Road Landfill
12 Town Gut Landfill
13 Paint Solvents Disposal Ground
14 Waste Acid Disposal Pit
15 Mercury Deposits in Manhole, Fluorine Lab
16 Laboratory Chemical Disposal
17 Disposed Metal Parts Along Shoreline
18 Hog Island
19 Catch Basin at Chip Collection Houses
20 Single-based Powder Facility
21 Bronson Road Landfill
23 Hydraulic Oil Spill Discharges from Extrusion Plant
24 Abandoned Drain Lines
25 Hypo Discharge X-Ray Building No.2
26 Thermal Destructor 2
27 Thermal Destructor 1
28 Original Burning Ground
39 Silver Release to Sediments
40 Palladium Catalyst in Sediments
42 Olsen Road Landfill
43 Toluene Disposal Site
44 Soak Out Area
45 Abandoned Drums
46 Cadmium Sandblast Grit
47 Mercuric Nitrate Disposal Area
48 Nitroglycerine Plant Disposal Area
49 Chemical Disposal Pit
50 Building 103, Crawl Space
51 Building 101, Dry Well
52 Building 102, Dry Well
53 Mercury Contamination of the Sewage System
54 Building 101
55 Building 102
56 IW87 - Lead Contamination
57 TCE Building 292 Area
66 Turkey Run Disposal Area
67 Hog-Out Facility
68 Former Building 259 Contamination
69 Building 1018 (Oxidizer Process Building)
70 Groundwater Contamination Along Water Works Way
71 Fire Training Areas-5 (Building 116)
72 Main Firehouse
73 Open Field by Tracks
74 Sanitary Treatment Plant #1

SWMU KEY

21 Caffee Road Decontamination Burn Point
38 Caffee Road Waste Oil Storage Area

MRP UXO KEY

6 NG Slums Burning Site (also IR Site 22)
8 Original Burning Ground (also IR Site 28)
9 Single-base Propellant Grains Spill (also IR Site 10)
11 The Valley (also IR Site 29)
13 FDR Skeet Range
19 Igniter Area
20 Safety Thermal Treatment Point
29 Southwestern Pistol Range
30 Gate 3 Burning Ground
32 Scrap Yard (also IR Site 41)
33 Water Impact Area

