



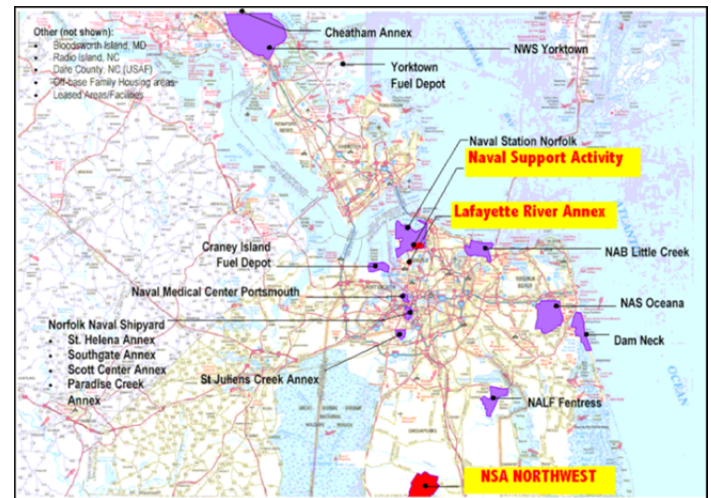
FY2016 SECRETARY OF DEFENSE ENVIRONMENTAL AWARD NAVAL SUPPORT ACTIVITY HAMPTON ROADS ENVIRONMENTAL QUALITY, NON-INDUSTRIAL INSTALLATION

Naval Support Activity Hampton Roads (NSA HR) is home to over 60 tenants, 24,000 DoD and government employees, and encompasses six regional facilities over 5,000 acres, in three Virginia cities and two North Carolina counties. NSA HR's Command and Control staff, three Public Works staffs, and eight Police/Security/Fire Departments oversee a wide range of facilities valued at \$2.5 billion including a major regional military hospital, Fleet C4I assets, modern expansive Marine, Navy and Coast Guard combat training facilities, and is host to 45 Flag and General officers that man, train, equip and operate U.S. Navy and Marine operations forces between England and Hawaii.

NSA HR is comprised of five installations, NSA Headquarters Compound, Lafayette River Annex, Supply Depot Annex, Camp Allen Marine Corps Base, and Northwest Annex. On 1 October 2011, NSA Norfolk added Naval Medical Center Portsmouth as its sixth facility in the region. To better reflect the base's area of responsibility and scope, which includes numerous facilities that are across the greater Hampton Roads area, NSA Norfolk was renamed NSA Hampton Roads.



NSA HR Portsmouth Annex is home of the oldest naval hospital installation (Naval Medical Center Portsmouth- NMCP) in continuous use in the United States. It is located within the coastal plain of Eastern Virginia in the Hampton Roads area on the Southern branch of the Elizabeth River at the confluence of Scott's Creek at the northeast corner of the City of Portsmouth. The facility consists of approximately 110 acres with riparian rights and occupies a prominent finger of land with water frontage on three sides. NMCP has a total staff of approximately 4,300, and provides a wide range of in-patient, out-patient, and ancillary services to over 420,000 beneficiaries including active duty military, retired military personnel, and eligible military family members. In addition, two patient care buildings, steam plant, a child development center, several recreation centers, maintenance shops, barracks, offices, and a fire station comprise the facility.



NSA HR-Northwest Annex (NWA) lies along the southeastern border of Virginia and the northeastern border of North Carolina. The station encompasses approximately 3,661 acres, three-quarters of which is in Chesapeake Virginia, and one-quarter is in Currituck County, North Carolina. NSA HR NWA is located within the historic boundaries of the Great Dismal Swamp, which once extended from the James River to the Albemarle Sound.

Beginning in the mid-1700s, however, much of the Great Dismal Swamp, including a large percentage of the land currently occupied by NSA HR-NWA, was ditched and drained for agriculture and timber production. The largest remaining areas of swamp are restricted to the Great Dismal Swamp National Wildlife Refuge to the west of the installation, the Northwest River Preserve to the northeast, and various Virginia and North Carolina state reserves in the area. As the host command, NSA HR-NWA provides the support function of berthing, messing, medical and dental, disbursing, public works support, and recreation facilities for the base.

