



# **Community Involvement Plan**

Naval Research Laboratory – Chesapeake Bay Detachment Chesapeake Beach, Maryland

March 2021









Naval Facilities Engineering Command Washington Washington, D.C.

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## **Overview of the Community Involvement Plan**



## 1.1 Introduction

This **Community Involvement Plan (CIP)** describes the **Department of the Navy's (Navy)** community involvement program for environmental restoration at the **Naval Research Laboratory – Chesapeake Bay Detachment (NRL-CBD)**, located in Chesapeake Beach, Maryland. NRL-CBD is a field station of NRL Washington D.C., and provides facilities and support services to NRL for research in radar, electronic warfare, optical device materials, communications, and fire-suppression research.

This CIP identifies community concerns about the investigation and restoration of potentially contaminated sites at NRL-CBD and describes how the Navy will meet the needs of the local community for information about, and participation in, the ongoing investigation and remedial processes. The outreach methods described in this CIP were developed based on community input received in fall 2019.

## **1.2 Environmental Restoration Program**

NRL-CBD's history and mission have required the use, handling, storage, and disposal of hazardous materials and petroleum products. Historical use, storage, and disposal practices differ from current practices, and have resulted in environmental contamination at the facility.

The Navy, in coordination with the **Maryland Department** of the Environment (MDE), implements an Environmental Restoration Program (ERP) at NRL-CBD to investigate soil, groundwater, surface water, and sediment under the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (Superfund). The ERP consists of two environmental investigation programs:

- Installation Restoration Program (IRP): The IRP was designed to identify and clean up past contamination from chemical and radiological contaminants, hazardous substances, and pollutants to protect human health and safety, and the environment.
- **Munitions Response Program (MRP):** The MRP addresses explosives safety hazards associated with munitions and explosives of concern, as well as human health and environmental risks associated with munitions constituents.

#### ACRONYMS AND ABBREVIATIONS

To make this document more readable, acronym use has been limited. Acronyms that are used repeatedly appear in **bold** the first time they are used. Other acronyms are provided for informational purposes but are not repeated throughout the document. The following acronyms are repeated:

AFFF	aqueous film-forming foam
AOC	Area of Concern
AR	Administrative Record
CERCLA	Comprehensive Environmental Response Compensation, and Liability Act
CFR	Code of Federal Regulations
CH2M	CH2M HILL, Inc.
CIP	Community Involvement Plan
DD	Decision Document
DoD	Department of Defense
EE/CA	Engineering Evaluation and Cost Analysis
ERP	Environmental Restoration Program
ESI	Expanded Site Inspection
FS	Feasibility Study
IRP	Installation Restoration Program
MDE	Maryland Department of the Environment
MRP	Munition Response Program
NAVFAC	Naval Facilities Engineering Command
Navy	Department of the Navy
NFRAP	No Further Response Action Plan
NPL	National Priorities List
NRL-CBD	Naval Research Laboratory – Chesapeake Bay Detachment
PA/SI	Preliminary Assessment/Site Inspection
PAO	Public Affairs Officer
PFAS	Per- and polyfluoroalkyl substances
PP	Proposed Plan
PRAP	Proposed Remedial Action Plan
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
USEPA	United States Environmental Protection Agency
RI	Remedial Investigation
ROD	Record of Decision
Superfund	Superfund Amendments and Reauthorization Act of 1986
TAPP	Technical Assistance for Public Participation
USEPA	U.S. Environmental Protection Agency



## 1.3 Community Involvement

Community involvement activities are an integral part of the ERP. Community involvement promotes communication between the public and the Navy concerning the status of remediation at installations. Specific community involvement activities are required by CERCLA at specific stages of environmental response, although the Navy's guidance may be more comprehensive than the requirements in CERCLA. The CIP is intended to be a site-specific strategy for meaningful community involvement throughout the CERCLA cleanup process. The Navy prepares and implements a CIP on an installation-wide basis rather than for a specific environmental restoration action (Navy, 2018).

This CIP has been completed in accordance with regulations and guidance for conducting community involvement activities related to environmental restoration, including:

- Superfund Community Involvement Handbook (USEPA, 2016)
- USEPA's Community Involvement Toolkit (2020b)
- Department of the Navy Environmental Restoration Program Manual (2018)
- **Department of Defense (DoD)** *Management Guidance for the Defense Environmental Restoration Program* (September 2001)
- Title 32 of the Code of Federal Regulations (CFR) Part 203, Final Rule
  [for] Technical Assistance for Public Participation (TAPP) in Defense
  Environmental Restoration Activities (Federal Register, 1998)
- 30 CFR Part 202, Final Rule [for] Department of Defense Restoration Advisory Boards (Federal Register, 2006)
- DoD's Restoration Advisory Board Rule Handbook (March 2007)

The main goal of the NRL-CBD community involvement program is to achieve effective, open communication among the Navy, the local community in and around Chesapeake Beach; and MDE. The primary objectives of the NRL-CBD community involvement program are to:

- Encourage and promote two-way communication between the Navy and concerned individuals, including local residents and state and local officials.
- Inform the general public of planned and ongoing cleanup actions, major findings, and decisions.
- Furnish accurate, timely, and understandable information to affected and interested parties.
- Provide and maintain a process of monitoring public concerns and information needs throughout the environmental restoration process.
- Ensure a system for incorporating public comments into the environmental restoration process in a timely and meaningful way is in place.
- Gather and update information about NRL-CBD neighboring communities.
- Revise the community involvement program as necessary to meet the changing needs of the local community.

## **1.4** Implementation of the ERP

The **Naval Facilities Engineering Command (NAVFAC)** Washington administers the ERP at NRL-CBD. As the owner of NRL-CBD, the Navy is ultimately responsible for implementing the ERP and the associated community involvement program as outlined by this CIP. The Naval Support Activity (NSA) Annapolis Commanding Officer, has the overall responsibility for administering this CIP, with support from NSA Annapolis' **Public Affairs Officer** 





(PAO), NAVFAC and NRL-CBD military and civilian personnel, state regulatory agencies, and technical personnel contracted by the Navy to assist in the ERP process.

NRL-CBD formed a CERCLA Tier I Partnering Team in 2016. The NRL-CBD Partnering Team is made up of NAVFAC Washington, NRL, and MDE representatives, with support from the Navy's environmental contractor. By bringing these key parties together in regular, structured meetings to discuss and resolve issues, the NRL-CBD Partnering Team promotes trust and cooperation that permits the remediation process to move forward at a quicker pace than would be possible under traditional procedures.



**SECTION 2** 

## **Facility Description and Site History**



This section describes the NRL-CBD facility, its location and brief history, the framework for environmental investigation at NRL-CBD under

CERCLA, and a brief overview of the environmental history.

## 2.1 Location and History

NRL-CBD is located south of Chesapeake Beach, Maryland, about 40 miles southeast of Washington, D.C. The installation occupies approximately 160 acres of land along the western shoreline of the Chesapeake Bay. The facility is divided into an eastern and western portion, separated by Bayside Road (Maryland State Route 261). The facility is bounded by Chesapeake Bay to the east and offsite residential housing areas to the north, south, and west (Figure 2-1).

In addition to the facility on Bayside Drive, NRL-CBD includes a small berthing (referred to as the Navy Dock) located in downtown Chesapeake Beach, approximately 1.7 miles north of the main NRL-CBD facility, as well as a 2-acre site at Tilghman Island, located 10 nautical miles east of the main facility.

NRL-CBD provides facilities and support services to NRL for research in radar, electronic warfare, optical devices, materials, communications, and fire-suppression research. Many unique experiments are conducted at the main facility, located on a cliff approximately 100 feet above the Chesapeake Bay, and the Tilghman Island site across the Bay. The experiments conducted at NRL-CBD include

### Figure 2-1. Base Location Map



low clutter and low background radar measurements. Basic research is also conducted in radar antenna properties, radar remote-sensing concepts, use of radar monitoring of ocean waves, and laser propagation. NRL-CBD hosts



facilities for the Navy Technology Center for Safety and Survivability, which conducts fire-suppression research on simulated carrier, surface, and submarine platforms.



While most of the munitions-related research once conducted at this location is no longer conducted at the field station, the main facility does maintain a test control center for air and sea operations that is available to researchers using NRL-CBD's over-water test range. The test range is a restricted zone located directly east of the main facility that extends across the Chesapeake Bay toward Tilghman Island. In the past, NRL-CBD also maintained ranges used for munitions-related research and testing, as well as a small arms range; these were used for periodic qualification and training.

The property for the facility was originally acquired in 1941 and construction progressed rapidly during World War II. Major expansion occurred in 1953 and 1954 with construction of a large laboratory building, shop facilities, and complete utility systems (NEESA, 1984). A video documenting the history of NRL-CBD was produced in 2016 in celebration of 75 years of naval research in Chesapeake Beach and can be viewed at: <a href="https://www.youtube.com/watch?v=Ppi47e-IRpM">https://www.youtube.com/watch?v=Ppi47e-IRpM</a>.

Land use at NRL-CBD is industrial and consists primarily of laboratory buildings, shop facilities, and other structures that support the installation's mission. There are currently no residential use areas on the facility.

## 2.2 ERP and the CERCLA Process

Since 1986, the Navy's ERP has followed the process prescribed by CERCLA regulations and guidance for investigating and addressing environmental contamination. This multistep process is followed regardless of whether a facility is listed on the **National Priorities List (NPL)** unless directed otherwise by a **Resource Conservation and Recovery Act (RCRA)** consent order or another legal instrument. The CERCLA process focuses on the management and remediation of non-operating sites with media contaminated with hazardous substances. The CERCLA process includes a series of activities, several of which are designed to involve the public in the decision-making process.

The investigations and remedial activities to be completed at NRL-CBD follow the guidelines established by the **U.S. Environmental Protection Agency (USEPA)** and the Navy as part of the CERCLA process. The CERCLA process is presented on **Figure 2-2** and described briefly in the following:

- <u>Preliminary Assessment/Site Inspection (PA/SI)</u>: A preliminary evaluation and investigation to determine if there has been a release of hazardous waste or materials causing contamination that warrants further study or cleanup.
- **<u>Remedial Investigation (RI)</u>**: An investigation to determine the nature and extent of contamination and associated human health and ecological risks.
- <u>Feasibility Study (FS)</u>: If the RI determines that cleanup is warranted, the FS evaluates cleanup approaches that may be selected.



#### Figure 2-2. General CERCLA Process



- Proposed Plan (PP) or Proposed Remedial Action Plan (PRAP): Documents the preferred cleanup approach based on an evaluation of various alternatives in the FS. The PP or PRAP is provided to the public for formal comment before selecting a cleanup remedy.
- <u>Record of Decision (ROD) or Decision Document (DD)</u>: Documents the selected remedy following consideration of public comments received on the PP. A summary of public comments and responses, known as a Responsiveness Summary, is included in the ROD or DD.
- **<u>Remedial Design (RD)</u>**: Development of the technical specifications for the remedy described in the ROD.
- <u>Remedial Action Construction and Operation</u>: Construction and operation of the remedy described in the ROD. Ongoing monitoring is generally used to determine when the objectives of the remedial action have been achieved to determine when the response has been completed.
- <u>Five-Year Reviews</u>: An evaluation of whether the selected remedy is protecting human health and the environment. Reviews are generally performed 5 years after the start of remedial action and repeated every 5 years as long as future land use is restricted.
- <u>Site Closeout</u>: Occurs when it has been determined that no further response is required at the site, all cleanup levels have been achieved, and the site is deemed protective of human health and the environment.

In addition, the following activities may occur at any time during the CERCLA process:

- Interim action: Actions taken, as needed, to reduce imminent risks to human health and the environment, while long-term field investigations are being conducted or until a final remedy is selected.
- <u>Removal action</u>: Actions that can function either as an interim or a long-term means of addressing potential releases of contaminants and reducing human and ecological exposure. Removal actions vary in duration and are categorized by their urgency and duration, as follows:
  - <u>Emergency removals</u> require an immediate response to releases or threatened releases to the environment and are typically initiated within hours or days of determining that a removal action is appropriate.



- <u>Time-critical removal actions</u> are situations where remediation activities must begin within 6 months of discovery of hazardous materials to protect public health and safety.
- <u>Non-time-critical removal actions</u> occur when a removal action is appropriate, but the situation allows for a
  planning period of 6 months or more before beginning removal activities. Because these sites do not
  present an immediate threat to public health or safety, more time is available to thoroughly assess potential
  threats and evaluate cleanup alternatives.
- Engineering Evaluation and Cost Analysis (EE/CA): Completed for non-time-critical removal actions and similar to a fast-track, limited scope RI and FS.
- **No Further Response Action Plan (NFRAP)**: A decision document that is developed after a field investigation finds that the levels of contaminants at a site do not pose a threat to human health and the environment.

In additional to the CERCLA process sequential steps, specific community involvement activities are required at certain points throughout the CERCLA process, and additional community involvement activities may occur at any point in the process. **Section 4.2** of this CIP discusses the required specific community involvement activities.

## 2.3 History of Environmental Investigation

Comprehensive environmental restoration activities at NRL-CBD began in 1984 under the Navy Assessment and Control of Installation Pollutants Program, and currently continue under the ERP. Various facility-wide studies and detailed investigations were completed to identify and assess sites posing a potential threat to human health or the environment. These early investigations identified eight IR sites and three MR sites for continued evaluation.

Documents related to previous investigations can be found in the **Administrative Record (AR)** located on the NAVFAC ERP website for NRL-CBD at <u>https://go.usa.gov/xQFuV/</u>. This section summarizes the active sites in the ERP, as shown on **Figure 2-3**.

### Figure 2-3. Active ERP Sites





## 2.4 Environmental Response Sites

A basewide **Site Inspection (SI)** (CH2M, 2016) was conducted to determine whether historical practices had led to site-related releases of contaminants into soil or groundwater at six environmental response sites and two **areas of concern (AOCs)**. These included: Site 2 (Chemical Burial Area), Site 3 (Landfill 1), Site 4 (Landfill 2), Site 5 (Landfill 3), Site 7 (Road Oil Application), AOC C (Chemical Burial Area 2), and AOC D (Water Tower). Soil and groundwater were sampled for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals, and human health and ecological risk screenings were conducted. Results of the SI resulted in recommended further evaluation of potential risk from surface soils for all sites except Site 2 (Chemical Burial Area) and AOC C (Chemical Burial Area 2); these two sites did not require further evaluation.

Based on results of the SI, an **Expanded Site Inspection (ESI)** was conducted for the remaining sites (CH2M, 2019a). Additional soil and groundwater data were gathered through test pitting, surface and subsurface soil sampling, monitoring well installation, groundwater sampling, and x-ray fluorescence soil screening for lead. Results indicated that surface soil should be further evaluated in an RI for Site 3 (Landfill 1), Site 4 (Landfill 2), Site 5 (Landfill 3), and AOC D (Water Tower). Site 7 (Road Oil Application) does not require further action while Site 9 (Photo Processing Waste) requires further evaluation.

### 2.4.1 Sites 3, 4, and 5 (Landfills 1, 2, and 3)

Sites 3, 4, and 5, also known as Landfills 1, 2, and 3, are located on the western portion of NRL-CBD, south and adjacent to the main access road (Figure 2-4). Each site reportedly consisted of four to six excavation pits (25 feet by 25 feet by 20 feet deep). Landfill 1 operated from 1942 to 1950. Landfill 2 operated from 1950 to 1958, and Landfill 3 operated from 1958 to 1968. The landfills accepted public works waste (e.g., household garbage and tree trimming refuse), shop wastes (e.g., wooden boxes, cardboard cartons, oily rags, absorbent materials, empty oil cans, lubricant cans, and paint sludges), and non-toxic laboratory waste (e.g.,

### Figure 2-4. Sites 3, 4, and 5 (Landfills 1, 2, and 3)



paper towels, cardboard boxes, and small quantities of waste solvents).

In the late 1980s, research buildings were constructed at the former Landfill 1 site in association with development of the Fire Testing Area. Currently, the Landfill 1 site is relatively flat and is used as office space consisting of three research buildings (Buildings 301, 307, and 314) and a parking lot. The Landfill 2 site is a relatively flat, large, open mowed grassy area. The Landfill 3 site is largely wooded with a grass clearing where the former access road was located.

Sites 3, 4, and 5 were investigated as part of the base-side SI and ESI, as described above. Results of soil testing indicated that all three sites should be investigated in an RI.



## 2.4.2 Site 7 – Road Oil Application

Site 7, also known as Road Oil Application, encompasses the historical dirt roads located on NRL-CBD west of Bayside Road (Figure 2-5). From 1940 through 1952, waste oils were reportedly spread twice a year on dirt roads to control dust. The oil used in this application was primarily spent crankcase oil and paint thinner, but may have included other liquid waste products such as engine cleaner, steam cleaning waste, dishwashing soap, and gasoline mixed in with the waste oil. It was reported. but not confirmed, that a small

#### Figure 2-5. Site 7, Road Oil Application Site



volume (less than 10 pints per year) of PCB-contaminated liquids may have been mixed with the waste oils (NEESA, 1984). Today the former dirt roads no longer exist or have been improved with asphalt and are used as the current base access roads.

Site 7 was investigated as part of the basewide SI and ESI. Based on results of the ESI, which indicated there were no human health or ecological risk impacts from the site soils, Site 7 was recommended for no further action, with MDE concurrence.

### 2.4.3 Site 9 – Photo-processing Waste Discharge

Site 9, also known as Photoprocessing Waste Discharge, is associated with a photography laboratory that was housed in the southeastern corner inside former Building 43 (Figure 2-6). The laboratory was used from the late 1950s to the early 1960s and from the late 1960s to 1975. Wastewater reportedly was disposed of through a drain that discharged to the ground immediately outside the building. The photograph laboratory was used once or twice during each year of operation, generating 10 to 15 gallons of waste solution per event (NEESA, 1984). A 20foot boundary around former



Figure 2-6. Site 9, Photo-processing Waste Discharge

Building 43 was established for environmental investigations; this area likely would include the area of the direct discharge. The building has been demolished and the site is relatively level and covered with grass. The road network surrounding the former building is still intact.

Site 9 soils and groundwater were investigated as part of the basewide SI and ESI. Based on discussions with MDE, Site 9 is recommended for further evaluation.



Site 10, formerly called AOC A, is a fire testing area located near the center of NRL-CBD (Figure 2-7). The site has been used since 1968 to test the effectiveness of aqueous film-forming foam (AFFF) on extinguishing fires started with various fuel sources. The site consists of a fire testing pad, the Fire 1 Test Chamber, Building 313 (Fire Testing Building), a pump house, and a concrete-lined wastewater collection pit in the northern area and Building 314 (Fire Testing Building) on the southern side, separated by a grassy area. In the mid-to-late 1980s, several improvements were made to Site



Figure 2-7. Site 10, Fire Testing Area

10, including a new testing pad, a concrete-lined collection pit, and new conveyance piping from the Fire Testing Area structures to the new collection pit.

