NAVAL AIR STATION OCEANA
2020 Environmental Restoration Success Story

PFAS PRELIMINARY ASSESSMENT

Background

From late 2016 to spring 2017, the Per- and Polyfluoroalkyl (PFAS) Basewide Site Inspection fieldwork was conducted at NAS Oceana. The Site Inspection fieldwork included sampling monitoring wells to determine the presence of perfluorooctanoic acid/perfluorooctane sulfonic acid (PFOA/PFOS) at levels above the USEPA lifetime health advisory,[a] confirm suspected source areas, and determine whether PFOA/PFOS have migrated offsite and are present at levels exceeding the USEPA lifetime health advisory in offsite private drinking water.[b] As a result of on-Installation exceedances of the USEPA lifetime health advisory, sampling of private drinking water wells was offered to parcels within one mile of any exceedance. Sixteen drinking water samples were collected from fifteen parcels and drinking water at one parcel had detections of PFOA and PFOS (combined) above the USEPA lifetime health advisory.

Status

A Preliminary Assessment (PA) of potential sources of PFAS at NAS Oceana is in development. The PA is part of a Navy-wide installations assessment of potential historical sources of PFAS use. The objectives of the PFAS PA are to identify and catalog all potential or confirmed PFAS sources, eliminate from further considerations those areas where there is no evidence of PFAS release or suspected release, identify areas requiring further PFAS investigation, identify receptors and migration pathways, and determine whether an expedited response action is warranted because of current complete exposure pathways. Eighty-seven potential PFAS source areas are being evaluated as part of the PA.

a The USEPA lifetime health advisory for PFOA/PFOS is 70 parts per trillion. For more information regarding the USEPA lifetime health advisory see the USEPA website: https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos.

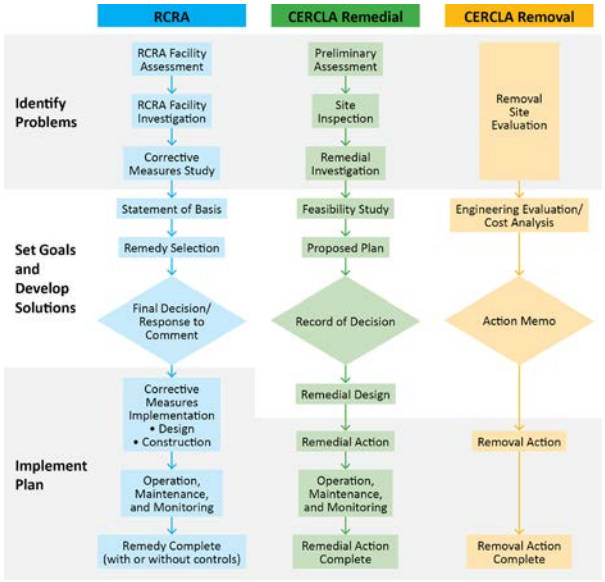
b Most nearby properties are connected to City of Virginia Beach water, which has been tested and found not to contain PFAS at levels exceeding the USEPA lifetime health advisory. Sampling for PFAS was only offered to properties with private wells supplying drinking water.

Environmental Restoration
CLEAN. PROTECT. RESTORE.

This brochure has been created as part of the Navy's Environmental Restoration community outreach program. The Navy provides the public with information on the ERP at NAS Oceana and other Navy facilities. To facilitate community outreach, the Navy ERP focuses on communicating how the Navy, USEPA, and states work together to restore areas where former operations have caused environmental contamination.

NAS OCEANA ENVIRONMENTAL INVESTIGATION PROCESS

Under both the CERCLA and Resource Conservation and Recovery Act (RCRA) processes, investigations and restoration of contaminated sites are conducted through the following steps:



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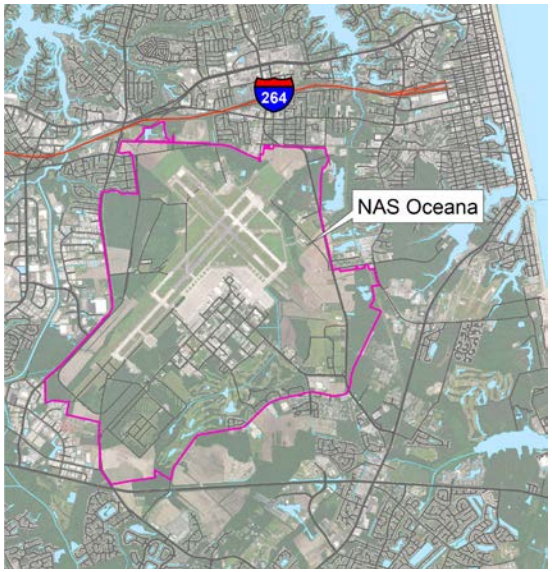
NAVAL AIR STATION OCEANA
Virginia Beach, Virginia
Environmental Restoration Program



This fact sheet provides information on environmental investigation and restoration activities at Naval Air Station (NAS) Oceana. The Navy works in partnership with the U.S. Environmental Protection Agency (USEPA) and Virginia Department of Environmental Quality to manage the Environmental Restoration Program (ERP) at NAS Oceana.

If you would like additional information about the NAS Oceana ERP, contact Jillian Wheeler, Remedial Project Manager, at 757-341-0485 or e-mail jillian.wheeler@navy.mil.

For other questions regarding NAS Oceana, contact the NAS Oceana Public Affairs Officer at 757-433-3131 or e-mail OceanaPAO@navy.mil.

FOR MORE INFORMATION
https://go.usa.gov/DyRj
NAS Oceana Information Repository –
Meyera E. Oberndorf Central Library | Virginia Beach

NAVAL AIR STATION OCEANA
Environmental Restoration Program

NAS Oceana, located in Virginia Beach, was established in 1943 as a small auxiliary airfield. Since 1943, NAS Oceana has grown to more than 16 times its original size and is now a 6,000-acre master jet base supporting an installation population of 19,000 people. The primary mission of NAS Oceana is to provide the personnel, operations, maintenance, and training facilities to ensure fighter and attack squadrons on aircraft carriers of the U.S. Atlantic Fleet are ready for deployment.

ENVIRONMENTAL RESTORATION HISTORY AND HIGHLIGHTS AT NAS OCEANA – The ERP was established to address past releases of hazardous substances, pollutants, contaminants,and military munitions at military installations.

- **1984** – IAS completed
- **1986** – Field investigations initiated at sites identified in IAS
- **1988** – USEPA completed facility assessment identifying 95 SWMUs and 5 Areas of Concern
- **1990** – Issuance of the RCRA Section 3008(h) Administrative Order on Consent for NAS Oceana
- **1993** – In situ aeration pilot study initiated to reduce VOCs in groundwater at SWMU 24*
- **1995** – Removal Action conducted at SWMU 24* to address TPH-contaminated soil
- **1997** – Soil removal action conducted at SWMU 15*; roughly 18,000 yd^3 of contaminated soil treated onsite by bioremediation and aeration
- **1998** – USEPA issued memorandum transferring oversight to CERCLA
- **2003** – DD for SWMU 25* stating NFA, with understanding that ditch sediments to be scraped and removed in next 2 years
- **2003** – DD for SWMU 15* stating NFA under CERCLA
- **2003** – Ditch sediments removed at SWMU 25*, completing final remedial action required in 2003 DD
- **2003** – Groundwater treatability studies implemented at SWMUs 2B, 2C, and 2E to treat chlorinated VOCs
- **2008** – DDs for SWMUs 2B, 2C, 2E – continued enhanced bioremediation, LTM, and LUCs selected as remedial actions; LTM initiated at SWMUs
- **2008** – DD for SWMU 24* stating NFA as a result of the 1997 soil excavation and 1996–1997 in situ pilot study
- **2012** – Continued enhanced bioremediation treatments conducted at SWMU 2B and 2C to treat chlorinated VOCs
- **2013** – Removal Action conducted at Oceana Salvage Yard
- **2017** – Concentrations of VOCs in groundwater met cleanup goals at SWMU 2E
- **2018** – Removal Action conducted at UXO 5*
- **2020** – Action Memorandum signed, initiating connection to city water to provide an alternative drinking water source for the private property affected by PFOA/PFOS

** This site is closed and is not shown on the figure below. Refer to the* Site Management Plan *on the NAVFAC public website for more information:* ***https://go.usa.gov/DyRj****.*