Lafayette River Annex (LRA) is the home of the Naval Facilities Engineering Command (NAVFAC) Atlantic. NAVFAC manages the planning, design, construction, contingency engineering, real estate, environmental and public works support for U.S. Navy shore facilities around the world. LRA consists of approximately 20 acres with 310 civilians and military personnel.



Background

Environmental protection and stewardship is essential to the safe, healthful, and compliant execution of our mission and the preservation and protection of our land, air and water. We are committed to integrate sound environmental practices into all of our operations, and control the effects its operations or processes may have on the environment, and to continually improve its operating procedures.

The Environmental (EV) Division is part of NSA HR Public Works Department (PWD) and the Director works directly for the Public Works Officer (PWO). The EV Division Director communicates routinely with senior leadership, including the Installation Commander, on critical environmental issues. EV Division staff consists of a Director; one and a one-half time Environmental Protection Specialist (EPS); and one-half Natural Resources Specialist (NRS). Environmental permits are centrally managed by the Hampton Roads' EV Core staff (located in Norfolk), while the EV Division interfaces with resident commands' operational process owners.

NSA HR has a fully conforming Environmental Management System (EMS) program which is publicized throughout the command via posters, pamphlets, and annual training. Environmental awareness training is conducted multiple times during the year to all personnel, including contract personnel online via the Environmental Compliance Assessment, Training, and Tracking System (ECATTS) system. The training covers all environmental media including storm water, wastewater, air, spills, P2, and hazardous waste.

The Navy's Environmental Policy Statement is the foundation of the EMS and reflects its commitment to integrate mission accomplishment with environmental stewardship. The Policy is publicized throughout the installation with posters and pamphlets distributed by email and our website at each installation. An effort is made by each of the EPS to hand out Care cards and hang posters up at each of the process owner's command during their regular site visits conducting compliance oversight



inspections.

NSA HR is committed to preventing pollution at its source whenever possible. To achieve our goals, we have adopted the following guidelines for our EMS:

- Committed to integrate sound environmental practices into our operational decisions that could impact the environment.
- Continually improve our environmental performance through the use of effective environmental management and planning.
- Ensure implementation of pollution prevention measures and waste minimization programs.
- Develop objectives and targets and implement sustainable practices to reduce environmental impacts.
- Conduct regular environmental management system audits to continually assess our progress toward our environmental goals.
- Educate our personnel on their responsibilities to the environment.
- Foster communication throughout our organization on our environmental commitments and performance.



During the award period, the installation fostered many partnerships with the community and resident commands:

- Worked with the Virginia Department of Forestry and Arbor Day Foundation for 13th Tree City Award.
- Earth Day and Arbor Day Celebrations and Tree Plantings attended by tenant commands and residents.
- Chesapeake Bay Foundation - 26th Clean the Bay Day, 93 volunteers cleaned up 1.5 miles of shoreline, collecting 58 trash bags of debris, lumber, and plastic bottles weighing approximately 1,820 pounds.
- Partnership with Keep Norfolk Beautiful to support Clean the Base/Station Day annually. NSA HR Headquarters performed two base-wide cleanup events collecting 758 pounds of rubbish.
- Legacy Grants received in 2014 and 2015 for National Public Lands Day events to include oyster gardening, tree plantings, and pollinator garden projects at NSA HR-Portsmouth Annex.
- Legacy Grant received in 2014 for National Public Lands Day event at LRA in partnership with the Chesapeake Bay Foundation and Elizabeth River Project. At the LRA pier, we are growing oyster spat-on-shell in rigid 1' x 1' x 3' wire cages that are suspended just below the surface of the water. A total of six cages containing approximately 6,000 baby oysters were harvested in the summer of 2015. In addition, the Chesapeake Bay Foundation created two new oyster reefs and expanded the existing oyster reef in the Lafayette River.
- Two River Star Recognition awards received from the Elizabeth River Project recognized as a River Star Business at the Commitment Level for shoreline restoration projects to include an oyster reef, oyster reef balls, and shoreline buffer planting.