**Per- and polyfluoroalkyl substances (PFAS)** are a group of "emerging contaminants" commonly found in firefighting foam but also in items such as non-stick cookware, stain-resistant carpet and furniture, raincoats, and other common consumer products. The Navy has developed a protective policy to address past releases of PFAS. In 2017, the Navy initiated an investigation of PFAS in on-base groundwater and determined that these substances are present in the shallow groundwater as a result of testing fire-extinguishing agents, specifically various formulations of AFFF. Since PFAS are in the shallow groundwater, there is the potential for these substances to also be present in private drinking water wells in the designated areas because of their proximity and location relative to the Fire Testing Area.

Therefore, the Navy reviewed available records and identified off-base properties suspected to have drinking water wells within the designated sampling area. While there is no legal requirement to conduct drinking water testing, the Navy voluntarily initiated an off-base drinking water investigation to determine if past operations at the Fire Testing Area may have affected drinking water in private wells near NRL-CBD. In July 2018, the Navy sampled drinking water from 42 wells immediately north and south of the base.

As emerging contaminants, PFAS have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. USEPA is currently studying PFAS to determine if regulation is needed. In May 2016, the EPA released lifetime health advisory levels for two PFAS, specifically perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Health advisory levels are not regulatory standards. They are health-based concentrations which should offer a margin of protection for people throughout their lives from adverse health effects resulting from exposure to PFOS and PFOA in drinking water. The USEPA health advisory level for lifetime exposure is 70 parts per trillion (ppt) for PFOS and 70 ppt for PFOA. When both PFOS and PFOA are found in drinking water, the combined concentrations should not exceed 70 ppt.

PFOA and PFOS were not detected in 39 of the 42 wells sampled and no samples exceeded the Lifetime Health Advisory of 70 ppt set by the USEPA. The results indicated that exposure to PFOS and PFOA is not occurring at the private drinking water wells where the sampling indicated nondetect. Where PFOS and PFOA were detected, no samples exceeded the Lifetime Health Advisory of 70 ppt. Because owners of some properties in the initial sampling area did not sign up for sampling, the Navy will sample private drinking water wells in the sample area upon request.



The Navy's initial investigation of NRL-CBD determined that PFAS were present in the shallow groundwater but not in the deep groundwater aquifer. The concentrations of PFAS were highest closest to the Fire Testing Area, with concentrations in groundwater decreasing with distance from the site. Based on these results, the Navy incorporated the Fire Testing Area into the ERP and is planning a SI to determine the presence or absence of PFAS in soil, surface water, and sediment as well as to refine the extent of PFAS in groundwater. Results of the SI will guide additional on-base investigation and requirements for additional off-base drinking water sampling, if necessary. Fieldwork for the Site Inspection is anticipated to begin in 2020.

### 2.4.5 Area of Concern D – Water Tower

AOC D, the water tower, is located on the western portion of NRL-CBD. The water tower was constructed in 1953 and remains onsite. It has a reported capacity of 400,000 gallons for use as part of the potable water supply for the Base. Although there are no documented releases from this area, it is assumed that the ground surface below the water tower may have been affected by lead due to lead-based paint falling to the ground during maintenance and from paint that has weathered over time. Documentation obtained from NRL-CBD shows that lead was





detected in paint chips obtained from the water tower in 2012. However, the water tower was painted in 1994, suggesting that the lead-based paint has been covered by more recent paint, given that lead-based paint use was banned in housing and other building settings in 1978. The condition of the paint surface on the water tower was noted as being in average condition with some localized areas of paint chipping or delaminating (Mumford-Bjorkman Associates, Inc., 2012).

AOC D was investigated as part of the base-wide SI and ESI, as described above. Results of the ESI confirmed the presence of lead in surface soils at concentrations exceeding residential and industrial levels. The site is currently in the planning presence for

in the planning process for addressing the lead-based paint on the tower and conducting an Interim Action to remove contaminated soil.

## 2.5 Munitions Response Sites

#### 2.5.1 MRS 001 – Hypervelocity Low Pressure Gun

The Hypervelocity Low Pressure Gun (HVG) Site, designated as MRS 001, is located on 2.7 acres near the western property boundary of NRL-CBD (**Figure 2-9**). Construction of the







light-gas HVG test facility began in 1962 to support the ballistic missile defense program, and was used between 1967 and 1995 to study the impact of high-velocity projectiles on various target materials. Targets were placed in a spherical chamber and a test projectile was fired through the gun into the chamber in a totally-enclosed testing environment. The piston would lodge in the gun after each firing and the gun would be backfired to forcibly expel the piston. The hillside directly behind the gun breach served as a backstop berm for the piston, which would be forcibly expelled into the backstop berm when the gun was fired. Because the piston was lead-filled, lead may have affected soils on the range floor behind the gun breach and within the berm. The test projectiles, and targets have been removed, and there is no evidence of munitions and explosives of concern (MEC).

The SI (Malcolm Pirnie, Inc., 2010) was conducted to identify, and confirm the presence of contamination at MRS 001. The SI included surface soil sampling, installation of temporary monitoring wells, and collection of groundwater samples. No MEC were observed. Based on the results of the SI MRS 001 was recommended for an RI.

An RI (Tetra Tech, 2016c) was completed to characterize the nature and extent of contamination, and to quantify the potential risks posed to human health and the environment as a result of exposure to site-related contaminants. No unacceptable risks to human or ecological health were identified for soils. However, isolated areas with lead concentrations exceeding action levels are attributed to lead-based paint used on the gun and support structures. The Navy plans to remove the gun barrel, support structures, and lead-contaminated surface soil through a removal action. The RI also indicated potential future risk associated with metals in shallow groundwater should the property ever be turned over for residential use.

Based on results of the RI, a Focused Feasibility Study was conducted to determine ways to address human health risk from possible future exposure to groundwater at MRS 001 (Tetra Tech, 2016a). The remedial alternatives were presented in a PRAP (CH2M, 2018a) The Navy, with the support of MDE, proposed to implement land use controls to prevent unacceptable human health risks from hypothetical future exposure to site-related contaminants in shallow groundwater.

### 2.5.2 MRS 002 – Randle Cliffs, Zuni Launch Site and Randle Cliffs, Gun Mounts

The Randle Cliffs, Zuni Launch Site and the Randle Cliffs, Gun Mounts together make up MRS 002 (Figure 2-10). The Zuni Launch Site is located along the base's eastern boundary, between the toe of Randle Cliffs and the shoreline of the Chesapeake Bay. It varies from 20 to 75 feet wide and is about 500 feet long. The site encompasses the land portion of the former over-water quality control/research test range, including the former launcher, associated building and structures, and the tidal zone extending eastward to the mean low water mark. The Gun Mounts site is located at the top of Randle Cliffs and includes a 5.2-acre land portion of a former land-to-water range. Structures at the site included gun mounts, gun director platforms,

Figure 2-10. MRS 002, Randle Cliffs, Zuni Launch Site and Randle Cliffs, Gun Mounts



and a blast apron located along a 1,235 section of the cliffs.

The gun mounts were used from 1944 to 1948, likely in conjunction with experiments involving gun sighting, as the height and distance to the water are similar to those on a large Naval vessel. The gun mounts, gun director platforms, and blast apron area are current used to mount and test radar equipment, although much of the land at the top of Randle Cliffs that existed in the 1940s has been lost to erosion.



The Zuni Launch Site, which was first used in the 1960s, was used to fire Zuni rocket motors with chaff rounds for quality control testing and research. Based on historical information obtained during the PA, all chaff rounds detonated over the water. This Zuni Launch Site was last used in 1992 before construction of a pier directly east/northeast of the site. Currently, the site is used occasionally for vehicle parking.

An SI (Malcolm Pirnie, Inc., 2010) was conducted in 2010 to identify, and confirm the presence of contamination at MRS 002. The SI included surface soil sampling, temporary monitoring well installation, and the collection of groundwater samples. No MEC were observed. Based on the results of the SI MRS 002 was recommended for an RI.

An RI (Tetra Tech, 2016c) was completed to characterize the nature and extent of contamination, and to quantify the potential risks posed to human health and the environment as a result of exposure to site-related contaminants. The RI indicated that soil contaminants exceeded background levels but did not pose an unacceptable risk to human health or the environment. Therefore, the Navy, with the support of MDE and after community input and a public meeting in 2018, signed a Decision Document for No Action for soil at MRS 002 (CH2M, 2019b).

Groundwater will be addressed under a separate Proposed Plan and Decision Document.

### 2.5.3 MRS 003 – Small Arms Range

MRS 003, the Small Arms Range, designated as MRS 003, encompasses approximately 0.6 acre near the southeastern corner of the portion of NRL-CBD west of Maryland Route 261 (**Figure 2-11**). The range was oriented east to west direction and was approximately 30 to 35 yards wide by 50 to 55 yards long. The firing line(s) was located on the easternmost portion of the range. A hill served as the backstop berm. Target stands were placed approximately 5 feet in front of the toe of the hill. The site boundary for MRS 003 encompasses the historic locations of the firing line and target area, and the former backstop berm (hill). The range was first used in the 1960s for recreation by Navy personnel and civilians. Navy personnel and DoD



contract guard forces also used the range for small arms qualification. The Small Arms Range was closed early in the 1990s after failing to maintain military range specifications (i.e., adequate separation distances/buffers).

An SI (Malcolm Pirnie, Inc., 2010) was conducted in 2010 to identify, and confirm the presence of contamination at MRS 003. The SI included surface soil sampling, installation of temporary monitoring wells, and collection of groundwater samples. No MEC were observed. Based on the results of the SI MRS 003 was recommended for an RI.

An RI (Tetra Tech, 2016c) was completed to characterize the nature and extent of contamination, and to quantify the potential risks posed to human health and the environment as a result of exposure to site-related contaminants. The RI indicated that lead in surface soil posed a human health risk for hypothetical future residents, construction workers and industrial workers as well as an ecological risk for ecological receptors. The RI also indicated that groundwater presented a risk to future hypothetical residents due to metals.

A Focused Feasibility Study (Tetra Tech, 2016b) was developed to evaluate alternatives for addressing this risk, and a PRAP was issued for public comment in August 2017. The Navy, in concurrence with MDE and after no public comments were received, selected to excavate lead-contaminated soils, dispose of them at a licensed offsite facility, and backfill the site with clean fill (CH2M, 2018c). The soil removal was completed in 2019 and a Remedial Action Completion Report was completed in 2020 (NAVFAC Washington, 2020).

As described above, groundwater will be addressed under a separate Proposed Plan and Decision Document.

## **Community Overview**

This section describes communities near NRL-CBD, provides a brief history of past community involvement activities, and summarizes known community concerns about the site and the communications needs of community members.

## 3.1 Community Setting

NRL-CBD is located south of the Town of Chesapeake Beach, in southern Maryland, along the western edge of the Chesapeake Bay. Less than 30 miles southeast of Washington, D.C., Chesapeake Beach was founded by the Washington and Chesapeake Beach Railway Company in 1894 as a resort town on the shores of the Chesapeake Bay, completed with beachfront hotels, a race track, casino, bathhouses, beaches, bandshell, and a roller coaster on a mile-long boardwalk. From 1900 until 1934, Chesapeake Beach attracted tourists from Washington, D.C. and Baltimore, but by the early 1930s, the Great Depression and the rising popularity of the automobile lead to closure of the railroad in 1935 (Town of Chesapeake Beach, n.d.)



Today, Chesapeake Beach is home to nearly 6,000 residents who work locally, commute to the Washington, D.C. area, or who have retired to enjoy life along the Chesapeake Bay. The town still attracts tourists, and is known for fresh seafood like Maryland blue crabs and locally caught rockfish, active recreation like fishing and sailing, quiet beaches, and public boat ramps and marinas.

NRL-CBD is flanked by a mix of single-family residential neighborhoods, forested areas, and small farms. The closest schools to NRL-CBD are Beach Elementary School (approximately 2 miles north), Sunderland Elementary School (approximately 4 miles west), Mount Harmony Preschool (approximately 4.5 miles northwest) and





Huntingtown High School (about 5 miles southwest). Other public schools, private daycare centers, preschools, and church schools are located in the communities surrounding NRL-CBD.

Numerous opportunities exist in the area for recreation, shopping, and dining. Local attractions include marinas and tackle shops, the Chesapeake Beach Rail Trail, community parks, beaches, museums such as the Chesapeake Beach Railway Museum, playing fields and tennis courts, and the Chesapeake Beach Water Park, located adjacent to Chesapeake Beach's Community Center.



## 3.2 Population

The Town of Chesapeake Beach is located in Calvert County, Maryland's smallest county, within the Washington D.C. metropolitan area. Select demographic and economic data for Chesapeake Beach and Calvert County, in comparison to the State of Maryland, are shown in **Table 3-1**.

Table 3-1. Demographic Summary			
	Maryland	Calvert County	Town of Chesapeake Beach
Total population, 2010 <sup>a</sup>	5,773,552	88,737	5,753
Total population, 2017 <sup>b</sup>	5,996,079	90,824	5,930
Percent change (2010–2017)	3.5%	2.4%	3.1%
Percent minority (non-white)⁵	43.4%	14.8%	9.7%
Hispanic or Latino <sup>b</sup>	9.6%	3.6%	2.9%
Median age <sup>♭</sup>	38.5	40.8	34.5
Median household income, 2017 <sup>b</sup>	\$78,916	\$100,350	\$102,679
Unemployment rate <sup>♭</sup> (population older than 16 years old)	4.1%	5.0%	5.2%
Persons living below the poverty level, 2017 <sup>b</sup>	9.7%	5.7%	8.3%
Percent over 5 years old who speak English less than "very well" <sup>b</sup>	6.7%	1.3%	0.5%
<sup>a</sup> U.S. Census Bureau, 2020a			

## 3.3 Environmental Justice

The Environmental Justice Act of 1992 obligates federal agencies to make environmental justice part of their overall mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. Environmental justice refers to the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (USEPA, 2011).

The Navy is aware of environmental justice issues and seeks to ensure that actions and activities related to the ERP at NRL-CBD do not disproportionately affect any segment of the population. An environmental justice screening for this CIP was conducted using a mapping tool developed by USEPA called EJSCREEN (USEPA, 2020a). EJSCREEN uses data on low-income and minority populations at the Census-block-group level (rather than county or city-level, as shown in Table 3-1), to develop a demographic index. EJSCREEN was used to develop a demographic index for a 5-mile region of influence around NRL-CBD. Results of the EJSCREEN are shown in terms of percentiles, indicating the percent of the United States population that has a higher value for



low-income and minority indicators. Percentiles at or above 95 percent indicate those areas that are of particular concern for environmental justice issues. Results indicated that there were no areas within the region of influence for NRL-CBD with demographic percentiles that would indicate populations that would be potentially more susceptible to environmental concerns based on income or minority indicators.

## 3.4 Employment

Although Calvert County is Maryland's smallest county, it falls within the Washington, D.C. metropolitan area and many residents commute to the metro area. However, Calvert County's private sector industries generate \$4.6 billion in economic output. Major private sector employers include Calvert Health Medical Center, Exelon/Calvert Cliffs Nuclear Power Plant, Arc of Southern Maryland, and Chesapeake Beach Resort & Spa (Maryland Department of Commerce, 2019).

## 3.5 Local Water Use

NRL-CBD is in the Atlantic Coastal Plain physiographic province. The sediments of the Coastal Plain are a thick sequence of unconsolidated sands, clays, and gravels and, at times, indurated lime or iron-cemented sands (NEESA, 1984). The two primary formations that underlie NRL-CBD are the Choptank formation, which ranges from 75 to 100 feet thick, and the underlying Calvert formation, which is approximately 150 feet thick (NEESA, 1984). Based on information obtained from the soil borings collected during the Basewide SI (CH2M, 2016), the 2017 Background Groundwater Investigation (CH2M, 2017), and the Evaluation of PFAS in Groundwater (CH2M, 2018b) at the facility, the soils underlying NRL-CBD are consistent with the Atlantic Coastal Plain and the Choptank and Calvert formations.

Shallow groundwater across the facility has been encountered from depths ranging from 10 to 27 feet below ground surface. Localized groundwater flow is influenced by surface topography, which causes the groundwater flow to radiate to the northeast and southeast from Navy Court Road. This shallow water table is underlain by a thick clay layer (i.e., Calvert confining unit) that is believed to be laterally continuous and fully confining. Below this confining unit is the Piney Point aquifer, which is the primary drinking water aquifer for private residential use in the vicinity of NRL-CBD. Groundwater, obtained from deeper regional aquifers, is also used as a source for public drinking water.

Groundwater is a source of drinking water in the neighborhoods near NRL-CBD. A review of drinking water well records available through the County indicated that private water supply wells are primarily screened in the Piney Point aquifer.

## 3.6 History of Community Outreach

The minimum community involvement activities required under CERCLA have been conducted during environmental investigations at NRL-CBD, including publishing notices in the local newspapers, holding public comment periods, and holding public meetings as required. These community outreach activities solicited little public attention.

In 2016, the Navy developed a proactive policy to identify and investigate potential perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) exposures in drinking water. After a records review and on-base sampling, the Navy announced plans to sample off-base private drinking water wells. The Navy sent letters to local affected property owners and held a public meeting and poster session in July 2018, before sampling, and again in October 2018 after sampling to provide a summary of the results to the public. Individual property owners were sent their individual well sampling results. This increased off-base activity raised public awareness, interest, and potential concern about the Navy's environmental response activities at NRL-CBD. As a result, the Navy began the process to develop this CIP and to assess the need to establish a **Restoration Advisory Board (RAB)**, including holding a RAB public interest meeting in August 2019. Based on interest at the meeting and the receipt of 17 applications for RAB membership, the Navy held its first RAB meeting for NRL-CBD in December 2019, with all applicants invited to join the RAB.

Copies of public notices and posters from recent community outreach activities are provided in Appendix A.



## 3.7 Community Interests and Concerns

#### 3.7.1 Process to Assess Community Interests and Concerns

To assess community interests and concerns and prepare this CIP, a letter introducing the CIP process and the RAB interest meeting was mailed in August 2019 to 124 local stakeholders, including elected officials, town and County employees, and local residents, including those who had previously attended public meetings. Copies of the letter are provided in **Appendix B**. In addition, a public notice was published in the *Calvert Recorder* twice during the weeks preceding the August 2019 CIP/RAB public meeting, and flyers were posted in public places in town.

Questions were prepared to guide personal interviews for development of this CIP. Fourteen community members attended the RAB/CIP public meeting. Participants were offered a chance to participate in a CIP interview at the meeting, or to schedule a telephone interview. Attempts to contact letter recipients were made by phone and email to schedule additional interviews. Nine stakeholders chose to be interviewed for this CIP. Interviewees represented community residents, local officials, and environmental organizations.