ENVIRONMENTAL RESTORATION PROGRAM SITES

Active ERP sites at NAS Oceana (see figure) include the following:

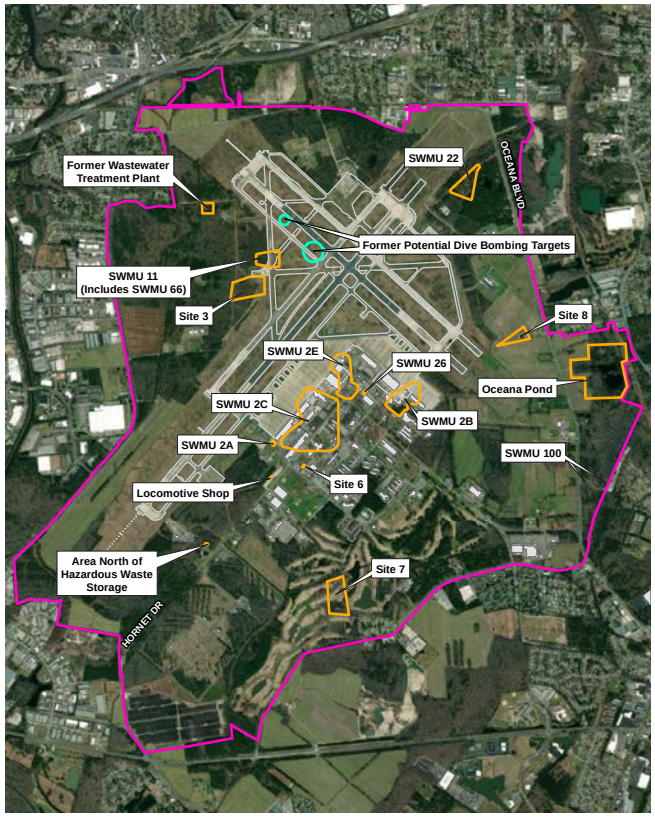
Active Installation Restoration Program Sites

- Area North of Hazardous Waste Storage
- Former Wastewater Treatment Plant
- Locomotive Services
- Oceana Pond
- Site 6 – Navy Exchange Maintenance Building Waste Oil Disposal Area
- SWMU 2A – Line Shack Disposal Area
- SWMU 2B – Line Shack Disposal Area
- SWMU 2C – Line Shack Disposal Area
- SWMU 2E – Line Shack Disposal Area
- Site 3 – West Side Landfill
- Site 7 – Fifth Green Landfill
- Site 8 – North Station Landfill
- SWMU 11 (includes SWMU 66) – Former Firefighting Training Area
- SWMU 22 – Construction Debris Landfill
- SWMU 26 – Firefighting Burn Pit
- SWMU 100 – Oceana Salvage Yard Access Road and Burial Unit[a]
- Other areas that are part of the installation-wide PFAS investigation[b]

Potential Munitions Response Program Site[c]

- Former Potential Dive Bombing Targets

a Site where non-Navy waste was deposited on Navy property.
b PFAS are compounds with heat-resistant properties that were used in some formulations of aqueous film-forming foam (AFFF). Two of these compounds, PFOS and PFOA, were present in AFFF used by the Navy. See the following website for more detail: http://www.secnav.navy.mil/eie/Pages/PFC-PFAS.aspx.
c This site is being investigated and is considered a potential site until the presence of munitions and explosives of concern is confirmed.



Legend

- NAS Oceana boundary
- Active IRP site boundary
- Potential MRP site boundary

0 0.5 1 mile N

AFFF	aqueous film-forming foam
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DD	Decision Document
ERP	Environmental Restoration Program
IAS	Initial Assessment Study
IRP	Installation Restoration Program
LTM	long-term monitoring
LUCs	land use controls
NAS	Naval Air Station
NFA	No Further Action
MRP	Munitions Response Program
PA	Preliminary Assessment
PFAS	per- and polyfluoroalkyl substance(s)
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
RCRA	Resource Conservation and Recovery Act
SWMU	solid waste management unit
TPH	total petroleum hydrocarbon
USEPA	U.S. Environmental Protection Agency
UXO	unexploded ordnance
VOC	volatile organic compound
yd^3	cubic yard(s)