Top: Arbor Day tree planting. NSA Hampton Roads and NSA Northwest were named Tree City USA Communities.

Photo Credit: Katisha Draughn-Fraguada, NSA HR PAO, Norfolk, VA

Second: 2015 Clean the Bay Day event at Lafayette River Annex.

Third: Oyster gardening at NSA Portsmouth Annex.

Bottom: Shoreline buffer planting.

Photo Credit: Linda Hicks, NFML, Norfolk, VA

- River Star Recognition awards received from the Elizabeth River Project recognized as a River Star Business at the Sustained Distinguished Performance Level for shoreline restoration projects to include an oyster reef, oyster reef balls, shoreline and riparian buffer planting.
- Continued partnership with the Elizabeth River Project and Chesapeake Bay Foundation in oyster gardening. Grew over 12,000 baby oysters each year at LRA and Portsmouth Annex sites.
- Received two Hampton Roads Sanitation District (HRSD) Pollution Prevention Partner Awards.
- Natural Resources Program worked with different partners to maintain environmental compliance on and off the installation. Partners included U.S. Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries, U.S. Army Corps of Engineers, Virginia Department of Forestry, Virginia Natural Heritage Foundation, Virginia Department of Environmental Quality (VDEQ), North Carolina Wildlife Resources Commission, North Carolina Department of Environmental and Natural Resources, and the U.S. Geological Survey.

Significant Plans and Agreements:

- Disinfectant By-Product Plan, July 2006
- Drinking Water Bacteriological Plan, January 2009
- Continually updated the Environmental Management System (EMS) Document Library
- Revised the February 2013 Hazardous Material, Hazardous Waste, Minimization and Disposal Guide
- Hazardous Waste (HW) Contingency Plan, December 2015
- NSA HR revised the August 2012 HRSD Pretreatment Device Management Plan, and NSA HR-Portsmouth revised the July 2013 plan.
- Updated the Integrated Natural Resources Management Plans (INRMP), in 2015
- Integrated Cultural Resources Management Plans (ICRMP), November 2013
- Internal Assessment Plan (IAP), January 2015
- Oil Discharge Contingency Plan/Facility Response Plan, NSN/NSA September 2012; NSA HR-Portsmouth December 2012
- Revised the Pest Compliance and Pest Management Plan, April 2011
- Revised the Pollution Prevention Plan, April 2013
- Revised the Regional Clean Air Compliance Guide, December 2010
- Revised the Regional Spill Standard Operating Procedure, August 2014
- Spill Prevention Control and Countermeasure (SPCC) Plan, NSA HR-NWA December 2013; NSA HR-Portsmouth September 2013; NSA HR August 2013
- Revised the Storm Water Management Phase II Plan, July 2013
- Revised the Storm Water Pollution Prevention Plan (NSA HR), July 2013

Awards

- Received the 2013 and 2014 HRSD Outstanding Environmental Compliance Awards – Silver NSA HR; Gold NSA HR-Portsmouth.
- Received the 2013 and 2014 River Star Recognition awards from the Elizabeth River Project.
- Received Gold Level SECNAV Energy and Water Management Awards for an outstanding program in FY13 and FY14.