#### 3.7.2 Summary Results of Community Interviews

**Appendix C** contains a copy of the interview questions and compiled results of the personal interviews. Following are highlights of those interviews:

- Most of the interviewees live in Chesapeake Beach but neither live nor work on-Base.
- The majority have lived locally for more than 6 years.
- Results varied when people were asked to describe the relationship between the base and the community, with
  some saying it was generally a positive relationship and the base was a good neighbor, and others stating
  there was essentially no relationship.
- Respondents indicated that the local community is somewhat concerned about environmental issues in general, with the most interest in the Chesapeake Bay and associated issues (e.g., surface water quality, stormwater runoff, fishing, erosion, climate change, and associated sea level rise).
- Most of those interviewed were aware of the Navy's environmental investigations at NRL-CBD, although some
  were not aware until the off-base groundwater investigation began. One interviewee expressed frustration in
  not being able to obtain information about the environmental restoration program when he first became aware
  of it, and indicated that he had to make numerous requests for information.
- Interviewees indicated specific interest in environmental restoration activities to include: protecting Chesapeake Bay from groundwater and surface water runoff, addressing shallow wells and protecting people from exposure to contaminants, addressing potential human and livestock health issues, and ensuring the Navy implements a thorough and sound process.
- Most interviewees expressed interested in the formation of a RAB.
- The majority of interviewees were not aware that there are documents available for review at the Calvert Library-Twin Beaches Branch, nor had they seen public notices in the *Calvert Recorder*.
- About half of the interviewees were aware that the Navy has an environmental restoration website.
- Generally, interviewees indicated that people get information about the local community through the Town
  website and online newsletter, Facebook, and local newspapers. Because Chesapeake Beach is a small
  community, interviewees indicated that people also get information through word of mouth and local bulletin
  boards.

Interviewees made the following recommendations for how the Navy should communicate about the ERP at NRL-CBD:

• In general, use both print and social media to reach residents; do not assume that everyone uses social media.



- General updates can be published in the town online newsletter, but specific information for residents should be mailed. The Navy should request a community address list through the town.
- Flyers, announcements, and meetings should be posted on community bulletin boards, including posting public meetings on the board in front of Town Hall. Other bulletin board locations that were recommended included the library, grocery stores, the community center, senior centers, outdoor community boards in Prince Frederick and North Beach, and at the Chesapeake Beach post office, as many residents get their mail through P.O. boxes and therefore go to the post office regularly.
- The Navy could have a booth with information at the Farmers' Market (June-November) and at the County Fair in September.
- RAB meetings will help keep people informed. If RAB meetings are not held, then the Navy should hold public meetings several times a year at the community center.

Interviewees also expressed interest related to the base but not specifically related to the ERP, including asking whether the base will remain operational, whether the base fire department will be re-opened, and whether a range can be opened for public use, given the scarcity of local public ranges.

## **Community Involvement Program**



The goal of the NRL-CBD community involvement program is to achieve effective, open communication among the Navy, the local community in and around Chesapeake Beach, and MDE.

In cooperation with MDE, the Navy will function as the lead agency responsible for managing the community involvement program at NRL-CBD. The Navy will facilitate communications with the community based not only on the community involvement requirements of CERCLA, but also on the community's interests and concerns, as identified in the community interviews conducted to prepare this CIP. This community involvement program will enable the Navy to respond to public interest in, and concerns about, the environmental investigation and remediation activities at NRL-CBD.

The Navy has conducted community involvement activities to support the ERP in accordance with CERCLA. Required activities have included public notices, public meetings, and public comment periods for specific documents, such as PPs and PRAPs. Public meetings tended to draw little attention until off-based shallow well sampling was conducted in 2018. More recent community involvement activities have included:

- August September 2017 public notice and public comment period for the MRS 003 PRAP
- July 2018 public poster board session and meeting to announce beginning of off-base well sampling
- October 2018 public poster board session and meeting to announce results of off-base well sampling
- October November 2018 public notice, public comment period, and public meeting for the MRS 002 PP for soil
- August 2019 public poster board session and meeting to gauge interest in forming a RAB and to announce the CIP process
- December 2019 first RAB meeting

The activities described below are part of the community involvement strategy addressing the community involvement objectives for NRL-CBD and the information needs of the local community. This CIP is a dynamic document that will evolve as the project progresses.

The effectiveness of the NRL-CBD community involvement program is dependent on timely and accurate information dissemination, feedback from the public, the Navy's response to community concerns, and effective coordination between the Navy and MDE. The Navy is committed to a proactive community involvement program and providing timely information to the community in a clear, concise form.

## 4.1 Objectives of the Community Involvement Program

The primary objectives of the NRL-CBD community involvement program are to:

- Encourage and promote two-way communication between the Navy and concerned individuals, including local
  residents and state and local officials.
- Inform the general public of planned and ongoing cleanup actions, major findings, and decisions.
- Furnish accurate, timely, and understandable information to affected and interested parties.
- Provide and maintain a process of monitoring public concerns and information needs throughout the environmental restoration process.
- Ensure a system is in place for incorporating public comments into the environmental restoration process in a timely and meaningful way.
- Gather and update information about NRL-CBD neighboring communities.
- Revise the community involvement program as necessary to meet the changing needs of the local community.



## 4.2 Required Community Involvement Activities

Several community involvement activities are required as part of the CERCLA process. These are described in the following subsections and listed in **Table 4-1**.

### 4.2.1 Designate Navy Contacts

**Description:** Provide a point of contact and information resources to respond to inquiries from the public.

**Goal:** Provide accurate, timely, and easy-to-understand information to community members seeking information about the ERP at NRL-CBD.

**Implementation:** The NAVFAC Washington PAO is the primary point of contact for the ERP and will work closely with the ERP Manager. As the primary point of contact for



the ERP for NRL-CBD, the PAO serves as the central information source for public and media inquiries. As the key spokesperson, he or she is responsible for answering telephone calls and responding to written inquiries about site activities. In addition, the NAVFAC Washington PAO will keep the Navy's regional PAO informed of ongoing issues.

The Navy will continue to publicize the PAO's contact information as the primary point of contact and will ensure the information is provided in all articles, announcements, and advertisements.

Timing: Ongoing.

### 4.2.2 Establish and Maintain an Information Repository

**Description:** The Information Repository is a one-stop collection of documents for the public, where people can easily find information about CERCLA in general and the status of the cleanup and remediation at project sites. Under CERCLA, it is required to be located "at or near" the site. Typically, it is located in a convenient, easily accessible public location such as a public library.

**Goal:** To provide convenient access to site-related information for community members.

**Implementation:** An Information Repository has been established at Calvert Library-Twin Beaches Branch, approximately 2.4 miles from NRL-CBD. The Navy will continue to place general documents of public interest and for public review in the library as needed.



**Timing:** Ongoing. The Information Repository will be maintained as needed to contain general documents of public interest and documents available for public comment. The location of the Information Repository will be referenced in future fact sheets and public notices.



### 4.2.3 Establish and Maintain an Administrative Record File

Description: The AR file includes documents that were considered or relied upon in selecting a response action.

**Goal:** To provide community members with a comprehensive record of all documents and resources used by the Navy in reaching all decisions about the NPL site and its cleanup.

**Implementation:** For NRL-CBD, copies of AR documents are available by searching the online Administrative Record file located on the NRL-CBD public website at <a href="https://go.usa.gov/xQFuV">https://go.usa.gov/xQFuV</a>. Copies of documents are also available by contacting the PAO or the Navy Remedial Project Manager.

**Timing**: The Navy will continue to update the AR file as needed. The AR was established as soon as site investigations began, and it will remain open until the last ROD or DD has been signed. After the last ROD or DD has been signed, the AR may be closed but a records file may remain open for post-ROD documents, such as Five-year Reviews.

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#### 4.2.4 Provide Technical Assistance for Public Participation

**Description:** The DoD established the TAPP program (Federal Register, 1998) to provide a mechanism for RABs to obtain technical assistance. Examples of TAPP projects include reviewing restoration documents and proposed remedial technologies, interpreting environmental health effects, participating in relative risk-ranking exercises (which are used to prioritize restoration activities at a facility), and certain types of technical training.

The RAB can define a proposed TAPP project and prepare a TAPP request. The Navy will then prepare a Statement of Work and procure a qualified technical assistance provider. The RAB may be asked to assist by commenting on potential providers. Funding is provided for up to \$25,000 per year, or 1 percent of the total restoration cost (whichever is less), with a limit of \$100,000 total over the life of the program at any one installation.

The Navy has trained personnel in the TAPP process and produced presentation material. The RAB may request TAPP presentations or training through their Navy co-chair.

**Goal:** To enable RABs to obtain technical assistance to help them better understand and provide input into the CERCLA process at NRL-CBD.

**Implementation:** No TAPP has been awarded for NRL-CBD because the RAB has just been formed. The Navy will provide information about the TAPP program to the RAB, and place information in the Information Repository. Information about the TAPP program could also be made available on the NRL-CBD ERP website.

**Timing:** The Navy will provide information about the TAPP program to the RAB, place information in the information repository, and may post information about the TAPP program directly on the community outreach page of the NRL-CBD ERP website within 1 year of publication of this CIP.

#### 4.2.5 Hold Public Meetings

**Description:** A public meeting is an open forum, usually featuring a presentation on a specific topic by the ERP managers and other members of the site team. The public may ask questions and make public comments.

Public meetings are required at specific steps in the CERCLA process. If a public meeting is held during a public comment period, a court reporter will produce a written transcript of the meeting that will become part of the AR.



Public meetings must be held upon request whenever a formal public comment period is required under CERCLA regulations.

Informal public meetings may be held at any time in the CERCLA process to keep community members informed about ERP activities. Informal public meetings do not require a court reporter to be present.

**Goal:** To provide stakeholders with opportunities to learn about the status of site cleanups, receive responses to their questions and concerns, and have an opportunity to submit comments on proposed actions or decisions.

**Implementation:** Currently, public meetings are held as required under CERCLA for specific technical activities, such as during the public comment period on proposed plans. Informal public meetings and poster board sessions have also been held. Public meetings and poster board meetings are generally held at the Northeast Community Center, which offers well-equipped and accessible meeting rooms that are convenient to local stakeholders and do not require entry to the installation through security checkpoints.

NRL-CBD will continue to hold public meetings as required by CERCLA. Because interviewees indicated that they have not seen a newspaper advertisement for public meetings, the Navy may consider using additional methods to advertise public meetings, such as a posting information about public meetings in the Town's online newsletter (with their permission), posting notices on the NRL-CBD website, and posting notices on community bulletin boards.

**Timing:** The Navy will continue to hold public meetings whenever a formal public comment period is required (for example, upon completion of draft final PPs). The Navy may choose to hold informal public meetings as warranted.

#### 4.2.6 Provide Comment Periods

**Description:** Public comment periods lasting a minimum of 30 days are held to give community members an opportunity to provide input on major decisions in the CERCLA process, such as the selection of removal actions or selected cleanup remedies.

When a public meeting is held during a public comment period, a court reporter will accurately capture comments made during the meeting. This transcript becomes part of the final ROD or DD. Community members may also submit written comments at any time during the public comment period. The public comment period can be extended an additional 30 days if requested by the public. As required, a written response is prepared for significant comments received and included in the ROD or DD.

**Goal:** Provides community members with an opportunity for meaningful involvement in the process and provides the Navy with valuable information for use in making decisions.

**Implementation:** Public comment periods are held as required under CERCLA and DoD policy for specific technical activities, such as during the public comment period on PPs. The Navy places the document that is available for public comment in the information repository at the Calvert Library-Twin Beaches Branch and publishes a notice announcing a 30-day public comment period (for a PP or PRAP) in the *Calvert Recorder*. The notice includes a brief description of the document and advertises the availability of the document in the Information Repository. The Navy will continue to hold and publicize comment periods as appropriate and required under CERCLA.

Timing: Comment periods will be held and publicized for specific technical activities as required.

### 4.2.7 Publish Public Notices

**Description:** At certain points in the CERCLA process, including the beginning of public comment periods, public notices are required to be published in a local newspaper. The public notice can be published as a display advertisement or in legal notices, but should be noticeable.



**Goal:** The purpose of public notices it to notify interested stakeholders about events and activities related to the ERP.

**Implementation:** The Navy currently publishes public notices as required in the *Calvert Recorder* approximately 2 weeks before the event being announced. The Navy will continue to publish public notices in this newspaper as required.

**Timing:** Public notices will continue to be published approximately 2 weeks before a public meeting or beginning of a public comment period.

#### 4.2.8 Prepare a Responsiveness Summary

**Description:** At the end of a public comment period, a Responsiveness Summary will be prepared summarizing comments received and the Navy's responses to public comments. The summary will inform the decision makers about the community preferences, as well as any general concerns. It also provides the public with documentation of the concerns raised and the Navy's responses to those concerns. Responsiveness Summaries are made available to the public in the AR as a part of the ROD or DD.

**Goal:** The purpose of a Responsiveness Summary is to summarize comments received during comment periods, to document how the Navy has considered those comments during the decision-making process, and to provide responses to major comments.

**Implementation:** Responsiveness summaries are prepared and published as an appendix to the ROD or DD. A ROD or DD is placed in the Information Repository for 30 days after it has been signed and is placed in the AR. The Navy will continue to produce Responsiveness Summaries as part of RODs or DDs and will place them in the Information Repository and AR.

Timing: The Navy will continue to issue Responsiveness Summaries whenever a ROD or DD is prepared.

#### 4.2.9 Develop and Update the Community Involvement Plan

**Description**: The CIP is a written plan of action that provides for interaction with the public, elected officials, and environmental groups, including obtaining their input at appropriate points during the environmental restoration process. Under CERCLA, a revision to the CIP should be considered: (1) after a ROD or DD is signed, if significant community concerns are discovered that pertain to the remedial design and construction phase, or (2) as appropriate when a major change in the ERP at NRL-CBD occurs. Otherwise, Navy guidance recommends the Navy consider updating the CIP every 3 to 5 years.

**Goal:** To provide a current foundation for establishing two-way communication with the public to create an understanding of ERP and related actions, to assure public input into decision-making processes related to affected communities, and to make certain that the Navy is aware of and responsive to public concerns.

**Implementation**: This CIP will be made available to the public in the Information Repository and on the NRL-CBD ERP website. It will be updated in 5 years unless site activities require an update sooner.

Timing: This CIP will be updated in 5 years unless site activities require an update sooner.

## 4.3 Additional Community Involvement Activities

#### 4.3.1 Establish a Restoration Advisory Board

**Description:** A RAB is an advisory group for the restoration process, with members from the public, the Navy, and regulatory agencies. These individuals are considered a key resource in efforts to communicate openly and effectively with the community at large. A RAB is designed to act as a focal point for the exchange of information between a DoD facility and the local community regarding ERP activities. A RAB is intended to bring community



members with diverse interests within the local community together with government officials representing the Navy and appropriate regulatory agencies. A RAB enables the early and continued two-way flow of information, concerns, values, and needs between the community and NRL-CBD, and provides community members an opportunity to be involved in the ERP.

**Goal:** To gain effective input from stakeholders on cleanup activities and increase installation responsiveness to the community's concerns about the ERP at NRL-CBD.

**Implementation:** The past level of community interest in the ERP at the base did not warrant formation of a RAB. However, in response to recent community interest, the Navy held a public meeting in August 2019 to gauge interest in forming a RAB for NRL-CBD. Results of interviews for this CIP also documented interest in a RAB and the Navy accepted RAB member applications in August and September 2019. Seventeen RAB applications were submitted and the Navy extended an invitation to all who submitted RAB applications. The first RAB meeting was held on December 11, 2019. RAB meetings are planned to be held at least twice a year.

Implementation of the RAB will following guidance documented in the *Restoration Advisory Board Rule Handbook* (DoD, 2007), which outlines steps for starting a RAB, recruiting

community members, establishing ground rules, and eventually dissolving a RAB when ERP activities conclude.

Communication about the RAB may include published newspaper notices or email notification to invite the public to RAB meetings, posting through the Town website or email notifications (as permitted), website updates, and announcements placed on bulletin boards in public places.

**Timing:** The Navy established the RAB in December 2019 and plans to hold RAB meetings at least twice each year until such time that the RAB is dissolved.

## 4.3.2 Maintain a Mailing List of Interested Parties

**Description:** A mailing list of persons known to be interested in NRL-CBD ERP activities may be maintained. The list may include mailing addresses, as well as email addresses.

**Goal**: To provide project information to stakeholders who want to be kept informed about ERP activities.

**Implementation:** The Navy has begun developing a mailing list based on the mailing list for CIP interviews, sign-in sheets



at public meetings, RAB members, and other interested parties. The mailing list will be maintained in a database or spreadsheet to facilitate sorting and printing labels for different types of mailings. In addition, email addresses should be maintained to the extent possible, to enable the Navy to send out electronic notifications. The Navy can use this mailing list (electronic and print) to send notifications of upcoming activities, such as potential RAB meetings and public meetings, as well as fact sheets and information about proposed plans and other site activities.

**Planned Activity:** The Navy will maintain and periodically update the stakeholder mailing list. Interested community members and groups will be added to the list upon request. Key community contacts to be included in the mailing list are shown in **Appendix D**.

Timing: Ongoing

#### 4.3.3 Maintain a Website

**Description:** Internet technology allows new information to be made available quickly and enables information to be delivered in a user-friendly manner, at the convenience of the user. Increasingly, people rely on the internet to obtain information. Furthermore, maintaining a website rather than printing large numbers of documents and fact sheets saves paper and money spent on printing and mailing.

**Goal:** To enable community members to access key information about CERCLA in general and more detailed information about the NRL-CBD ERP on their own time and at minimal expense

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**Implementation:** The Navy has established a public website for information about the NRL-CBD ERP at <a href="https://go.usa.gov/xQFuV">https://go.usa.gov/xQFuV</a>. The website provides historical and overview information about the ERP, updated information about active sites, past RAB meeting minutes, and access to the searchable AR.

**Planned Activity:** The Navy will continue to update the website on a regular basis. When significant actions such as remedial construction occur, photos and updated information may also be added to the website. Documents such as fact sheets, final RAB meeting minutes, this CIP, Five-year Reviews, and other documents of interest to the public will also be posted on the NRL-CBD ERP website.

Timing: Ongoing.

#### 4.3.4 Prepare and Distribute Fact Sheets

**Description**: Fact sheets are brief documents intended to inform stakeholders about technical information and progress of the investigation and cleanup process. Fact sheets are written for nontechnical audiences and use straightforward graphics to describe technical issues.

**Goal:** To provide stakeholders with current, accurate, easy-tounderstand information about the Navy's environmental investigations and munitions response activities at NRL-CBD.

**Implementation:** The Navy, in cooperation with MDE, will produce fact sheets as needed to communicate about specific issues at NRL-CBD. Fact sheets will be distributed at RAB meetings and public meetings, and will be placed in the information repository. They may also be emailed to the mailing list, posted on bulletin boards, or posted or distributed electronically through the Town's website (as permitted).



**Timing:** The Navy will produce required fact sheets in accordance with CERCLA policy and will develop additional fact sheets as needed.



## 4.4 Timing of Community Involvement Activities

**Table 4-1** presents the general timing of community involvement activities associated with potential environmental restoration activities. Community involvement activities related to these sites may be combined or separate, depending on timing and level of public concern and interest relative to the status and schedule of ERP activities.