NAVFAC
Naval Facilities Engineering Systems Command

SITE LOCATION MAP
MAIN AREA
NAVAL SUPPORT FACILITY INDIAN HEAD
INDIAN HEAD, MARYLAND

FILE	112G08005-JU01	SCALE	AS NOTED
FIGURE NO.	FIGURE 3-1	REV	DATE 9/20/2023

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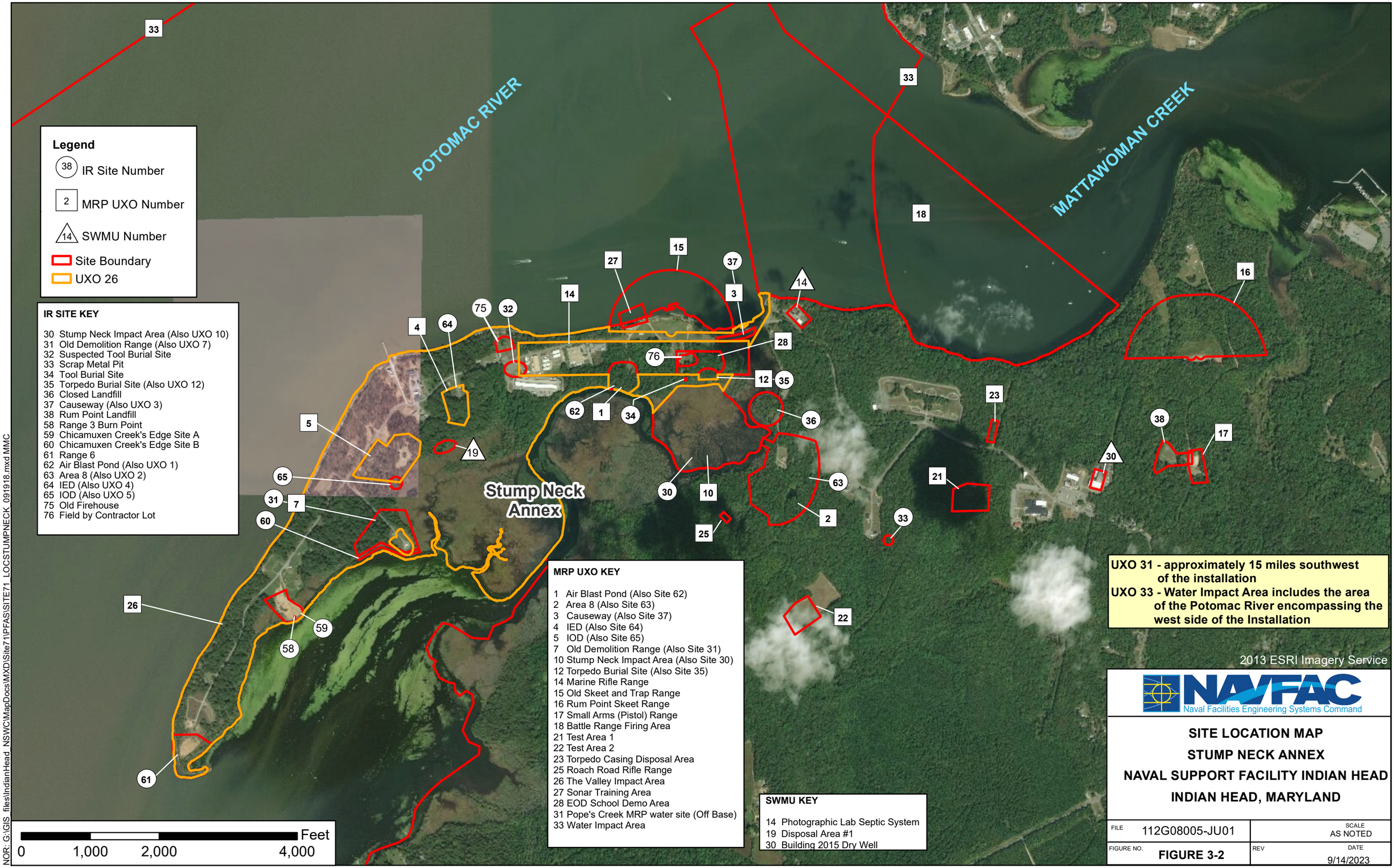
POTOMAC RIVER
MATTAWOMAN CREEK
Stump Neck Annex
Legend
38 IR Site Number
2 MRP UXO Number
14 SWMU Number
Site Boundary
UXO 26
IR SITE KEY
30 Stump Neck Impact Area (Also UXO 10)
31 Old Demolition Range (Also UXO 7)
32 Suspected Tool Burial Site
33 Scrap Metal Pit
34 Tool Burial Site
35 Torpedo Burial Site (Also UXO 12)
36 Closed Landfill
37 Causeway (Also UXO 3)
38 Rum Point Landfill
58 Range 3 Burn Point
59 Chicamuxen Creek's Edge Site A
60 Chicamuxen Creek's Edge Site B
61 Range 6
62 Air Blast Pond (Also UXO 1)
63 Area 8 (Also UXO 2)
64 IED (Also UXO 4)
65 IOD (Also UXO 5)
75 Old Firehouse
76 Field by Contractor Lot
MRP UXO KEY
1 Air Blast Pond (Also Site 62)
2 Area 8 (Also Site 63)
3 Causeway (Also Site 37)
4 IED (Also Site 64)
5 IOD (Also Site 65)
7 Old Demolition Range (Also Site 31)
10 Stump Neck Impact Area (Also Site 30)
12 Torpedo Burial Site (Also Site 35)
14 Marine Rifle Range
15 Old Skeet and Trap Range
16 Rum Point Skeet Range
17 Small Arms (Pistol) Range
18 Battle Range Firing Area
21 Test Area 1
22 Test Area 2
23 Torpedo Casing Disposal Area
25 Roach Road Rifle Range
26 The Valley Impact Area
27 Sonar Training Area
28 EOD School Demo Area
31 Pope's Creek MRP water site (Off Base)
33 Water Impact Area
SWMU KEY
14 Photographic Lab Septic System
19 Disposal Area #1
30 Building 2015 Dry Well
UXO 31 - approximately 15 miles southwest of the installation
UXO 33 - Water Impact Area includes the area of the Potomac River encompassing the west side of the Installation
2013 ESRI Imagery Service
0 1,000 2,000 4,000 Feet
NAVFAC
Naval Facilities Engineering Systems Command
SITE LOCATION MAP
STUMP NECK ANNEX
NAVAL SUPPORT FACILITY INDIAN HEAD
INDIAN HEAD, MARYLAND
FILE 112G08005-JU01
SCALE AS NOTED
FIGURE NO. FIGURE 3-2
REV
DATE 9/14/2023
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APPENDIX A

NSFIH – Main Area Site Figures

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APPENDIX B

NSFlH – Stump Neck Annex Site Figures

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APPENDIX C

Photo Log

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