NSA HR PWD representatives receives River Stars Recognition award from the Elizabeth River Elizabeth River Project in January 2015. The Elizabeth River Project is a nonprofit organization focused on improving the health of the Lafayette River through partnering with industries and schools to establish projects aimed at restoring the Chesapeake Bay watershed. Photo credit: Linda Hicks, NFML Norfolk, VA

Program Summary

NSA HR is a member of the CNRMA-HR Regional EMS and operates according to established Environmental Management Procedures (EMPs). As a CNIC EMS Appropriate Installation, NSA HR has its own Environmental Policy Statement, signed by the Installation Commanding Officer (CO), Internal Assessment Plan, and regulatory permits. The installations covered under the CNRMA-HR Regional EMS share regional significant aspects and objectives/targets, but have the potential to have installation specific significant aspects and objectives/targets as well. In order to effectively implement the CNRMA-HR Regional EMS, an Environmental Quality Management Board (EQMB) has been established. The overall goal of the EQMB is to enhance EMS efforts across the Hampton Roads (HR) Installations in order to sustain continual improvement upon the CNRMA-HR Regional EMS and ensure continued conformance with ISO 14001, as well as adhere to OPNAVINST 5090.1D and OPNAV M-5090.1, define Best Management System (BMS) processes, and all applicable Executive Orders.

As a member of the EQMB, we work to represent our organizational component's interests and perspectives on EMS developments and issues; evaluate/approve significant environmental aspects and impacts conducted at HR installations; evaluate/approve objectives and targets to reduce, minimize, control or improve significant environmental impacts; evaluate/approve environmental management procedures (EMPs); evaluate the implementation of corrective and preventative actions (CAPA); communicate EQMB decisions to personnel in our respective organization; ensure all personnel contribute to the overall success of the HR EMS; implement procedures, plans, and programs established by the EQMB; and encourage and spearhead installation EMS efforts. For FY14-15, the significant aspects were Storage Tanks, Clean Air Act Compliance and their respective objectives are Improve Tank Management/Compliance, and Improve Clean Air Act Compliance.

NSA HR's installation specific significant aspect was environmental awareness and the objective was to improve EMS and environmental awareness. Our EPS' carry and distribute to all personnel a wallet-sized EMS card with the Environmental Policy Statement, emergency response number, and website address for the location of EMS awareness, and environmental compliance training. In accordance with ISO 14001, we annually conduct a top management review of the EMS with the CO to ensure it is operating as planned, and is suitable, adequate, and effective. The CO's recommendations for improvement on the performance of the NSA Hampton Roads EMS are recorded in the minutes and implemented. NSA HR had six federal, state and local agency inspections during the award period; and all inspection, reports had zero discrepancies.

Accomplishments

EMS: We incorporated environmental awareness training into PWD facility management departments tenant face-to-face meetings. We met twice a year at each installation in 2014 and 2015. The tenant brief consists of reviewing the items that EVERYONE at the command needs to know related to EMS, as well as discussing current environmental impacts, targets and objectives. The meeting provides a great opportunity to get our stakeholders feedback on the environmental management program, and direct input and buy-in on implementing new practices and procedures to achieve compliance, and protect human health and the environment while supporting the military mission.

Environmental Management System (EMS)

Here are the things that EVERYONE at the command needs to know

1) Q: What is EMS? A: EMS is a set of processes and procedures that allow an organization to analyze, control, and reduce its impact on the environment.

2) Q: What is our environmental policy? A: There is a detailed policy signed by the Commanding Officer of the installation, however the CNRMA environmental policy is communicated through the acronym "CARE", which summarizes the key concepts:

- C - Comply with rules
- A - Always improve
- R - Reduce waste
- E - Eliminate pollution

3) Q: What significant aspects are related to your job? A: At NSA Hampton Roads, significant aspects include aboveground and underground storage tank management, clean air act compliance, education and training. *Know how your particular job affects the environment and what the 2 biggest environmental issues are at your location.*

4) Q: What procedures, operational controls and objectives/targets apply to your job?
A: For NSA Hampton Roads FY14 Significant Aspects:

Significant Aspect	Operational Control Documents	Objectives/Targets
Storage Tank Management	Comply with Spill Prevention Control and Countermeasures (SPCC) Plan and applicable Standard Operating Procedures (SOPs)	Improve storage tank compliance.
Clean Air Act Compliance	Comply with Navy Region Clean Air Act Rules & SOPs	Improve Clean Air Act compliance (i.e. ODS record keeping, leak rate calculations and reporting)
Environmental Awareness and Outreach	Comply with Navy Region and Installation Instructions, SOPs and Alerts	Ensure All personnel are trained.