	Preliminary Assessment Site Inspection	Remedial Investigation Feasibility Study	Proposed Plan	Record of Decision	Remedial Design Remedial Action	Pre-ROD Significant Changes	Post-ROD Significant Changes	Removal Action < 6 Months	Removal Action > 120 Days	Removal Action > 6 Months	Five- Year Review
Designate Navy Contacts											0
Information Repository											О
Administrative Record											О
Technical Assistance for Public Participation Information											
Public Notice						О					
Public Meeting		0		О		Ο	0	0	Ο	Ο	О
Public Comment Period											
Responsiveness Summary											
Community Involvement Plan											0
Restoration Advisory Board	Ο	Ο	0	О	0	0	0	0	О	Ο	Ο
Mailing List	Ο	0	0	0	0	0	Ο	0	0	Ο	Ο
Website	Ο	Ο	0	0	Ο	Ο	0	Ο	0	Ο	Ο
Fact Sheets			$\mathbf{O}^{1}$				2				Ο

|--|

Ongoing activity

Required activity

Discretionary activity as determined by community interest or as needed

PP or PRAP may be published as a fact sheet.
 Explanation of Significant Differences may be published as a fact sheet.

Source: Superfund Community Involvement Handbook (USEPA, 2016)

0

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# **SMIE**

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# Naval Research Laboratory Chesapeake Bay Detachment MRS 003 – Small Arms Range Public Notice

The Department of the Navy (Navy), with concurrence from the Maryland Department of the Environment (MDE), recently completed a Focused Feasibility Study (FFS) to evaluate alternatives for a response action at Munitions Response Site (MRS) 003–Small Arms Range. The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requires a Proposed Remedial Action Plan (PRAP) to present the preferred alternative prior to conducting a response action. The Navy, as lead agency, has prepared the PRAP in accordance with CERCLA and the National Contingency Plan.

The Naval Research Laboratory – Chesapeake Bay Detachment (NRL-CBD) is located near Chesapeake Beach, Maryland. The facility encompasses more than 161 acres and includes MRS 003, known as the Small Arms Range in the western portion of the facility. MRS 003 is comprised of 0.6 acres and encompasses the former small arms range. MRS 003 was designated by the Navy in 2010 to address lead-impacted soil.

The FFS presents the evaluation of alternatives



to remove lead-contaminated soil at MRS 3. As a result of the FFS, the Navy is proposing excavation of the lead-contaminated soil, with offsite disposal at a CERCLA Off-Site Ruleapproved facility; the excavated areas will be backfilled with clean fill to existing grade.

The Navy will make the PRAP available for public review for 30 days at the Calvert County Public Library – Twin Beaches Branch from August 25 until September 23, 2017. The Calvert County Public Library - Twin Beaches Branch is located at 3819 Harbor Road, Chesapeake Beach, MD. Based on sufficient public interest, a public meeting may be held during which the Navy and MDE will provide more information about the site and describe the alternatives evaluation process for MRS 003. Public comments on the PRAP, including the commenter's name and address, will become part of the Site Administrative Record and the Navy will provide a response to significant comments. The final remedy for MRS 003 - Former Small Arms Range will be selected only after the public comment period has ended and all substantial comments have been addressed.

For additional information, please contact: Regina Adams, Public Affairs Office NAVFAC Washington Regina.adams@navy.mil (202) 685-0384 Public Notice MRS 001, 002, and 003 Groundwater and MRS 002 Soil Proposed Plan Published in *The Calvert Recorder* April 6, 2018



# Public Review and Comment on Proposed Response Plans for Three Munitions Sites at Naval Research Laboratory – Chesapeake Bay Detachment

The Department of the Navy invites public review and comment on the preferred alternatives for selection of the Final Remedy for three munitions response sites at the Naval Research Laboratory-Chesapeake Bay Detachment, located near Chesapeake Beach, Maryland. The Navy has prepared the following documents in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

- Proposed Plan, Soil at MRS 002 Randle Cliffs, Zuni Launch Site (RCZ) and Gun Mounts (RCG) and,
- Proposed Remedial Action Plan, Groundwater at MRS 001-Hypervelocity Low Pressure Gun (HVG), Groundwater at MRS 002 – Randle Cliffs, Zuni Launch Site, and Groundwater at MRS 003 - Small Arms Range (SAR)

# Site Description

The Naval Research Laboratory – Chesapeake Bay Detachment encompasses more than 161 acres and includes Munition Response Site (MRS) 001, MRS 002 and MRS 003. MRS 001 is located on 2.7 acres near the western portion of the facility. MRS 002 contains two distinct portions - the Zuni Launch Site is located on 0.5 acres along the eastern boundary of the site and the Gun Mounts site is located on 5.2 acres at the top of Randle Cliffs. MRS 003 is located on 0.6 acres in the western portion of the facility. MRS 001, MRS 002, and MRS 003 were designated by the Navy in 2010 to address impacted soil and groundwater.

## Proposed Response Plans

The Navy, with concurrence from the Maryland Department of the Environment (MDE), completed a Remedial Investigation (RI) to characterize the soil and groundwater at the three sites. In addition, a Focused Feasibility Study (FFS) was prepared for groundwater at MRS 001, MRS 002 (RCZ only), and MRS 003 to evaluate alternatives for response actions.

**Proposed Plan for Soil at MRS 002:** The Navy's preferred alternative is No Action because there are no unacceptable risks to human health or ecological receptors that would warrant remedial action. Additionally, no evidence of munitions or munitions residue was found in soil at MRS 002.

Proposed Remedial Action Plan for Shallow Groundwater at MRS 001, MRS 002 (RCZ only), and MRS 003: The Navy proposes implementing Land Use Controls (LUCs) to prevent exposure to site-related contaminants under a hypothetical future scenario where the land was converted to residential use. Under this preferred alternative, LUCs would prevent use of the groundwater for drinking water by prohibiting the installation of wells for purposes other than monitoring. The LUCs for groundwater will remain in place indefinitely at MRS 001, MRS 002 (RCZ only), and MRS 003 to protect human health and the environment.

## Public Review and Comment

The documents describing these response actions are available for public review **April 6-May 6, 2018** at:

## Calvert County Public Library – Twin Beaches Branch 3819 Harbor Road Chesapeake Beach, MD 20732

Should there be sufficient public interest, a public meeting may be held during which the Navy and MDE will provide more information about the sites and describe the alternatives evaluation process the three munitions sites.

Public comments should be submitted to:

Regina Adams, Public Affairs Office NAVFAC Washington 1314 Harwood Street SE, Washington, D.C. 20374 <u>regina.adams@navy.mil</u> (202) 685-0384

Public comments, including the commenter's name and address, will become part of the Site Administrative Record and the Navy will provide a response to significant comments. The final action for soil at MRS 002 and the final remedy for shallow groundwater at MRS 001, MRS 002 (RCZ only), and MRS 003 will be selected only after the public comment period has ended and all substantial comments have been addressed. MDE Fact Sheet Naval Research Laboratory – Chesapeake Bay Detachment; What you Need to Know May 2018



## Naval Research Laboratory-Chesapeake Bay Detachment

What You Need to Know

Naval Research Laboratory-Chesapeake Bay Detachment (NRL-CBD) is a field station for NRL Washington D.C. that provides facilities and support services for radar, electronic warfare, optical devices, materials, communications, and fire suppression research.

#### **Site Location**

The Naval Research Laboratory – Chesapeake Bay Detachment is located at 5813 Bayside Rd, Chesapeake Beach, in Calvert County, Maryland. The 168-acre property is identified on Calvert County Tax map 12, parcel 66. Several buildings are present on-site, with scattered wooded areas and streams which empty into the Chesapeake Bay. The site is located on the west bank of the Bay, with the eastern boundary steeply dropping off to the rip-rap-reinforced shoreline, approximately 80 feet below, The site is secured with fencing and a manned guard post. Maryland Rt. 261 (Bayside Rd) runs north-south through the site, dividing it into western and eastern portions. The facility also includes a 2-acre tract of land on Tilghman Island in Talbot County. In addition, NRL-CBD controls a water range area extending to the east into the Chesapeake Bay.

### Site History

The NRL-CBD site is one of several field sites of the NRL, whose main campus is in Washington, D.C. The NRL-CBD site is used to conduct testing involving radar, electronic warfare, optical devices, materials, communications, and fire research. Land for the site was initially acquired in 1941, with major expansion occurring in 1953-1954 with construction of a large laboratory building, shop facilities, and complete utility systems.

#### **Environmental Investigations**

In 1984, the Navy conducted an Initial Assessment Study of the site as part of their Superfund equivalent program (the Navy Assessment and Control of Installation Pollutants, or NACIP). In that and subsequent studies, the following Installation Restoration (IR) sites have been identified at NRL-CBD:

- Site 2 (Chemical Burial Site) was used in the 1950s-1960s for the disposal and/or burning area for chemical wastes generated at NRL D.C. and brought to NRL-CBD.
- Site 3 (Landfill #1) was used from 1942-1950 for disposing of household garbage, oily rags, lubricant cans, paint sludge, paper, etc., and open surface storage of equipment.
- Site 4 (Landfill #2) was used between 1950-1958 for disposing of household garbage, oily rags, lubricant cans, paint sludge, paper, etc.
- Site 5 (Landfill #3) was used between 1958-1968 to dispose of household garbage, oily rags, lubricant cans, paint sludge, paper, etc., and open surface storage of equipment.
- Site 6 (Power Plant Oil Spill) occurred in 1973 when a 75-gallon oil spill that was cleaned up.
- Site 7 (Road Oil Application) is an area used between 1940-1952 to spray waste oils on roads to control dust.

www.mde.maryland.gov



## Naval Research Laboratory-Chesapeake Bay Detachment

## What You Need to Know

- Site 8 (Well Mercury Contamination) is an area where a one-time mercury release from a flowmeter to the water supply, cleaned up in the 1970s with no apparent residual effects based on blood testing and 8 months of drinking water monitoring.
- Site 9 (Photoprocessing Waste Discharge) was used between 1950s-1975 to discharge of photochemicals to ground.
- AOC A (Fire Testing Area) is an area where NRL-CBD tested fire-extinguishing agents.
- AOC B (Quarters) is the location of several former residential buildings (now razed) with lead-based paint and asbestos.
- AOC C (Chemical Burial Site 2) is an area used in the 1960s and has the same operational history as Site 2.
- AOC D (Water Tower) was used between 1950s-1970s and was painted with lead-based paint on tower, which has now impacted the surrounding surface soil.

The Military Munitions Response Program (MMRP) sites identified at NRL-CBD are as follows:

- UXO-1 (Hypervelocity Low Pressure Gun) was used between 1967-1995 to study the impact of high velocity projectiles on various target materials.
- UXO-2 (Randle Cliffs Zuni Launch Site) was used between 1960s-1992 to test and research associated with Chaff rounds.
- UXO-2 (Randle Cliffs Gun Mount) was in operation between 1944-1948 and was used in conjunction with experiments involving Naval vessel gun-sighting.
- UXO-3 (Small Arms Range) was operational between the 1960s-early 1990s as a recreational range for Navy personnel and civilians.

#### **Current Status**

Based on additional Site Inspection activities conducted on IR sites in 2012, Site 2 and AOC C were not recommended for further action. However, several of these sites are currently in the remedial investigation phase, and the Navy has recommended further action for Site 3, Site 4, Site 5, Site 7, Site 9, and AOC D. In 2014 and 2017 respectively, soil and groundwater background studies were performed to provide information to aid in the evaluation of remedial alternatives for both IR and MMRP sites. In 2017, the Navy completed site-wide sampling for Perfluorobutanesulfonic Acid (PFBS), Perfluorooctane Sulfonate (PFOS), and Perfluorooctanoic Acid (PFOA) in shallow and deep groundwater, and the presence of these compounds was confirmed in the shallow groundwater zone; additional investigations will focus on AOC A, the Fire Testing Area. The anticipated plan for UXO-3 is excavation of lead-contaminated soil and proper off-site disposal.

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Navy Fact Sheet Naval Research Laboratory – Chesapeake Bay Detachment; Drinking Water Investigation June 2018

# Naval Research Laboratory – Chesapeake Bay Detachment 5813 Bayside Road | Chesapeake Beach, Maryland 20732

Drinking Water Investigation

June 2018

The Navy is requesting permission to sample drinking water from wells within designated areas near the Naval Research Laboratory – Chesapeake Bay Detachment (NRL-CBD) in Chesapeake Beach, Maryland. The Navy has developed a protective policy to address past releases of per- and polyfluoroalkyl substances (PFAS). These substances are present in the soil and shallow groundwater at NRL-CBD as a result of historical testing of extinguishing agents used for firefighting activities, specifically various formulations of aqueous film forming foam (AFFF). Since PFAS are in the shallow groundwater, there is the potential for these substances to also be present in private drinking water wells in the designated areas because of their proximity and location relative to the NRL-CBD Fire Testing Area (FTA) where the Navy performs testing of these extinguishing agents (Figure 1).

The Navy previously identified NRL-CBD as a site with potential offsite PFAS migration and exposure via groundwater used as drinking water. A review of county drinking water well records led the Navy to believe that drinking water wells located within the designated area were installed in the deeper groundwater, which is "protected" by a thick (greater than 100 feet) layer of clay. A Navy investigation of NRL-CBD found that although the shallow groundwater at the FTA contained PFAS, the deeper groundwater (specifically the Piney Point aquifer) did not contain any detectable levels of PFAS. In May 2018, the Navy learned that there may be a limited number of private drinking water wells in an area southeast of NRL-CBD using the shallow groundwater as their drinking water. Additionally, recent studies have improved our understanding of how PFAS can be transported in surface water. As such, the Navy is reconsidering the potential for PFAS transport and exposure in drinking water north of NRL-CBD. These designated areas, north and southeast of the installation, are shown on Figure 2.

If your preliminary results show that your drinking water contains PFOS and/or PFOA above the EPA lifetime health advisory, then the Navy will provide bottled water or an alternate water supply until a long-term solution is implemented.



In an abundance of caution and concern for our neighbors, before the ongoing investigation and delineation of PFAS in groundwater at NRL-CBD is complete, the Navy is initiating an investigation of offbase drinking water wells within these designated areas to identify and address any current exposure to PFAS in drinking water. There is no legal requirement to conduct drinking water testing. It is a voluntary measure because water quality for our off-base neighbors is a priority for the Navy. The Navy is performing this drinking water investigation in coordination with partners such as the United States Environmental Protection Agency (EPA) Region 3, Agency for Toxic Substances and Disease Registry, Maryland Department of the Environment, and Maryland Department of Health – Calvert County.

#### Figure 2



June 2018

Naval Research Laboratory – Chesapeake Bay Detachment Drinking Water Investigation

#### BACKGROUND

PFAS are man-made chemicals that have been used since the 1950s in many household and industrial products because of their stain- and water-repellant properties. PFAS are now present virtually everywhere in the world because of the large amounts that have been manufactured and used. Once these compounds are released to the environment, they break down very slowly.

PFAS are "emerging" contaminants, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The EPA is currently studying PFAS to determine if regulation is needed. In May 2016, the EPA released lifetime health advisory (LHA) levels for two PFAS, specifically perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). **Health advisory levels are not regulatory standards. They are health-based concentrations which offer a margin of protection for all Americans given a lifetime of exposure to PFOS and PFOA in drinking water.** The EPA health advisory level for lifetime exposure is 70 parts per trillion (ppt) for PFOS and 70 ppt for PFOA. When both PFOS and PFOA are found in drinking water, the combined concentrations should not exceed 70 ppt.

#### NAVY POLICY

The Navy has developed a proactive policy to assess potentially impacted drinking water and eliminate exposure to PFOS and/or PFOA near installations where there were known or suspected releases of PFAS to the environment. Navy policy is to sample drinking water sources downgradient (in the direction of groundwater flow) from a suspected release of PFAS. To ensure protectiveness, the Navy will offer this drinking water sampling to all residents in the designated area (Figure 2), regardless of the depth of their drinking water well. This area includes approximately 79 private drinking water wells which the Navy is requesting permission to sample to ensure our neighbors are not being exposed to PFAS in their drinking water at concentrations exceeding the EPA LHA.

## HEALTH INFORMATION

Exposure to PFOS and PFOA appears to be global. Studies have found both compounds in the blood samples of the general population. Studies on exposed populations indicate that PFOS and/or PFOA may cause elevated cholesterol levels and possibly low infant birth weight. In studies conducted using laboratory animals, effects on developmental, neurological, immune, thyroid, and liver function were observed.

Health effects from exposure to low levels of PFAS are not well known and studies are continuing. Blood tests are available to measure these chemicals, but they are not routinely done because the results can be inconclusive and test results do not predict health effects. Long-term exposure effects are still being investigated by the EPA.

Based on what is known and still unknown about PFOS and PFOA, it is recommended people not drink or cook with water that contains these compounds above the EPA LHA.

#### ACTIONS BASED ON RESULTS

The preliminary results from the off-base drinking water sampling are expected within a few weeks after collecting the samples. The Navy will do its best to keep the result confidential to the extent permitted by law. We will provide notification to the property owners of their personal drinking water results and provide follow-up actions, if needed.

The Navy will provide an alternate water source, likely bottled water, for drinking and cooking to any resident in the sampling area whose water contains PFOS and/or PFOA above the EPA LHA. The Navy will continue to provide the alternate water until a permanent solution can be implemented.

For updates about this investigation, visit: https://go.usa.gov/xQFuw/ If you have specific questions, contact: NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231) Posters NRL-CBD Drinking Water Investigation Open House Public Meeting Northeast Community Center July 11, 2018



# Why Is the Navy Sampling for PFAS?

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/

If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

# The Navy is protecting our neighbors by identifying potential exposure to unregulated compounds (PFAS) in drinking water.

The Navy has a protective policy that goes beyond the requirements of the Safe Drinking Water Act.

- The EPA established a drinking water lifetime health advisory of 70 ppt for two PFAS compounds, PFOS and PFOA.
- The Navy is taking action to:
  - Identify and prioritize locations with the potential for exposure to PFOS and/or PFOA.
  - Protect our neighbors who may be exposed to drinking water that has PFOS and/or PFOA above the EPA lifetime health advisory.



per- and polyfluoroalkyl substances perfluorooctanoic acid

PFOS perfluorooctane sulfonate parts per trillion ppt



# **Naval Support Activity Annapolis**

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



- Naval Support Activity (NSA) Annapolis is a Commander, Navy Installations Command (CNIC) activity.
  - Naval Research Laboratory Chesapeake Bay Detachment (NRL-CBD), located near Chesapeake Beach, Maryland, is a tenant command on the footprint of NSA Annapolis.
- NSA Annapolis delivers base operations support and municipal services to NRL-CBD, including:
  - Security and emergency services
  - Public works and environmental services through Naval Facilities Engineering Command (NAVFAC)
- NSA Annapolis provides the primary point of contact:
  - Commandant Naval District Washington N00P Washington Navy Yard 1411 Parsons Ave SE Washington, DC 20374

#### LEGEND

NSA Annapolis





# **CHESAPEAKE BAY DETACHMENT**

# **NRL-CBD Fire and Combustion Research**





# **Off-Base Investigation – Drinking Water Well Sampling**

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/

If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



- The Navy is investigating the release of AFFF (firefighting foam) from research and testing activities on the base.
- The Navy is also investigating off-base locations while continuing to evaluate the extent of PFAS contamination on base.
- The Navy is requesting permission to sample drinking water wells within the designated areas due to their location relative to the NRL-CBD Fire Testing Area.
- Based on the results of off-base drinking water well sampling, the Navy may expand the sampling area.

#### LEGEND

- Proposed sampling area (parcels)
  - Fire Testing Area (suspected source)
- Shallow monitoring well
- Direction of shallow groundwater flow ➔
  - Surface water
- Base boundary

AFFF aqueous film forming foam LHA lifetime health advisory PFAS U.S. Environmental Protection Agency NRL-CBD Naval Research Laboratory – Chesapeake Bay Detachment PFOA FPA

per- and polyfluoroalkyl substances perfluorooctanoic acid

PFOS ppt

perfluorooctane sulfonate parts per trillion





# Off-Base Investigation – Drinking Water Well Sampling

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



#### LEGEND

Proposed sampling area (parcels)Fire Testing Area (suspected source)

Shallow monitoring well

- → Direction of shallow groundwater flow
- Surface water
- Base boundary

AFFF aqueous film forming foam EPA U.S. Environmental Protection Agency

LHA lifetime health advisory

- NRL-CBD Naval Research Laboratory Chesapeake Bay Detachment
- PFAS per- and polyfluoroalkyl substances
- PFOA PFOS ppt

perfluorooctanoic acid perfluorooctane sulfonate parts per trillion





# What Are PFAS, PFOS, and PFOA?

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

## Where Do PFAS Come From?

- Are man-made compounds; no natural occurrence.
- Have been used since 1950s in many products.
- Last a long time in the environment.
- Are found in people, animals, and fish around the world.



firefighting foam



stain-resistant carpets



nonstick cookware



paints and stains



water-repelling fabrics



food packaging

# What Is the EPA LHA for PFOS and PFOA?

- Sets a concentration of 70 ppt in drinking water.
- Protects against harmful health effects to sensitive populations and the general public, even for lifetime exposure.
- Compares the total concentration of both PFOS and PFOA found to the 70 ppt advisory.
- Provides information to state agencies and public health officials on health effects and water treatment so they can take steps to reduce exposures.
- Is non-enforceable.

## How Is the EPA LHA Calculated?

- Is based on studies of health effects with PFOS and PFOA in laboratory animals.
- Considers information regarding health effects of people exposed to PFOS and PFOA.
- Protects sensitive populations, including the fetuses or nursing infants of mothers who are exposed.
- Assumes 20 percent of overall exposure is from drinking water, 80 percent of exposure is from other sources.

AFFF	aqueous film forming foam	NRL-CBD	Naval Research Laboratory –
ATSDR	Agency for Toxic Substances		Chesapeake Bay Detachment
CDC EPA _HA	and Disease Registry Centers for Disease Control and Prevention U.S. Environmental Protection Agency lifetime health advisory	PFAS PFOA PFOS ppt	per- and polyfluoroalkyl substances perfluorooctanoic acid perfluorooctane sulfonate parts per trillion



# **Exposure and Health Effects**

Additional information can be found online at www.secnay.navy.mil/eie/pages/pfc-pfas.aspx For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/

If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

## **PFAS in People**

- CDC monitoring estimates that most people in the U.S. have PFAS in their bodies.
- Levels of PFOS and PFOA are going down over time following their phase-out from use.
- Some PFAS stay in the body a long time there is no recommended medical treatment to reduce PFAS in the body.



Source: CDC National Health and Nutrition Examination Surve

# **Exposures to PFAS**

- Appear to be widespread around the world.
- Are primarily through:
  - Ingesting contaminated food, water, or soil
  - Breathing air that contains contaminated dust from carpets, upholstery, clothing, etc.
- Will build up in the body until exposure stops.
- Reach the fetuses or nursing infants of mothers who are exposed.
- Are not significant through skin contact when bathing or showering.

# **How to Reduce Exposure**

- If water contains PFOS and PFOA above the health advisory level, you can reduce exposure by using a different water source for drinking, cooking, and brushing teeth.
- Filter PFOS and PFOA from water using certified granular activated carbon or high-pressure membrane systems, such as reverse osmosis. These systems require ongoing maintenance.

# **Potential Health Effects**

- More research is needed to confirm or rule out possible links between exposure and health effects.
- Animals exposed to high levels of PFAS had changes in liver, thyroid, and pancreas function; altered hormone levels; and increased rates of certain cancers.
- Based on limited evidence from studies with people, potential health effects can include:
  - Increased cholesterol levels
  - Changes in growth, learning, and behavior of the developing fetus and child
  - Immune system changes
- The levels of PFOS or PFOA in drinking water do not predict what, if any, health impact might occur as a result of exposure.

## **Should I Have My Blood Tested?**

ATSDR and CDC understand and acknowledge that you may want to know the level of PFAS in your body. However, there are some limitations with blood tests to consider:

- Test results will not provide clear answers for existing or possible health effects or patient care.
- Blood testing for PFAS is not a routine test that health care providers offer.

Consult with your doctor for more information.

AFFF	aqueous film forming foam	NRL-CBD	Naval Research Laboratory –
ATSDR	Agency for Toxic Substances		Chesapeake Bay Detachment
	and Disease Registry	PFAS	per- and polyfluoroalkyl substances
CDC	Centers for Disease Control and Prevention	PFOA	perfluorooctanoic acid
EPA	U.S. Environmental Protection Agency	PFOS	perfluorooctane sulfonate
LHA	lifetime health advisory	ppt	parts per trillion

- Decreased fertility
- Altered hormone function
- Increased risk of certain types of cancer



Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

> Bottled water would be

depending on preference.

delivered once or twice a month,

## After Your Water Is Sampled...What's Next?

- The Navy will notify residents of preliminary results in August 2018.
- If the PFOS/PFOA test results are **above** the health advisory level...
  - ...the Navy will provide bottled water for drinking and cooking, tailored to each household's needs.
- If the PFOS/PFOA test results are at or below the health advisory level...

...no immediate action is needed.

# **Ongoing Actions**

# The Navy is committed to you. We will:

- Continue to keep the community informed.
- Monitor and expand the sampling area if needed.
- Stay involved until a long-term solution is in place.

PFOS

ppt



# **On-Base Investigation – Shallow Groundwater**

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/

If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



#### LEGEND

- Shallow monitoring well
- PFOS and/or PFOA detection  $\otimes$ greater than EPA LHA (70 ppt)
- AFFF aqueous film forming foam EPA U.S. Environmental Protection Agency
- LHA lifetime health advisory
- Direction of shallow groundwater flow
- Surface water

PFAS

- Fire Testing Area (suspected source) Base boundary
- NRL-CBD Naval Research Laboratory -**Chesapeake Bay Detachment** 
  - per- and polyfluoroalkyl substances
- **PFOA** PFOS ppt
- perfluorooctanoic acid perfluorooctane sulfonate parts per trillion

# On-Base Investigation – Deep Groundwater

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



→ Direction of deep groundwater flow

AFFF aqueous film forming foam EPA U.S. Environmental Protection Agency

EPAU.S. Environmental Protection AgLHAlifetime health advisory

NRL-CBD Naval Research Laboratory – Chesapeake Bay Detachment PFAS per- and polyfluoroalkyl substances

Fire Testing Area (suspected source)

PFOA PFOS ppt perfluorooctanoic acid perfluorooctane sulfonate parts per trillion

# NRL-CBD Conceptual Cross Section

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



- Review of drinking water well records available through the County indicated that all private water supply wells are screened in the Piney Point aquifer.
- There were no detections of PFAS in the Piney Point aquifer on base.
- The Navy is sampling to determine whether PFAS have impacted private drinking water wells off base.

AFFFaqueous film forming foamEPAU.S. Environmental Protection AgencyLHAlifetime health advisory

NRL-CBD Naval Research Laboratory – Chesapeake Bay Detachment PFAS per- and polyfluoroalkyl substances PFOA PFOS ppt

perfluorooctanoic acid perfluorooctane sulfonate parts per trillion



# **Federal Environmental Investigation Process**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV

For more information on EPA processes, visit https://www.epa.gov/superfund

For more information on Maryland processes, visit www.mde.maryland.gov



# **NRL-CBD Community Involvement**

- Community involvement is the process of engaging and collaborating with community members.
- The goal of community involvement is to advocate community participation throughout the NRL-CBD environmental restoration program by:
  - Providing an avenue for discussion and information exchange for the environmental cleanup program
  - Helping to address concerns of the public and **NRL-CBD** neighbors

EPA



The on-base PFAS investigation is in the early stages. A preliminary groundwater investigation was conducted to determine if contaminants were released. The goal of the Site Inspection is to determine the magnitude and extent of the release.

U.S. Environmental Protection Agency MDE NRL-CBD Naval Research Laboratory – Chesapeake Bay Detachment PFAS

Maryland Department of the Environment per- and polyfluoroalkyl substances



# **NRL-CBD Environmental Restoration Program Sites**

Additional information can be found online at (case sensitive) https://go.usa.gov/xOFuV/

#### **Munitions Response Sites**

#### MRS 001 – Hypervelocity Low **Pressure Gun**

- Test facility used 1967–1995
- Remedial Investigation Phase

#### MRS 002 – Randle Cliffs, Zuni Launch Site, and Gun Mounts

- Zuni Launch Site Used 1960s-1992: site activities limited to quality control testing and research
- Gun Mounts Used for a short period 1944–1948; site activities likely involved gun sighting
- Proposed Plan Phase

#### MRS 003 – Small Arms Range

- Small arms range used 1960searly 1990s for recreation and small arms gualification
- Decision Document Phase

#### LEGEND

Munitions Response Site boundary **Environmental Response Site or** Area of Concern boundary

feet

□ NRL-CBD boundary

500 1,000

AOC Area of Concern MRS **Munitions Response Site** NRL-CBD Naval Research Laboratory -**Chesapeake Bay Detachment** 

### The Navy is committed to environmental protection.

In addition to the PFAS investigation, the Navy is investigating three munitions sites and seven environmental sites at NRL-CBD.



#### **Environmental Response Sites**

#### Site 3 – Landfill No. 1

- Base municipal landfill 1942–1950
- Site Inspection Phase

#### Site 4 – Landfill No. 2

- Base municipal landfill 1950–1958
- Site Inspection Phase

#### Site 5 – Landfill No.3

- Base municipal landfill 1958–1968
- Site Inspection Phase

#### Site 7 – Road Oil Application

- Historical dirt roads reportedly sprayed with waste oils as dust control 1940-1952
- Site Inspection Phase

#### Site 9 – Photo-Processing Waste

- Discharge from photo-processing lab released to the ground during 1950s and 1960s
- Site Inspection Phase

## 🏁 Site 10 – Fire Testing Area

- Site in use since 1968 to test fire extinguishing agents
- Site Inspection Phase

#### AOC D – Water Tower

- Base water tower in use since 1950s; soils beneath water tower impacted by lead from lead-based paint used on the water tower
- Site Inspection Phase

# **Managing Your Private Well**

If you have specific questions, please contact Calvert County Health Department 410-535-5400 | calvert.admin@maryland.gov | www.calverthealth.org

## **Managing the Risks**

- Testing of private wells is recommended to ensure water quality.
- Bacteriological testing once a year is a good idea. Regular testing can tell you the quality of the water.
- More frequent testing is recommended if your water changes in taste, odor, or appearance or if you have recurrent incidences of gastrointestinal illness.
- The National Ground Water Association recommends you test for bacteria, nitrates/ nitrites, and any other contaminants of local concern.
- If using water conditioner (aka, "water softener") equipment, it should be maintained and kept in working order.
- Do not dispose of or store hazardous materials or chemicals on your property or near your well.

## **Typical Well Design**





# We Need Your Cooperation – Drinking Water Sampling Process

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

# **Sampling Process**

- We need your cooperation to:
  - Make your appointment (sampling will take less than an hour).
  - Review and fill out the questionnaire.
- A team of qualified professionals will:
  - Collect water from the sample point (water will run for 3–5 minutes).
  - Analyze the sample according to EPA guidelines for a sampling and analysis process that follows strict quality control and quality assurance protocols.

# **Other Ways to Schedule an Appointment**

To schedule an appointment for sampling a drinking water well in the designated area, please contact: **NRLCBDWATER@navy.mil** or **1-855-NRLCBD1 (1-855-675-2231)**.



PFASper- and polyfluoroalkyl substancesPFOAperfluorooctanoic acid

perfluorooctane sulfonate parts per trillion

PFOS

ppt



# Sign Up for Your Sampling Appointment Here

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

# **Off-Base Drinking Water Well Sampling**

- The Navy is currently sampling drinking water wells in designated areas only.
- Drinking water samples will be collected
  Friday, July 13, through Sunday, July 22.
- Sampling appointments are available Monday–Friday 9 a.m.–6 p.m., Saturdays 9 a.m.–1 p.m., and Sundays noon–4 p.m.
- The property owner must give permission for sampling.
- Sampling takes less than an hour.
- An adult resident (18 years of age or older) must be present during sampling.



Public Notice MRS 002 Soil Proposed Plan and Public Meeting Published in *The Calvert Recorder* October 17, 2018



TRACY T. NEWMAN 3615 Lantern Court Dunkirk, MD 20754 Defendant(s)

#### In the Circuit Court for Calvert County, Maryland

#### Case No. 04C16000199

Notice is hereby given this 26th day of September, 2018, by the Circuit Court for Calvert County. Maryland, that the sale of the property mentioned in these proceedings and described as 3615 Lantern Court, Dunkirk, MD 20754, made and reported by the Substitute Trustee, will be RATIFIED AND CONFIRMED, unless cause to the contrary thereof be shown on or before the 26th day of October, 2018. provided a copy of this NO-TICE be inserted in some newspaper printed in said County, once in each of three successive weeks before the 26th day of October. 2018.

The report states the purchase price at the Foreclosure sale to be \$600,000.00.

KATHY P. SMITH. Clerk of the Circuit Court for Calvert County, Maryland 2810403 CC 10-10,10-17,10-24-18

RICHARD D. LLOYD, Esquire 89 Duke Street Prince Frederick, MD 20678 NOTICE OF APPOINTMENT NOTICE TO CREDITORS NOTICE TO UNKNOWN HEIRS

Estate No. 14609

TO ALL PERSONS INTERESTED IN THE ESTATE OF GERTRUDE BESSIE MOORE AKA: BES-SIE MOORE, BESSIE G. MOORE, BESSIE J. MOORE

Notice is given that: BRIDGET DEMONE WIGGINS, 9805 LAKE POINTE COURT #203, LARGO, MD 20774 was on OCTOBER 04, 2018 appointed Personal Representative of the estate of: BES-SIE GERTRUDE MOORE who died on AUGUST 1, 2018 with a will.

Further information can be obtained by reviewing the estate file in the office of the Register of Wills or by contacting the personal rep-

NOTICE OF SALE BRADFORD I. WEBB, Assignee and ANDREW L HARTMAN, Assignee Plaintiffs vs.

Donna M. Rivera Defendant

In the Circuit Court for Calvert County, Maryland Case No.

C-04-CV-18-000212

Notice is hereby issued by the Circuit Court for Calvert County this 19th day of September, 2018, that the sale of the property located at 974 CRYSTAL ROCK RD., LUSBY, MD, 20657, made and reported by Bradford I. Webb, Assignee, be ratified and confirmed, unless cause to the contrary thereof be shown on or before the 19th day of October, 2018, provided, a copy of this notice be inserted in some newspaper published in said county, once in each of three successive weeks, before the 19th day of October, 2018.

The Report of Sale states the amount of the sale to be One Hundred Thousand Nine Hundred Fifty-Two Dollars and No Cents (\$100,952.00).

KATHY P. SMITH, Clerk of the Circuit Court for Calvert County, Maryland 2809104 CC 10-3,10-10,10-17-18

#### NOTICE

CARRIE M. WARD, et al. 6003 Executive Blvd. Suite 101 Rockville, MD 20852 Substitute Trustees Plaintiffs

vs. GWENDOLYN W. RODENIZER WAYNE A. RODENIZER 12466 Saddle Lane Lusby, MD 20657 Defendant(s)

#### In the Circuit Court for Calvert County, Maryland

#### Case No. 04C17000361

Notice is hereby given this 11th day of October, 2018, by the Circuit Court for Calvert County, Maryland, that the sale of the property mentioned in these proceedings and described as 12466 Saddle Lane, Lusby, MD 20657, made and reported by the Substitute Trustee, will be RATI-FIED AND CONFIRMED, unless cause to the contrary thereof be shown on or before the 11th day of Novem ber, 2018, provided a copy of this NOTICE be inserted in some newspaper printed in said County, once in each of three successive weeks before the 11th day of November, 2018.

#### Public Review and Comment on the Proposed Plan for Soil at MRS 002 Naval Research Laboratory – Chesapeake Bay Detachment

The Department of the Navy invites public review and comment on the preferred alternative for selection of the Final Remedy for soil at Munitions Response Site (MRS) 002 at the Naval Research Laboratory-Chesapeake Bay Detachment, located near Chesapeake Beach, Maryland. The Navy, with concurrence from the Maryland Department of the Environment (MDE), completed a Remedial Investigation (RI) to characterize the soil at MRS 002. The Navy's preferred alternative is No Action because there are no unacceptable risks to human health or ecological receptors that would warrant remedial action. Additionally, no evidence of munitions or munitions residue was found in soil at MRS 002.

A public meeting to discuss the Proposed Plan will be held at the Northeast Community Center (4075 Gordon Stinnett Ave., Chesapeake Beach, MD 20732) on Wednesday, October 24, 2018. You are encouraged to attend anytime at your convenience between 4 p.m. and 7 p.m.

For additional information regarding the meeting, and a copy of the Proposed Plan, you may visit the public web site at <a href="https://go.usa.gov/xQFuV/">https://go.usa.gov/xQFuV/</a>

#### Information Repository

Copies of the Proposed Plan are also available for public review from October 24 through November 23, 2018 at:

**Calvert County Public Library – Twin Beaches Branch** 3819 Harbor Road Chesapeake Beach, MD 20732

NOTICE OF **APPOINTMENT** NOTICE TO CREDITORS NOTICE TO UNKNOWN

HEIRS Estate No. 14592

TO ALL PERSONS INTERESTED IN THE ESTATE OF MARJORIE LOUISE ATHENS

Notice is given that: ARTHUR JOHN ATHENS. 3665 HUNTING CREEK RD, HUNTINGTOWN, MD 20639 was on SEPTEM-BER 24, 2018 appointed Personal Representative of the estate of: MARJORIE LOUISE ATHENS who died on SEPTEMBER 12, 2018 with a will.

Further information can be obtained by reviewing the estate file in the office of the Register of Wills or by contacting the personal representatives or the attorney.

All persons having any objection to the appointment (or to the probate of the decedent's will) shall file their objections with the Register of Wills on or before the 24TH day of MARCH, 2019. (6 months from date of appointment)

Any person having a claim against the decedent must present the claim to the undersigned personal repesentatives or file it with the Register of Wills with a copy to the undersigned on or before the earlier of the following dates:

NOTICE OF APPOINTMENT NOTICE TO CREDITORS NOTICE TO UNKNOWN HEIRS

#### Estate No. 14588 TO ALL PERSONS INTERESTED IN

#### THE ESTATE OF RAYMOND S SMITH

Notice is given that: JANE A SMITH, 8111 SIMPSON FARM ROAD, OWINGS, MD 20736 was on SEPTEMBER 27, 2018 appointed Personal Representative of the estate of: RAYMOND S SMITH who died on AUGUST 30, 2018 with a will.