5) Q: What do you do in the event of a spill or emergency? A: Call the Emergency Communication Center. If safe to do so, use spill kit contents to stop flow of spill until additional help arrives.

6) Are there any process/operational controls associated with your job/process? A: Possibilities could include spill kits, containment pallets, hazardous waste storage locker/cage, torpe for covering items outside, trash cans, recycle bins, light switch, etc.

7) Know the SOPs for your specific environmental assets (HWAAs, SAA, wash rack, Storage tanks, berm log, etc) and where to find them at your location.

8) Know what type of environmental training you need for your job.

9) Ensure any issues/deficiencies found during previous environmental inspections have been fixed/ addressed. Be able to provide proof of fix.

Ensure all are trained in EMS and can produce proof (certificate). Course can be taken online at <http://navfac.ecatts.com>
For more information call 836-1862 or 341-0397

- Wrote and contributed content on environmental specific training topics monthly to the installation's newsletter "Shore Lines" published by the NSA HR Public Affairs Officer.
- Implemented quarterly email communication/newsletter on EV issues, standard operating procedures and best management practices and training opportunities. Collected the email addresses on every environmental practice owner at all six installations to implement a quarterly email communication called, "EV Notes".

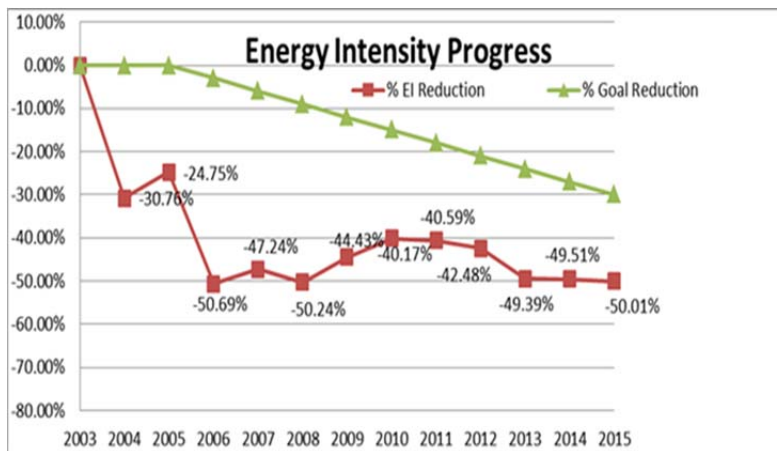
Waste reduction efforts: The EV staff manages a total of 16 permits from VDEQ and HRSD and conducts over 300 oversight inspections per quarter of tenant commands to ensure permit compliance. All inspections are entered and tracked utilizing EMSWeb for immediate review by Core and installation EV staff for problem identification and trend analysis.

NSA HR is a participant of the Regional Recycling Program, which consists of the collection, segregation and sale of scrap metal, aluminum cans, cardboard, paper, lead-acid batteries and other common recyclable items. The Integrated Solid Waste Management Program (ISWMP) is implemented by NAVFAC Recycling, consolidating all in-house services and contracts to provide overall management of the solid waste stream in the Region. NSA HR participated in the free Call2Recycle spent recyclable battery program initiated at MCA-614 at the end of March 2015, and has been very successful. Over 500 pounds of recyclable batteries have been diverted from hazardous waste disposal to recycling in the last six months.

Reduction of Food Waste at NSA Portsmouth is successfully managed by the installation of a food digester. OG50 aerobically processes an average of 50 pounds food waste per hour, depending on the food waste composition. The ORCA is run 12 hours a day, seven days a week, as the Galley, is open 365 days a year due to patient care. The ORCA waste disposal management system has demonstrated a great cost savings by eliminating the cost of having food waste trucked off the facility, and diversion of 60,000 pounds of food waste to the landfill.