Further information can be obtained by reviewing the estate file in the office of the Register of Wills or by contacting the personal representatives or the attorney.

All persons having any objection to the appointment (or to the probate of the decedent's will) shall file their objections with the Register of Wills on or before the 27TH day of MARCH, 2019. (6 months from date of appointment)

Any person having a claim against the decedent must present the claim to the undersigned personal representatives or file it with the Register of Wills with a copy to the undersigned or or before the earlier of the following dates:

MARK J. DAVIS, Esquire Davis, Upton & Palumbo, LLC 132 Main Street Prince Frederick, MD 20678

Submit Comments

The public may submit written comments to:

Ms. Regina Adams

Public Affairs Office, NAVFAC Washington

1314 Harwood Street SE, Washington, D.C. 20374

regina.adams@navy.mil

(202) 685-0384

NOTICE OF APPOINTMENT NOTICE TO CREDITORS NOTICE TO UNKNOWN HEIRS

#### Estate No. 14567

TO ALL PERSONS INTERESTED IN THE ESTATE OF VERNON L MCCREADY

Notice is given that: CAR OL A WARWICK, 2379 CHERRY GROVE ROAD, SUFFOLK, VA 23438 was on OCTOBER 02, 2018 appointed Personal Representative of the estate of: VER-NON L MCCREADY who died on AUGUST 25, 2018 with a will.

Further information can be obtained by reviewing the estate file in the office of the Register of Wills or by contacting the personal representative or the attorney.

All persons having any objection to the appointment (or to the probate of the decedent's will) shall file their objections with the Register of Wills on or before the 2ND day of APRIL, 2019. (6 months from date of appointment)

Any person having a claim against the decedent must present the claim to

#### NOTICE TO CREDITORS

OF APPOINTMENT OF FOREIGN PERSONAL REPRESENTATIVE

Estate No. 14593

NOTICE IS GIVEN that the CIRCUIT court of SARASOTA county, FLOR-IDA appointed DEBRA J. SHOCKLEY, 917 WYTHE LANE, SEAFORD, DE 19973 as the PERSON-AL REPRESENTATIVE of the Estate of BARBARA J. MASKE A/K/A BARBA-RA J. LEWIS who died on DECEMBER 27, 2017 domiciled in FLORIDA, UNITED STATES OF AMERICA.

The Maryland resident agent for service of process is TERRY L. HERMAN-SON, whose address is 4605 WOODLEA AVE., BALTI-MORE, MD 21206.

At the time of death, the decedent owned real or leasehold property in the following Maryland counties:

#### PRINCE GEORGE'S COUNTY AND CALVERT COUNTY

All persons having claims against the decedent must file their claims with the Register of Wills for CALVERT COUNTY with a copy to the foreign personal representative on or before the earlier of the folwing dates

resentative or the attorney

All persons having any objection to the appointment (or to the probate of the decedent's will) shall file their objections with the Register of Wills on or before the 4TH day of APRIL. 2019. (6 months from date of appointment)

Any person having a claim against the decedent must present the claim to the undersigned personal representative or file it with the Register of Wills with a copy to the undersigned on or before the earlier of the following dates:

(1) Six months from the date of the decedent's death, except if the decedent died before October 1, 1992, nine months from the date of the decedent's death; or

(2) Two months after the personal representative mails or otherwise delivers to the creditor a copy of this published notice or other written notice, notifying the creditor that the claim will be barred unless the creditor presents the claims within two months from the mailing or other delivery of the notice. A claim not presented or filed on or before that date, or any extension provided by law, is unenforceable thereafter. Claim forms may be obtained from the Register of Wills.

BRIDGET DEMONE WIGGINS, Personal Representative

MARGARET H. PHIPPS, Register of Wills Courthouse, 175 Main Street Prince Frederick, MD 20678-3337

2811113 CC 10-17,10-24,10-31-18



The report states the purchase price at the Foreclosure sale to be \$168,675.00.

KATHY P. SMITH, Clerk of the Circuit Court for Calvert County, Maryland 2812520 CC 10-17.10-24.10-31-18

NOTICE (Adult) (DOM REĹ 61) IN THE MATTER OF: NANCY LYNN HUNTER WILLIAMS FOR CHANGE OF NAME TO:

NANCY LYNN HUNTER

In the Circuit Court for **Calvert County** 

> Civil No.: C-04-FM-18-645

The above Petitioner has filed a Petition for Change of Name in which he/she seeks to change his/her name from Nancy Lynn Hunter Williams to Nancy Lynn Hunter. The petitioner is seeking a name change because: My husband and I are separated and I desire to resume the use of my original name.

Any person may file an objection to the Petition on or before the 12th day of November, 2018. The objection must be supported by an affidavit and served upon the Petitioner in accordance with Maryland Rule 1-321. Failure to file an objection or affidavit within the time allowed may result in a judgment by default or the granting of the relief sought.

A copy of this notice shall be published one time in a newspaper of general circulation in the county/city at least fifteen (15) days before the deadline to file an objection.

KATHY P. SMITH. Clerk of the Circuit Court for Calvert County, Maryland

2812512 CC 10-17-18

(1) Six months from the date of the decedent's death, except if the decedent died before October 1, 1992, nine months from the date of the decedent's death; or

(2) Two months after the personal representatives mail or otherwise delivers to the creditor a copy of this published notice or other written notice, notifying the creditor that the claim will be barred unless the creditor presents the claims within two months from the mailing or other delivery of the notice. A claim not presented or filed on or before that date, or any extension provided by law, is unenforceable thereafter. Claim forms may be obtained from the Register of Wills.

ARTHUR JOHN ATHENS. Personal Representative MARGARET H. PHIPPS, Register of Wills

Courthouse. 175 Main Street Prince Frederick, MD 20678-3337 2808698 CC 10-3,10-10,10-17-18

#### NOTICE

The College of Southern Maryland Board of Trustees' next regularly scheduled meeting will be held on Thursday, October 18, 2018 at 3:30 p.m. at the CSM Prince Frederick Cam-<u>pus in Building B, Room</u> <u>104/105</u>. A portion of the meeting may be held in closed executive session.

(1) Six months from the date of the decedent's death, except if the decedent died before October 1, 1992, nine months from the date of the decedent's death; or

(2) Two months after the personal representatives mail or otherwise delivers to the creditor a copy of this published notice or other written notice, notifying the creditor that the claim will be barred unless the creditor presents the claims within two months from the mailing or other delivery of the notice. A claim not presented or filed on or before that date, or any extension provided by law, is unenforceable thereafter. Claim forms may be obtained from the Register of Wills.

JANE A SMITH, Personal Representative

MARGARET H. PHIPPS, Register of Wills

Courthouse. 175 Main Street Prince Frederick, MD 20678-3337 2810291 CC 10-10,10-17,10-24-18

the undersigned personal representative or file it with the Register of Wills with a copy to the undersigned on or before the earlier of the following dates:

(1) Six months from the date of the decedent's death except if the decedent died before October 1, 1992, nine months from the date of the decedent's death: or

(2) Two months after the personal representative mails or otherwise delivers to the creditor a copy of this published notice or other written notice, notifying the creditor that the claim will be barred unless the creditor presents the claims within two months from the mailing or other delivery of the notice. A claim not presented or filed on or before that date, or any extension provided by law, is unenforceable thereafter. Claim forms may be obtained from the Register of Wills.

CAROL A WARWICK, Personal Representative

MARGARET H. PHIPPS, Register of Wills Courthouse 175 Main Street Prince Frederick, MD 20678-3337 2811005 CC 10-10,10-17,10-24-18

(1) Six months from the date of the decedent's death. except if the decedent died before October 1, 1992, nine months from the date of the decedent's death; or

(2) Two months after the foreign personal representative mails or delivers to the creditor a copy of this published notice or other written notice, notifying the creditor that the claim will be barred unless the creditor presents the claim within two months from the mailing or other delivery of the notice. Claims filed after that date or after a date extended by law will be barred.

DEBRA J. SHOCKLEY, Foreign Personal Representative

CERETA A. LEE, Register of Wills Prince George's County, Maryland P.O. Box 1729 Upper Marlboro, MD 20773-1729

2809654 CC 10-3,10-10,10-17-18

10-17-18



Navy Fact Sheet Naval Research Laboratory- Chesapeake Bay Detachment; Drinking Water Investigation Initial Results and Path Forward October 2018 Naval Research Laboratory – Chesapeake Bay Detachment 5813 Bayside Road | Chesapeake Beach, Maryland 20732 Drinking Water Investigation Initial Results and Path Forward

October 2018

In mid-2018, the Navy completed requested sampling of drinking water from wells within designated areas near Naval Research Laboratory – Chesapeake Bay Detachment (NRL-CBD; see Figure 1). Although initial off-base drinking water sampling results have shown few detections of very low levels of PFAS, the Navy is continuing to test drinking water from wells within designated areas near NRL-CBD that have not already been tested. The Navy has developed a protective policy to address past releases of per- and polyfluoroalkyl substances (PFAS). In 2017, the Navy initiated an investigation of PFAS in on-base groundwater and determined that these substances are present in the shallow groundwater at NRL-CBD as a result of testing of extinguishing agents used for firefighting activities, specifically various formulations of aqueous film-forming foam (AFFF). Since PFAS are in the shallow groundwater, there is the potential for these substances to also be present in private drinking water wells in the designated areas because of their proximity and location relative to the NRL-CBD Fire Testing Area where the Navy performs testing of these extinguishing agents.

In the review of available records, the Navy identified property parcels suspected to have drinking water wells within the designated sampling area (Figure 2). There is no legal requirement to conduct drinking water testing. It is a voluntary measure because water quality for our off-base neighbors is a priority for the Navy. The Navy is performing this drinking water sampling in coordination with partners such as the U.S. Environmental Protection Agency (EPA) Region 3, Agency for Toxic Substances and Disease Registry Region 3, Maryland Department of the Environment, and Maryland Department of Health – Calvert County.

#### BACKGROUND

PFAS are "emerging" contaminants, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The EPA is currently studying PFAS to determine if regulation is needed. In May 2016, the EPA released lifetime health advisory levels for two PFAS, specifically perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Health advisory levels are not regulatory standards. They are health-based concentrations which should offer a margin of protection for all Americans



# throughout their lives from adverse health effects resulting from exposure to PFOS and PFOA in drinking water.

The EPA health advisory level for lifetime exposure is 70 parts per trillion (ppt) for PFOS and 70 ppt for PFOA. When both PFOS and PFOA are found in drinking water, the combined concentrations should not exceed 70 ppt.

Out of concern for our neighbors and a desire to be proactive, the Navy voluntarily initiated the off-base drinking water investigation to determine if past operations at NRL-CBD may have impacted drinking water in private wells near NRL-CBD.

If your preliminary results show that your drinking water contains PFOS and/or PFOA above the EPA lifetime health advisory, then the Navy will provide bottled water or an alternate water supply until a long-term solution is implemented.

#### Figure 2



October 2018



#### NRL-CBD DRINKING WATER INVESTIGATION

In July 2018, the Navy initiated off-base drinking water sampling near NRL-CBD. The table below summarizes the initial sampling results.

#### Drinking Water Results near NRL-CBD for PFOS/PFOA

			Detections of PFOS/
Samples	Not		PFOA above the EPA
collected	detected	Detected	lifetime health advisory
42	39	3	0

Out of the 42 samples collected by the Navy through September 2018, no samples exceeded the lifetime health advisory of 70 ppt set by the EPA. The results indicate that exposure to PFOS and PFOA is not occurring at the private drinking water wells that have been sampled to date. Since some properties in the initial sampling area did not sign up to have their drinking water tested, **the Navy is requesting permission to sample private drinking water wells in this area that have not already been tested**. At this time, the Navy is not planning to expand the sampling area.

The preliminary results from any additional off-base drinking water sampling are expected within approximately 30 days after collecting the samples. The Navy will keep the results confidential to the extent permitted by law. We will notify the property owners of their personal drinking water results and follow-up actions, if needed. The Navy will provide an alternate water source, likely bottled water, for drinking and cooking for those residents whose drinking water is found to contain PFOS and/or PFOA above the EPA health advisory. The Navy will continue to provide the alternate water source until a permanent solution can be implemented.

#### NRL-CBD PATH FORWARD

The Navy conducted an initial investigation on the NRL-CBD property to determine if PFAS were present in groundwater as a result of historical operations at NRL-CBD. This investigation determined that PFAS were present in the shallow groundwater but not in the deep groundwater (i.e., the Piney Point aquifer). The concentrations of PFAS were highest closest to the Fire Testing Area, with concentrations in groundwater decreasing with distance from the site. Based on these results, the Navy has incorporated the Fire Testing Area into the Installation Restoration Program and is planning a Site Inspection (SI). The SI will determine the presence or absence of PFAS in media (soil, sediment) as well as refine the extent of PFAS in groundwater. The SI results will guide additional on-base investigation and requirements for additional off-base drinking water sampling, if necessary. The Navy will share the results of the SI with the public and our local agency partners.

## **HEALTH INFORMATION**

Exposure to PFOS and PFOA appears to be global. Studies have found both compounds in the blood samples of the general population. Studies on exposed populations indicate that PFOS and/or PFOA may cause elevated cholesterol levels and possibly low infant birth weight. In studies conducted using laboratory animals, effects on developmental, neurological, immune, thyroid, and liver function were observed.

Health effects from exposure to low levels of PFAS are not well known and studies are continuing. Blood tests are available to measure these chemicals, but they are not routinely done because the results can be inconclusive and test results do not predict health effects. Long-term exposure effects are still being investigated by the EPA.

Based on what is known and still unknown about PFOS and PFOA, it is recommended people not drink or cook with water that contains these compounds above the EPA's lifetime health advisory.

> For updates about this investigation, visit: https://go.usa.gov/xQFuw

If you have specific questions, contact: NRLCBDWATER@navy.mil 1-877-NRLCBD1 (1-855-675-2231)

#### COMMUNITY OUTREACH

The Navy will share information with the community in the future through additional public meetings and by maintaining copies of environmental clean up documents in information repositories. The information repositories are maintained on the public website and, during public comment periods, at the Calvert Library Twin Beaches Branch. Access information for the repositories follows:

- Public website: https://go.usa.gov/xQFuV
- During the public comment period for a proposed plan at Calvert Library Twin Beaches Branch
   3819 Harbor Road
   Chesapeake Beach, MD 20732

Posters NRL-CBD Drinking Water Investigation Open House and Public Meeting Northeast Community Center October 24, 2018



# PFAS Drinking Water Results near NRL-CBD

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)



EPA U.S. Environmental Protection Agency NRL-CBD Naval Research Laboratory – Chesapeake Bay Detachment

- 42 drinking water samples were collected.
- PFAS were not detected in **39** samples.
- PFAS were detected in 3 samples. PFOA was detected in 2 of these samples.
- No results were above the EPA lifetime health advisory.
- The on-base PFAS investigation continues.
  - These results will help direct future off-base sampling.

#### LEGEND

- Sampling area
- Developed parcel in sampling area
- $\boxtimes$  Undeveloped parcel in sampling area
- Surface water

Fire Testing Area (suspected source)

- NRL-CBD boundary
- PFASper- and polyfluoroalkyl substancesPFOAperfluorooctanoic acid

PFOS perfluorooctane sulfonate ppt parts per trillion



Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/

If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

- Samples were analyzed for 14 PFAS compounds in accordance with the EPA's analytical method and Navy guidance.
- The EPA has established a drinking water lifetime health advisory of 70 ppt for two PFAS compounds, PFOS and PFOA.
  - There were no detections of PFOS.
  - There were no detections of PFOA above the lifetime health advisory.

# **Combined PFAS (14 compounds)**

42 samples collected






# What Are PFAS, PFOS, and PFOA?

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/ If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

### Where Do PFAS Come From?

- Are man-made compounds; no natural occurrence.
- Have been used since 1950s in many products.
- Last a long time in the environment.
- Are found in people, animals, and fish around the world.



firefighting foam



stain-resistant carpets



nonstick cookware



paints and stains



water-repelling fabrics



food packaging

### What Is the EPA Lifetime Health Advisory for PFOS and PFOA?

- Sets a concentration of 70 ppt in drinking water.
- Protects against harmful health effects to sensitive populations and the general public, even for lifetime exposure.
- Compares the total concentration of both PFOS and PFOA found to the 70 ppt advisory.
- Provides information to state agencies and public health officials on health effects and water treatment so they can take steps to reduce exposures.
- Is non-enforceable.

### How Is the EPA Lifetime Health Advisory Calculated?

- Is based on studies of health effects with PFOS and PFOA in laboratory animals.
- Considers information regarding health effects of people exposed to PFOS and PFOA.
- Protects sensitive populations, including the fetuses or nursing infants of mothers who are exposed.
- Assumes 20 percent of overall exposure is from drinking water, 80 percent of exposure is from other sources.

ATSDR	Agency for Toxic Substances	PFAS
	and Disease Registry	PFOA
CDC	Centers for Disease Control and Prevention	PFOS
EPA	U.S. Environmental Protection Agency	ppt
NRL-CBD	Naval Research Laboratory –	
	Chesapeake Bay Detachment	

per- and polyfluoroalkyl substances perfluorooctanoic acid perfluorooctane sulfonate parts per trillion



## **Exposure and Health Effects**

Additional information can be found online at www.secnay.navy.mil/eie/pages/pfc-pfas.aspx For updates as more information becomes available, visit (case sensitive) https://go.usa.gov/xQFuw/

If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

### **PFAS in People**

- CDC monitoring estimates that most people in the U.S. have PFAS in their bodies.
- Levels of PFOS and PFOA are going down over time following their phase-out from use.
- Some PFAS stay in the body a long time there is no recommended medical treatment to reduce PFAS in the body.



Source: CDC National Health and Nutrition Examination Surve

### **Exposures to PFAS**

- Appear to be widespread around the world.
- Are primarily through:
  - Ingesting contaminated food, water, or soil
  - Breathing air that contains contaminated dust from carpets, upholstery, clothing, etc.
- Will build up in the body until exposure stops.
- Reach the fetuses or nursing infants of mothers who are exposed.
- Are not significant through skin contact when bathing or showering.

### **How to Reduce Exposure**

- If water contains PFOS and PFOA above the health advisory level, you can reduce exposure by using a different water source for drinking, cooking, and brushing teeth.
- Filter PFOS and PFOA from water using certified granular activated carbon or high-pressure membrane systems, such as reverse osmosis. These systems require ongoing maintenance.

### **Potential Health Effects**

- More research is needed to confirm or rule out possible links between exposure and health effects.
- Animals exposed to high levels of PFAS had changes in liver, thyroid, and pancreas function; altered hormone levels; and increased rates of certain cancers.
- Based on limited evidence from studies with people, potential health effects can include:
  - Increased cholesterol levels
  - Changes in growth, learning, and behavior of the developing fetus and child
  - Immune system changes
- The levels of PFOS or PFOA in drinking water do not predict what, if any, health impact might occur as a result of exposure.

### **Should I Have My Blood Tested?**

ATSDR and CDC understand and acknowledge that you may want to know the level of PFAS in your body. However, there are some limitations with blood tests to consider:

- Test results will not provide clear answers for existing or possible health effects or patient care.
- Blood testing for PFAS is not a routine test that health care providers offer.

Consult with your doctor for more information.

- ATSDR Agency for Toxic Substances and Disease Registry CDC Centers for Disease Control and Prevention PFOS EPA U.S. Environmental Protection Agency
- NRL-CBD Naval Research Laboratory -**Chesapeake Bay Detachment**
- per- and polyfluoroalkyl substances perfluorooctanoic acid perfluorooctane sulfonate parts per trillion
- PFAS PFOA ppt

- Decreased fertility
- Altered hormone function
- Increased risk of certain types of cancer



# **Community Involvement**

Additional information can be found online at www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV If you have specific questions, please contact NRLCBDWATER@navy.mil or 1-855-NRLCBD1 (1-855-675-2231)

### **Current Outreach Efforts**

- Host Public Meetings Public meeting held in July 2018 to provide plans for off-base drinking water sampling.
- Maintain Information Repositories Copies of environmental cleanup program documents are available:
  - On the NRL-CBD website: https://go.usa.gov/xQFuV
  - During the public comment period for a proposed plan at Calvert Library Twin Beaches Branch
     3819 Harbor Road
     Chesapeake Beach, MD 20732

### We Need Your Feedback!

Please complete a survey form and let us know if you are interested in joining a RAB or how you would most like to receive information about the environmental cleanup program sites.

### **Option for Increased Community Involvement**

### **Restoration Advisory Board (RAB)**

- The Navy will form a RAB when there is sufficient and sustained community interest.
- A RAB is a group of interested local community members who meet with Navy personnel on a routine basis to discuss and provide feedback and advice on environmental cleanup plans and actions.
- To establish a RAB, the Navy needs:
  - At least 10 community members committed to fulfilling RAB responsibilities for a 2-year period.
  - A variety of people representing diverse interests from the local community.

### What are RAB Member Responsibilities?

- Provide community input to the Navy, regulators, and other government agencies on environmental clean-up activities.
- Review and comment on various technical documents and related site information.
- Attend routine RAB meetings and discuss and exchange information regarding site cleanup.
- Serve as a liaison with the community and provide them with information discussed at the RAB meetings.



# **Federal Environmental Investigation Process**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV For more information on EPA processes, visit https://www.epa.gov/superfund For more information on Maryland processes, visit www.mde.maryland.gov



### **NRL-CBD Environmental Restoration Program**

- The Environmental Restoration Program investigates environmental releases from past Navy operations.
  - The Installation Restoration Program was designed to identify and clean up past contamination from chemical and radiological contaminants, hazardous substances, and pollutants to protect human health and safety and the environment at Navy and Marine Corps installations.
  - The Munitions Response Program was designed to address the explosives safety hazards associated with munitions of an explosive concern, as well as the human health and environmental risks associated with munitions constituents.



EPAU.S. Environmental Protection AgencyMDEMaryland Department of the Environment

NRL-CBD Naval Research Laboratory – Chesapeake Bay Detachment PFAS per- and polyfluoroalkyl substances

# NRL-CBD Environmental Restoration Program – Installation Restoration Sites

Additional information can be found online at (case sensitive) https://go.usa.gov/xQFuV/



#### LEGEND

Inst Site	allation Restoration or AOC boundary	C NRL-CBD b	oundary o	500	1,000 🖡
AOC NRL-CBD	Area of Concern Naval Research Labora Chesapeake Bay Deta	atory – chment	PCB SVOC VOC	polychlorinated semivolatile org volatile organic	biphenyl anic compound compound

### **Installation Restoration Sites**

#### Site 3 – Landfill No. 1

- Base municipal landfill from 1942 to 1950
- Site Inspection Soil and groundwater sampled for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides

#### Site 4 – Landfill No. 2

- Base municipal landfill from 1950 to 1958
- Site Inspection Soil and groundwater sampled for VOCs, SVOCs, metals, PCBs, and pesticides

#### Site 5 – Landfill No. 3

- Base municipal landfill from 1958 to 1968
- Site Inspection Soil and groundwater sampled for VOCs, SVOCs, metals, PCBs, and pesticides

#### Site 7 – Road Oil Application

- Historical dirt roads reportedly sprayed with waste oils as dust control between 1940 and 1952
- Site Inspection Soil sampled for VOCs, metals, and PCBs

#### Site 9 – Photo-Processing Waste

- Discharge from photo-processing lab located inside Former Building 43 released to the ground during the 1950s and 1960s
- Site Inspection Soil and groundwater sampled for VOCs, SVOCs, and metals

#### Site 10 - Fire Testing Area

- Site in use since approximately 1968 to test fire extinguishing agents
- Site Inspection Results of ongoing on-base PFAS investigation will be used to determine if additional off-base sampling is needed

#### AOC D – Water Tower

- Base water tower in use since 1950s; soils beneath water tower impacted by lead from lead-based paint used on the water tower
- Site Inspection Soil sampled for lead

# NRL-CBD Environmental Restoration Program – Munitions Response Sites

Additional information can be found online at (case sensitive) https://go.usa.gov/xQFuV/



**Munitions Response Sites** 

### MRS 001 – Hypervelocity Low Pressure Gun

- Test facility used between 1967 and 1995
- Proposed Plan Navy currently developing proposed plan for soil and groundwater at this site

# MRS 002 – Randle Cliffs: Zuni Launch Site and Gun Mounts

- Zuni Launch Site Used between 1960s and 1992; site activities limited to production lot quality control testing and research associated with chaff rounds
- Gun Mounts Used for a short period from 1944 to 1948; site activities likely involved gun sighting
- Proposed Plan Navy proposing No Further Action as no contaminants of concern were identified in soil

### MRS 003 – Small Arms Range

- Small arms range used from 1960s until early 1990s for recreation and small arms qualification
- Remedial Action Navy currently developing remedial action workplan to excavate leadcontaminated surface soil and dispose of it in off-site landfill

MRS Munitions Response Site

NRL-CBD Naval Research Laboratory - Chesapeake Bay Detachment

# Planned Soil Remedial Action MRS 003 – Small Arms Range

Additional information can be found online at (case sensitive) https://go.usa.gov/xQFuV/



### LEGEND

MRS 003 Small Arms Range

Excavation area

- Topographic contour (1-foot interval)
- Topographic contour (1-meter interval)

- Munitions Response Site 003 (MRS 003) was first used in the 1960s for recreational purposes. Navy personnel and contract guard forces also used the range for small arms qualification. The range was closed early in the 1990s.
- The site was evaluated in the 2010 Site Inspection and 2016 Remedial Investigation. Lead in surface soil was identified as a chemical of concern.
- The Navy plans to implement Excavation and Off-Site Disposal to prevent unacceptable risks to human health and the environment from exposure to lead in surface soil.
  - Under this action, approximately 50 cubic yards of lead-contaminated surface soil within an area of 0.05 acre will be excavated and transported off-site for disposal.
  - The proposed timeframe for this action is February–March 2019.
- The groundwater remedy for the site is being addressed separately from the soil. Groundwater at the site was investigated during the Remedial Investigation for metals contamination. Currently, the Navy is evaluating remedial alternatives through a Feasibility Study.



### Proposed Plan Soil at MRS 002 – Randle Cliffs: Zuni Launch Site and Gun Mounts

Additional information can be found online at (case sensitive) https://go.usa.gov/xQFuV/



If you have specific questions, please contact NAVFAC Washington PAO Ms. Regina Adams at regina.adams@navy.mil or 202-685-0384

- Between the 1960s and 1992, the Zuni Launch Site was used in quality control testing and research associated with chaff rounds.
- From 1944 to 1948, Gun Mount activities involved gun sighting experiments.
- The areas were investigated during the 2010 Site Inspection and 2016 Remedial Investigation.
- In soil, no chemicals were identified as potential risks to human health or the environment. Therefore, the Navy, with the support of the Maryland Department of the Environment, proposes No Further Action for soil at MRS 002.
  - The public comment period for the Proposed Plan is October 24 to November 23, 2018.
- The groundwater remedy for the site is being addressed separately from the soil. Groundwater at the site was investigated during the Remedial Investigation. Currently, the Navy is evaluating remedial alternatives through a Feasibility Study.







# **CHESAPEAKE BAY DETACHMENT**

### **NRL-CBD Fire and Combustion Research**



Navy Restoration Advisory Board Interest Flyer August 2019



### RESTORATION ADVISORY BOARD PUBLIC INTEREST MEETING

### Naval Research Laboratory Chesapeake Bay Detachment

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV If you have specific questions, please contact amy.brand@jacobs.com

### What is a Restoration Advisory Board (RAB)?

A RAB is an advisory committee made up of interested local community members who meet with Navy personnel on a routine basis to learn about the Navy's environmental investigation and cleanup program.

The purpose of a RAB is to discuss and provide feedback and advice on environmental cleanup plans and actions.

To successfully form a RAB and increase community participation, the Navy is looking for at least 10 interested community members who want to learn more about environmental cleanup at NRL-CBD, provide constructive input, and act as a liaison with other members of the community to share information. RAB members serve voluntarily for a 2-year period.



RAB members listen to a presentation (top) and tour environmental sites (right) at an environmental restoration site.



### What are RAB Member Responsibilities?

- Provide input to the Navy, regulators, and other government agencies on environmental cleanup activities at NRL-CBD.
- Review and comment on various technical documents and related site information. (*No technical expertise is required.*)
- Attend regularly-scheduled RAB meetings to discuss and exchange information regarding site cleanup.
- Serve as a liaison with the community to facilitate two-way exchange of information and concerns about the NRL-CBD environmental cleanup.

### We Need You!

If you are interested in joining the RAB or simply want to learn more about it, please come to a RAB interest meeting at he Northeast Community Center on **August 28** at **5:00-7:00 p.m.** 

Should you wish to serve on the RAB, you may pick up an application at the meeting or download an application from: https://go.usa.gov/xQFuV

Applications are due by September 13, 2019.

Posters NRL-CBD Restoration Advisory Board Open House Public Meeting Northeast Community Center August 28, 2019



### **Federal Environmental Investigation Process**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV For more information on EPA processes, visit https://www.epa.gov/superfund For more information on Maryland processes, visit www.mde.maryland.gov



### **NRL-CBD Community Involvement**

- Community involvement is the process of engaging and collaborating with community members.
- The goal of community involvement is to advocate community participation throughout the NRL-CBD environmental restoration program by:
  - Providing an avenue for discussion and information exchange for the environmental cleanup program
  - Helping to address concerns of the public and NRL-CBD neighbors



The on-base PFAS investigation is in the early stages. A preliminary groundwater investigation was conducted to determine if contaminants were released. The goal of the Site Inspection is to determine the magnitude and extent of the release.

ency MDE Maryland Departme apeake Bay Detachment PFAS per- and polyfluoro

Maryland Department of the Environment per- and polyfluoroalkyl substances



# **NRL-CBD** Environmental **Restoration Program Sites**

Additional information can be found online at (case sensitive) https://go.usa.gov/xOFuV/

### **Munitions Response Sites**

#### MRS 001 – Hypervelocity Low **Pressure Gun**

- Test facility used 1967–1995
- Remedial Investigation Phase

### MRS 002 – Randle Cliffs, Zuni Launch Site, and Gun Mounts

- Zuni Launch Site Used 1960s-1992: site activities limited to quality control testing and research
- Gun Mounts Used for a short period 1944–1948; site activities likely involved gun sighting
- Proposed Plan Phase

### MRS 003 – Small Arms Range

- Small arms range used 1960searly 1990s for recreation and small arms gualification
- Decision Document Phase

### LEGEND

Munitions Response Site boundary **Environmental Response Site or** Area of Concern boundary

l feet

□ NRL-CBD boundary

500 1,000

AOC Area of Concern MRS **Munitions Response Site** NRL-CBD Naval Research Laboratory -**Chesapeake Bay Detachment** 

### The Navy is committed to environmental protection.

In addition to the PFAS investigation, the Navy is investigating three munitions sites and seven environmental sites at NRL-CBD.



### **Environmental Response Sites**

### Site 3 – Landfill No. 1

- Base municipal landfill 1942–1950
- Site Inspection Phase

### Site 4 – Landfill No. 2

- Base municipal landfill 1950–1958
- Site Inspection Phase

### Site 5 – Landfill No.3

- Base municipal landfill 1958–1968
- Site Inspection Phase

### Site 7 – Road Oil Application

- Historical dirt roads reportedly sprayed with waste oils as dust control 1940-1952
- Site Inspection Phase

### Site 9 – Photo-Processing Waste

- Discharge from photo-processing lab released to the ground during 1950s and 1960s
- Site Inspection Phase

### Site 10 – Fire Testing Area

- Site in use since 1968 to test fire extinguishing agents
- Site Inspection Phase

### AOC D – Water Tower

- Base water tower in use since 1950s; soils beneath water tower impacted by lead from lead-based paint used on the water tower
- Site Inspection Phase



# **Restoration Advisory Board**

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV

### **Current Outreach Efforts**

- Host Public Meetings Public meeting held in July 2018 and October 2018 to provide plans for off-base drinking water sampling.
- Maintain Information Repositories Copies of environmental cleanup program documents are available:
  - On the NRL-CBD website: https://go.usa.gov/xQFuV
  - During the Proposed Plan public comment period, information is also available at: Calvert Library Twin Beaches Branch 3819 Harbor Road Chesapeake Beach, MD 20732

### **We Need Your Participation!**

Please complete a RAB Application if you are interested in joining the RAB. **RAB Applications are due Sept. 13, 2019.** 

### **Restoration Advisory Board**

### **Restoration Advisory Board (RAB)**

- The Navy will form a RAB when there is sufficient and sustained community interest.
- A RAB is a group of interested local community members who meet with Navy personnel on a routine basis to discuss and provide feedback and advice on environmental cleanup plans and actions.
- To establish a RAB, the Navy needs:
  - At least 10 community members committed to fulfilling RAB responsibilities for a 2-year period.
  - A variety of people representing diverse interests from the local community.

### What are RAB Member Responsibilities?

- Provide community input to the Navy, regulators, and other government agencies on environmental clean-up activities.
- Review and comment on various technical documents and related site information.
- Attend routine RAB meetings and discuss and exchange information regarding site cleanup.
- Serve as a liaison with the community and provide them with information discussed at the RAB meetings.

# Developing a Community Involvement Plan (CIP)

For more information on NRL-CBD environmental activities, visit (case sensitive) https://go.usa.gov/xQFuV If you have specific questions, please contact amy.brand@jacobs.com

### What is a Community Involvement Plan?

- A document that describes how the Navy will communicate with the public throughout an environmental investigation and how community members can be involved
- Outlines a site-specific strategy to enable meaningful twoway communications
- Considered "an essential and integral component" of the Navy's Environmental Restoration Program

### We Need Your Input!

### **Schedule YOUR interview now!**

Community interviews are the #1 way to determine what people want to know and how they want to get information and be involved.

- Your input is important to us! You do NOT need to know anything about the environmental investigation.
- Results are compiled individual remarks are kept confidential.

### What is in a CIP?

- Brief site history
- Background and history of community involvement at the site
- Key demographic information about the community
- Community interests, concerns, and expectations for communications
- Community involvement activities the Navy plans to implement

### What is the Basis for a CIP?

- One-on-one personal interviews conducted with a broad cross-section of the community
- Interviews focus on:
  - What do people know about the Navy's environmental investigations at the site?
  - What do they want to know?
  - What are the best ways for people to get that information and be involved?
- Other sources: public meeting minutes, public comments, newspaper articles, etc.





### Appendix B CIP/RAB Letter

5090 N00/ Ser 200 August 9, 2019

NAME TITLE ADDRESS 1 Chesapeake Beach, MD 12345

Dear Sir or Madam:

The Navy is committed to protecting and conserving our environmental and natural resources at the Naval Research Laboratory – Chesapeake Beach Detachment (NRL-CBD). As part of this commitment, the Navy, in partnership with the Maryland Department of the Environment, implements the Environmental Restoration Program.

The Environmental Restoration Program focuses on investigating and addressing contamination that may have occurred in the past due to spills, leaks, or historic disposal practices that are no longer acceptable under today's environmental regulations. It also includes the Munition Response Program, which addresses potential hazards from unexploded ordnance, discarded military munitions, and munitions constituents. For example, as you may be aware, the Navy is investigating per- and polyfluoroalkyl substances (PFAS) in groundwater, as well as conducting other investigations, through the Environmental Restoration Program.

To support the Environmental Restoration Program and provide the community with opportunities to provide input, the Navy is implementing two community outreach activities: (1) requesting applications for establishing a **Restoration Advisory Board (RAB)**, and (2) conducting community interviews as the basis for developing a **Community Involvement Plan**.

A RAB is an advisory panel of community members who meet regularly with Navy and regulatory agency representatives to discuss and provide input on environmental investigations and remediation (cleanup) plans and actions. The Navy plans to hold an information meeting about the RAB. This meeting will provide more information about what a RAB does, how it operates, and the level of commitment should you apply for membership on the RAB. Applications will be available at the meeting or online at https://go.usa.gov/xQFuV.

### **RAB INTEREST MEETING**

DATE: Wednesday, August 28, 2019 TIME: 5:00 p.m. – 7:00 p.m. LOCATION: Northeast Community Center 4075 Gordon Stinnett Ave. Chesapeake Beach, MD 20732 A Community Involvement Plan (CIP) is a document that identifies community issues and concerns and describes how the Navy will communicate about the Environmental Restoration Program, including opportunities to participate in decision-making processes. The best way to identify community issues and concerns, as well as communication preferences, is to sit down with people like you and ask questions. We have prepared a set of interview questions that are used to guide an informal discussion. Results of these interviews are kept confidential and used in a summary format to help us get a better picture of what people know about the Environmental Restoration Program and what information the community wants or needs.

We hope that you will meet with us to participate in an interview. Ms. Amy Brand is a community involvement specialist with Jacobs, working under contract to the Navy to conduct community outreach activities. Ms. Brand will be conducting interviews in September. She or a colleague will contact you to coordinate a time to meet, or you may contact her directly by sending an email to **amy.brand@jacobs.com**. Ms. Brand can meet at your convenience, during the day or evening, at your workplace or a public location like a coffee shop or library. If you are unavailable to meet, but do wish to participate, she can arrange for a telephone interview with you.

**PARTICIPATE IN A COMMUNITY INTERVIEW** – Community interviews form the basis for developing the Community Involvement Plan. Schedule a time to meet by sending an email to: **amy.brand@jacobs.com** 

If you have any questions, please contact Regina Adams at **regina.adams@navy.mil** or phone: (202) 685-0384. Thank you in advance for taking the time to help us with these community outreach activities.