Stormwater: EV staff conducts Best Management Practice (BMP) and industrial process inspections regulated by Virginia Pollutant Discharge Elimination System (VPDES) Permit. We perform regular inspections of the installation's oil water separators (OWS) and associated valves that discharge to the storm system, as well as compliance oversight inspections of the tenant operations. Tenants at the installations covered by our IAP perform Storm Water Pollution Prevention Plan (SWPPP) inspections as required. NSA HR-Portsmouth is regulated under the Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Storm water from Small Municipal Separate Storm Sewer Systems (MS4). Environmental and Energy Outreach Fairs are held twice a year in April and October to support our public education program, and to distribute educational materials to the community and tenants about the impacts of storm water discharges on water bodies and the steps that they can take to reduce pollutants in storm water runoff.

Effective Use of Funds: To meet EO 13514 goal of a 30 percent energy reduction by 2015, energy conservation audits were conducted quarterly by Building Energy Monitors (BEM) and energy intensity compared to the 2003 baseline energy reduction for base exceeds the EO 13514 goals. During this award period, NSA HR received the Gold Level Energy Management Award. BEM trainings are held several times throughout the year at NSA HR HQ, NSA HR-NWA and NSA HR-Portsmouth. In addition to the group trainings at NSA HR HQ, weekly tenant site visits are made where energy training is reviewed along with the quarterly facility energy checklists, and any relevant energy projects and updates for the installation. Additionally, the Installation Energy Manager (IEM) communicates with BEMs via email to distribute awareness posters and energy conservation articles.



- Awarded a \$400K project to upgrade the mechanical and lighting in Meteorological and Oceanographic facility. This project will save approximately 231 million BTU (MMBTU) of energy consumption and will improve overall facility appearance and occupant comfort.
- Awarded a \$1.97M project to upgrade exterior lights to high efficiency light-emitting diode (LED). These fixtures will save approximately 9,000 MMBTU of energy consumption and will improve overall installation appearance.
- Awarded a \$200K project to repair steam lines, estimated energy savings of 3,139 MMBTU and improve site utility distribution and efficiency.
- Awarded a \$663K project to upgrade the direct digital energy controls (DDC) at several facilities to tie back to the central DDC facility. This project will save approximately 8,650 MMBTU of energy consumption.
- Awarded project decentralizing NSA HR and LRA from the Naval Station steam generation plant. At \$14M, the project will eliminate steam losses from an outdated 2.5 mile distribution system and reduce the load on the Naval Station plant. It is expected that this project will save approximately 3,200 MMBTU in reduced thermal losses.

- Installed a ground source heat pump at building SC-401. Costing almost \$1M, the heat pump allows the building to be heated and cooled by the earth's subsurface temperatures and removes it from the less efficient centralized steam system.

Community Relations: The CO records his "Top 3" video each week and is disseminated to NSA HR All Hands via the command's You Tube channel. This visual approach allows personnel to watch the CO discuss his top priorities and remember those items throughout the week. Environmental Awareness and outreach events are regularly highlighted in the CO's "Top 3" videos.

As part of the National Public Works Week campaign, the IEM for NSA HR highlighted a large Steam Decentralization project for the installation in the awareness video published by the NAVFAC MIDLANT PAO entitled, "Building for Today and Planning for Tomorrow." This allowed for the NSA HR energy program to highlight energy projects and initiatives to the NAVFAC MIDLANT Region. This short video was published on YouTube, PAO emails, and on the MIDLANT Portal.



Earth Day & Energy Outreach Fair at Portsmouth Annex in honor of the 44th National Earth Day (May 2015). The fair included environmental and wildlife displays, ways to be 'GREEN' at work and at home. Also featured some great Energy saving tips the Navy and NSA Hampton Roads specifically are using. Photo credit: Linda Hicks, NFML, Norfolk, VA

NSA HR fosters communication throughout our organization on our environmental commitments and performance. Our goal is to sustain our partnerships with local, state, and federal regulatory agencies and maintain continuous environmental compliance with existing and new regulations and guidelines.