Sincerely,

H. R. DENIUS III Captain, U. S. Navy Commanding Officer Appendix C Interview Questions and Compiled Results

### 2019-20 ENVIRONMENTAL RESTORATION PROGRAM COMMUNITY INVOLVEMENT PLAN

Naval Research Laboratory – Chesapeake Bay Detachment (NRL-CBD)

1	. What	is your zip code?		7 1 1	20732 21012 20754							
	a. H	ow long have you	live	d here?								
	o <	2 years	2	2-5 yea	rs		<b>3</b> 6-10	year		4	> 11 years	
2	. Have	you or any of you	r re	latives ev	ver work	ed at NRI	-CBD?					
	<b>2</b> Y	es (me)		1	Yes (rel	ative)	7	No (me	2)	8	No (relative)	
	Comn	nents:										
	•	Relative was ch Never worked t camped there Worked there a Have visited the	iief the as a e ba	of the fir re but ha subcont ase, prev	re depar ve been ractor iously w	tment un on base orked wi	til it clos many tii th NAVF	sed mes witl	h Boy Scout	troc	op in early 1990s,	
3.	How	would you describ	e th	e relatio	nship be	tween NI	RL-CBD a	ind the s	surrounding	com	imunity?	
		Generally positive Comments: Generally good They tend to be First investigati Interviewee sav information. Haven't really of One time a sail dealt with it. Good relations the 1990s still I security, fire de Don't know – n Annapolis Used to camp t Mostly no relat Employees com Don't really know very closed.	1 rel sta ion w a dea boa hip ive epain her ion her tion	Somewh positive ationshi and-offis occurred monitor It with th at crashe when Soc in the ar rtment, a y Chesap re with th ship – as o Town ( – don't c	at 2 b, close r h in the 1 ing well eem muc d on the outs use ea as ad ind com beake Ba ne Boy Se if it didu Council o onsider	Neither nor neg neighbor, 980s – bu and start base side d to cam ults now manding y Found couts (as n't exist. ccasiona myself na	positive ative past dri ut no on eed inves e of the p on bas Helped officer member a boy). Ily and s ative, so	o iver of c e heard stigating jetty – it se – note with de rs in that	Somewhat negative ommunity g anything ak g. Found it v t was there t was there t t area, some t area, some me slides. now how pe	grow pout ery o a lor of th Grea e cor	1 Generally negative th it until last year. difficult to get ng time, wish they have nose who were boys t relationship with mmute to DC or	ad ; in

ld you describe t	he community's attitude tow	vard environmental issues	s in general?
nerally 5 cerned	Somewhat concerned	1 Somewhat not concerned	Generally not concerned
nmental issues ge	nerally get the most concern	n or attention?	
Aost not very cor sues Aore interest tha hesapeake Bay – hesapeake Bay – hesapeake Bay – limate change limate change limate change limate change, w low to maintain eople are NOT co otential loss of c urface water qua vater quality unoff and erosio tormwater mana otential impacts byster restoration lot much interest adio frequency – nything associat	n concern • strong sense of environme • rockfish, bluefish, bacteria • health of the Bay, which m vater rise, loss of beaches the current environment – t oncerned about soil and gro lay cliffs like Calvert Cliffs eople pay attention to tribu ality n n ngement, flooding to drinking water n (Friends of Herring Bay) – o t or concern until last July – • what are they doing with r ed with cancer, birth defect	few people are very inter ntal commitment to prot in the Bay any think is getting wors own depends on it undwater contamination taries into the Bay, whet concern about water qua then interest in drinking adars s, or stillborn pregnancie	rested in environmental ect the Bay e, surface water quality her they are clear or muddy lity for oysters water s
ve contacted you of past disposal s	, were you aware that the Na ites at NRL-CBD?	avy is implementing envir	onmental investigations and
s, aware	Vaguely aware	3 No, not awa	re Not sure
ts: ame to initial op nterest partly rel Only became awa Vells were testec aw information i	en house ated to my past professiona re because he did some reso l n the free paper	Il life, partly related to m earch and asked questior	y role in town Is
	Id you describe the series of the sapeake Bay -	Id you describe the community's attitude tow nerally 5 Somewhat concerned cerned mental issues generally get the most concern Aost not very concerned or interested but a sues Aore interest than concern hesapeake Bay – strong sense of environme hesapeake Bay – nockfish, bluefish, bacteria hesapeake Bay – nockfish, bluefish, bacteria hesapeake Bay – health of the Bay, which m limate change limate change, water rise, loss of beaches low to maintain the current environment – t eople are NOT concerned about soil and gro otential loss of clay cliffs like Calvert Cliffs urface water – people pay attention to tribu urface water quality Vater quality sunoff and erosion tormwater management, flooding otential impacts to drinking water Dyster restoration (Friends of Herring Bay) – o lot much interest or concern until last July – fadio frequency – what are they doing with r inything associated with cancer, birth defect ve contacted you, were you aware that the Na of past disposal sites at NRL-CBD? s, aware Vaguely aware ts: frame to initial open house interest partly related to my past professional DNJ became aware because he did some res Vells were tested aw information in the free paper	Id you describe the community's attitude toward environmental issues erally 5 Somewhat concerned 1 Somewhat not concerned imental issues generally get the most concern or attention? Most not very concerned or interested but a few people are very inter- issues More interest than concern hesapeake Bay – strong sense of environmental commitment to prot hesapeake Bay – rockfish, bluefish, bacteria in the Bay hesapeake Bay – nockfish, bluefish, bacteria in the Bay hesapeake Bay – nockfish, bluefish, bacteria in the Bay hesapeake Bay – health of the Bay, which many think is getting wors limate change limate change, water rise, loss of beaches low to maintain the current environment – town depends on it eople are NOT concerned about soil and groundwater contamination otential loss of clay cliffs like Calvert Cliffs urface water – people pay attention to tributaries into the Bay, whet urface water quality Vater quality unoff and erosion tormwater management, flooding otential impacts to drinking water hyster restoration (Friends of Herring Bay) – concern about water qual lot much interest or concern until last July – then interest in drinking adio frequency – what are they doing with radars inything associated with cancer, birth defects, or stillborn pregnancie re contacted you, were you aware that the Navy is implementing envir of past disposal sites at NRL-CBD? s, aware Vaguely aware 3 No, not awar ts: ame to initial open house hterest partly related to my past professional life, partly related to m hyly became aware because he did some research and asked question Vells were tested aw information in the free paper

	- 1-				
6	Yes	25	<b>3</b> No		
a.	lf y	yes, what are you	ir issues or concerns?		
	•	Make sure that surface water i Concern that w Want things do Concerned abo No specific inte Need to keep i start to call Health concern Concerned abo used (e.g., agri Are livestock a Also concerned	t we take all necessary runoff ve address shallow priv one right so that people out potential runoff from erest or concerns – mor nformed – by nature of as for self and children out whether Navy has a culture) ffected by groundwate d about radiofrequency rested in seeing how th	precautions to protect the Bay f ate wells are safe and not exposed to co m the base re general interest in what the N doing outreach and work in the Il information about shallow we r contamination? and aluminum siding e process will go, was involved p	from groundwater and entaminants lavy is doing e community, people will ells and whether they are
	•	Also concerned	about radiofrequency	and aluminum siding	
	•	Generally inter	rested in seeing how th	e process will go, was involved [	previously at another site
Tł or re	ne N r RAI egula	lavy is looking to B. A RAB is an ad atory agencies (th	form (based on commu visory panel of commur ne Maryland Departmer	nity interest) what is known as a nity members who meet with the nt of the Environment) to discuss	Restoration Advisory Boar Navy and representatives and provide input on
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9.	Have NRL-C	you ever seen a pu CBD?	blic notice	in the <i>Calv</i>	<i>ert Recorder</i> about environment	al restoration activities at
	2	Yes	:	7 No	I don't read that paper.	I only read online news and don't see public notices.
	•	Don't really read	the news	paper		
	•	Don't get the new	wspaper			
10.	Ar NF	e you aware that th RL-CBD ( <u>https://go.</u>	he Navy m usa.gov/x(	aintains a p <u>QFuV</u> ), whic	ublic website for the environme h also contains the Administrati	ntal restoration program at ve Record documents?
	4	Yes	4	No		
	•	Not specifically a	ware, but	not surpris	ed.	
11.	In	general, how do yo	ou get new	s about the	e local community? (check all the	it apply)
	2	Website - The Tov	wn of Ches	apeake Bea	ach Welcomes You!	
	4	Social media				
		4 Facebook – c	ommunity	pages		
		Twitter				
		Other: Next o	loor			
	1	Websites (list):				
	1	Newspapers (list)	:			
		<ol> <li>Bay Net (</li> <li>Calvert R</li> <li>Calvert C</li> <li>Bay Wee</li> </ol>	(published ecorder county Tim kly	online thro es	ough Facebook)	
	1	Radio (list station	s) <b>97.7 FN</b> ,	103.9 FM		
		Television (list sta	itions):			
	1	Email notification	s (list sour	ce): <mark>Email r</mark>	notifications from Town	
		Flyers in town (wl	here?):			
	Ot	her:				
	•	Town online new Town online new Quarterly town n A lot of people in Town meeting bo Very rural – many talking to each of Word of mouth	vsletter – a vsletter nailer to re town use oard in fro y people g ther there	lmost wee esidents social med nt of Town o to the po )	kly (sign up for eblast) lia but there are also a lot of ser Hall st office, can post things there (	niors who may not everyone is looking, reading,

### 12. What are your recommendations for how the Navy should communicate about the environmental restoration program at NRL-CBD?

Website - The Town of Chesapeake Beach Welcomes You!

1 Social media

Facebook

Twitter

Other

1 Navy website updates – keep up to date!

**RAB** meetings

- 4 Email notification develop a list of people who are interested
- 4 Mail (please provide mailing address at the end of this survey)
- 2 Newspapers free weeklies

Radio

Flyers in town (where?)

Other (please specify)

- Could probably get a community address list through the town do a quarterly newsletter
- Use both social and print media
- For general updates, use the town newsletter
- For findings, do a mailer to make sure everyone gets it
- Mail letters to the whole community, not just specific areas because you don't think they are interested or affected.
- Grocery store bulletin board
- Board in front of town hall used to advertise meetings
- Community board in Prince Frederick (run by the Optimists)
- Letters in the mail very helpful and appreciated
- Bulletin board at post office put the link to the website
- Email updates develop an email list of people interested
- Make information available to marine owners they interact with on-the-water customers
- Coordinate with Friends of Herring Bay
- North Beach has notice boards at the entrance to town along the 3 main roads
- Senior Center in North Beach people use it during the day
- There are 3 Senior Centers all have bulletin boards and are open to the community
- Continue using town email notification
- Town hall/council meetings
- Church groups
- School bulletin boards
- Farmer's Market (June November), County Fair (September) have a booth with information
- If there is no RAB, then should hold meetings a couple times a year at the community center.

- 13. Who would you call if you had questions about the Navy's environmental restoration program at NRL-CBD?
  - 3 I don't know 3 Other (please specify)
    - 1 Amy Brand, Jacobs (CIP interviewer)
    - 2 Ryan Mayer/NAVFAC
    - 1 Peggy/MDE
    - 1 Ira May
    - 1 Ed Ziegler
    - 1 Would try to find NRL-CBD online
    - 1 Would look online or call the base
- 14. Who else do you think we should talk to as part of these community interviews?
  - 2 Mayor of Chesapeake Beach
  - 1 Mayor of North Beach (as a courtesy)
  - 1 Chesapeake Beach Green Team
  - 2 Delegate Mark Fisher
  - 1 Friends of Herring Bay
  - Calvert County environmental committee volunteers
  - (names of two private citizens provided)
- 15. Do you have any other comments about the Navy's environmental restoration program at NRL-CBD?
  - Interested in forests, soil, erosion and sediment control and how that can affect water quality.
  - Is the Base remaining operational?
  - Will the Base Fire Department come back?
  - Can they open a range for public use? (they have the facility, it was built soundly, there is nothing like that locally for the public)
  - Contact the people who were Boy Scouts in the 1990s and camped on-base, ask them where they "found things" (they found buried glass orbs, all were buried Scoutmaster was concerned so he collected them and put them back.)
  - Is Town public water supply protected?
  - Especially interested in where firefighting foam has been used.
  - It has been difficult to get information. Understand about protecting peoples' private information, but would be nice to get information about what has been found in private wells.
  - For future public meetings, have people write their home addresses so you can see who lives IN the community and is personally affected.
  - Interest in toxicological level that would affect micropods, insect larva, crab larva, etc.
  - Interest in any groundwater contamination that enters surface and tidal waters

Appendix D Key Contacts

OFFICE/ORGANIZATION	NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP	PHONE	EMAIL
CHESAPEAKE BEACH								
Mayor	Pat Mahoney	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-6905	pmahoney@chesapeakebeachmd.gov
Town Council Vice President	Valerie L. Beaudin	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-218-6696	veaudin@chesapeakebeachmd.gov
Town Councilman	Derek J. Favret	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	210-834-1841	dfavret@chesapeakebeachmd.gov
Town Councilman	Lawrence P. Jaworski	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	301-706-3229	ljaworski@chesapeakebeachmd.gov
Town Councilman	Gregory J. Morris	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230	gmorris@chesapeakebeachmd.gov
Town Councilman	Keith L. Pardieck	P.O. Box 400	8201 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230 301-792-1103	kpardieck@chesapeakebeachmd.gov
Town Councilman	L. Charles Fink	P.O. Box 400	8201 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230	cfink@chesapeakebeachmd.gov
Town Administrator	Holly Kamm Wahl	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230 301-855-8398	hwahl@chesapeakeeachmd.gov
Office and Community Involvement Coordinator	Marti Gilpin	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230 301-855-8398	mgilpin@chesapeakebeachmd.gov
Public Works Administrator	James Berry	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230 301-855-8398	jberry@chesapeakebeachmd.gov
Town Engineer	Wayne A. Newton	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230 301-855-8398	wnewton@chesapeakebeachmd.gov
Planning and Zoning Administrator	Chris Jakubiak	P.O. Box 400	8200 Bayside Road	Chesapeake Beach	MD	20732	410-257-2230 301-855-8398	cjakubiak@chesapeakebeachmd.gov
CALVERT COUNTY								
County Administrator	Mark Willis	175 Main Street		Prince Frederick	MD	20678	410-535-2161	Julian.Willis@calvertcountymd.gov
Deputy County Administrator	Linda Vassallo	175 Main Street		Prince Frederick	MD	20678	410-535-1600 x2483	linda.vassallo@calvertcountymd.gov
Board of County Commissioners, District 3	Kelly D. McConkey	175 Main Street		Prince Frederick	MD	20678	410-535-1600 301-855-1243	kelly.mcconkey@calvertcountymd.gov
Board of County Commissioners, At-large Representative	Earl "Buddy" Hance	175 Main Street		Prince Frederick	MD	20678	410-535-1600 301-855-1243	buddy.hance@calvertcountymd.gov
Board of County Commissioners, At-large Representative	Steve Weems	175 Main Street		Prince Frederick	MD	20678	410-535-1600 301-855-1243	steve.weems@calvertcountymd.gov
Communications and Media Relations	Dave Fitz, Director	Courthouse Square	205 Main St., 2nd Floor	Prince Frederick	MD	20678	410-535-2003	David.Fitz@calvertcountymd.gov
Public Works	Kerry Dull, Director	County Services Plaza	150 Main Street, Suite 202	Prince Frederick	MD	20678	410-535-2204	Kerry.Dull@calvertcountymd.gov
Economic Development	Kelly Robertson-Slagle, Director	Courthouse Square	205 Main St., 2nd Floor	Prince Frederick	MD	20678	410-535-4583 301-855-1880	kelly.slagle@calvertcountymd.gov
COMMUNITY REPRESENTATIVES								
Calvert County Chamber of Commerce	Kathy Maney, President & CEO	120 Dares Beach Road		Prince Frederick	MD	20678	410-535-2577	kathy@calvertchamber.org
American Legion Post 206	Scott Deacon, Commander	3300 Chesapeeake Beach Road		Chesapeake Beach	MD	20732	443-975-1001	skdeacon2@aol.com
Beach Elementary	Dr. Michael Shisler, Principal	7900 Old Bayside Road		Chesapeake Beach	MD	20732	443-550-9520	
Bayside Baptist Church	Pastor Glenn Swanson	3900 E. Chesapeake Beach Road		Chesapeake Beach	MD	20732	410-257-2411 401-257-0712	amandar.bayside@gmail.com
Randle Cliff Community Church	Pastor John Pappas	PO Box 722	4311 Randle Avenue	Chesapeake Beach	MD	20732	410-257-0342	onetheos@comcast.net
St. Anthony's Catholic Church	Rev. James M. Stack, Pastor	PO Box 660	8616 Chesapeake Avenue	North Beach	MD	20714	443-646-5722	fr.jamesstack@gmail.com
Chesapeake Beach Water Park		4079 Gordon Stinnett Avenue		Chesapeake Beach	MD	20732	410-257-1404	https://chesapeakebeachwaterpark.com/conta ct-us/
Izaak Walton League, Southern Maryland Chapter		4200 Gardiner Road		Waldorf	MD	20601	301-932-9949	http://somd.com/contact.php?key=2219
Chesapeake Bay Foundation	Alison Prost, Vice President, Environmental Protection & Restoration	6 Herndon Avenue		Annapolis	MD	21403	410-268-8816	chesapeake@cbf.org
Locust Grove Homeowners Association	Brendan Lamsden		Cont	act information for priv	ate citize	ns is not provided	I in this CIP.	

ORGANIZATION	TITLE	NAME	ADDRESS 1	ADDRESS 2	CITY	STATE	ZIP	PHONE	EMAIL
FEDERAL ELECTED OFFICIALS									
U.S. Senate	Senator	Benjamin L. Cardin	10201 Martin Luther King Jr. Highway	Suite 210	Bowie	MD	20720	301-860-0414	https://www.cardin.senate.gov/contact
U.S. Senate	Senator	Christopher Van Hollen, Jr.	60 West Street	Suite 107	Annapolis	MD	21401	410-263-1325	https://www.vanhollen.senate.gov/contact/email
U.S. Representative, District 5	Representative	Steny H. Hoyer	U.S. District Courthouse	6500 Cherrywood Lane, Suite 301	Greenbelt	MD	20770	301-474-0119	https://hoyer.house.gov/help/contact
STATE ELECTED OFFICIALS									
Governor	Governor	Lawrence J. Hogan	State House	100 State Circle	Annapolis	MD	21401-1925	410-974-3901	http://governor.maryland.gov/contact-the-governors-office/
Senate District 27	Senator	Michael A. Jackson	Senate Office Building	11 Bladen Street	Annapolis	MD	21401	410-841-3700	michael.jackson@senate.state.md.us
House of Delegates, District 27B	Delegate	Rachel R. Jones	House Office Building, Room 206	6 Bladen Street	Annapolis	MD	21401	410-841-3103 301-858-3103	rachel.jones@house.state.md.us
House of Delegates, District 27C	Delegate	Mark N. Fisher	House Office Building, Room 202	6 Bladen Street	Annapolis	MD	21401	410-841-3335 301-858-3335	mark.fisher@house.state.md.us