

**FY19-FY20 Secretary of the Navy Environmental Awards
Environmental Quality Industrial Installation
Naval Station Everett**

1. Introduction

a. Naval Station Everett (NAVSTA) Everett is located in northwest Washington State with the main waterfront site located on the Puget Sound at Everett, Washington. NAVSTA Everett is currently homeport to five destroyers, USS MOMSEN (DDG 92), USS RALPH JOHNSON (DDG 114), USS GRIDLEY (DDG 101), USS SAMPSON (DDG 102), and USS KIDD (DDG 100), as well as Commander, Carrier Strike Group Eleven and Commander, Destroyer Squadron Nine. In addition, the base supports a Coast Guard buoy-tender and a Coast Guard coastal patrol boat. Military Sealift Command supply vessels and other visiting ships also use the Navy port on a regular basis. The Station's waterfront site, commissioned in 1993, is a major presence along the Everett waterfront. A short distance west of downtown Everett, with a popular marina and retail area along the north boundary and the former Kimberly-Clark industrial facility immediately south, NAVSTA Everett is a 117-acre developed site supporting port operations and vessel maintenance plus recreation activities including a 90-slip marina with 2,830 linear feet of space and about 13 acres of recreational areas.

b. The Station's two nearby remote facilities are the Navy Support Complex (NSC) Smoky Point and Naval Radio Station (Transmitter) Jim Creek in Snohomish County. Including tenants, NAVSTA Everett is home to nearly 3,000 military and civilian personnel. It supports an active duty, and dependent population of over 5,000 and ranks as the fifth largest Snohomish County employer.

c. Naval Radio Station (Transmitter) Jim Creek comprises 4,600 acres located about 25 miles north of Everett in the foothills of the north Cascade mountains. The Station operates a very low frequency (VLF) radio transmitting facility that relays communications from Naval Command to elements of the Pacific Fleet. The 4,600 acres include old-growth conifer forest, lakes, streams, wetlands, fisheries, and threatened and endangered wildlife habitat. Morale, Welfare and Recreation (MWR) supports outdoor recreational opportunities including camping, fishing, biking and hiking.

d. The NSC Smokey Point site is located about nine miles northeast of the waterfront site in Marysville, Washington. The NSC covers 52 acres. It has various support activities including the Navy Exchange and Commissary. The 52 acres consist of upland meadows, jurisdictional wetlands (native growth protective easement), detention ponds, and bioswales, improved and semi-improved grounds.

e. Additional segments of NAVSTA Everett's Area of Responsibility (AOR) include 14 different Navy Operational Support Centers (NOSC) located in 11 northwestern States. Three of these NOSCs are located on Navy owned property. This results in higher environmental compliance oversight requirements. The final piece of NAVSTA Everett's AOR is the Naval Facility Pacific Beach located on the Washington coast. Environmental compliance oversight requirements at the Naval Facility Pacific Beach primarily include drinking water, wastewater, and cultural resource management at the 52-acre site. The military mission at the Naval Facility Pacific Beach consists of operating a fixed emitter antenna used for training exercises with

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Pacific Fleet assets. Non-mission related recreational activities also occur at the Naval Facility Pacific Beach.

2. Background

a. Port and fueling operations, plus ship, facility and utility operations and maintenance to support the mission pose substantial environmental quality challenges at NAVSTA Everett's Waterfront Site. The operational tempo quickly shifts to a higher pace upon the arrival and departure of the destroyers and other ships. Operations are more variable than routine. Maintaining energy and water efficiency standards while a population fluxes with the arrival and departure of the destroyers also presents unique challenges. Consistent environmental excellence during these rapidly expanding and contracting periods requires flexible and conscientious environmental management at all levels. Improvements to the environmental program have been key NAVSTA Everett goals for the past year.

b. For Naval Radio Station (Transmitter) Jim Creek, environmental quality challenges are part of supporting operation and maintenance of the antenna field and facilities along with the recreational facilities in this pristine area of old growth forest and salmon-bearing streams. At the NSC Smokey Point, the challenges are similar to those of a large shopping district with acres of parking and typical commercial and maintenance operations. The parking area brings storm water management issues addressed by infiltration basins. The commercial operations of the commissary and Navy Exchange bring the management of refrigeration units and gasoline dispensing which record keeping and the Spill Prevention, Control, and Countermeasures (SPCC) address.

c. Operations at all three locations generate substantial amounts of solid waste and storm water issues. The Station accepts and processes hazardous and solid waste from the ships, making reduction and minimization especially important. Ship support includes fueling and collection of compensating ballast water. In the rainy Pacific Northwest climate, storm water runoff to Puget Sound and salmon-bearing creeks is a significant environmental concern along with spills and other discharges. Air quality is highly regulated and monitored by State agencies. Despite NAVSTA Everett having relatively low emissions, the local clean air agency imposes strict regulations that require intensive monitoring and reporting. A systemic approach to environmental management is utilized to meet these challenges.

d. The Station successfully implemented 15 important environmental quality projects since opening in 1994. Since NAVSTA Everett is a newer facility for the Navy, a more focused approach is implemented to identify those environmental quality priorities having the most benefit and those that would secure leadership's support. In addition, rigor in environmental management is implemented to comply with new requirements in critical areas to avoid being vulnerable to regulatory penalty and to reduce risks to the environment. Upgrading NAVSTA Everett's Environmental Management System (EMS) to support mission and compliance is a top priority. The EMS addresses the environmental aspects and impacts of projects. Equipment-specific EMS checklists for air assessments and the compensating ballast water treatment system continue to be considered and evaluated for benefits to other installations.

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e. Program Management: Improvements to environmental program management has been a key NAVSTA Everett goal for the past two years. The Environmental Division exists within the Public Works Department Everett and is staffed with seven individuals associated with the environmental quality aspect of the Division. The Installation is in conformance with DoD Component environmental management policy and guidance.

f. Orientation to Mission: The Station initiated all elements of an EMS in FY19 and FY20 with the focus being to directly support missions and reduce risks to operations through compliance and stewardship as well as environmental protection. Specifically, the Station set new EMS goals and objectives, implemented operational controls, expanded work center staff training and deployed a quarterly assessment program. The Station updated critical plans such as the Spill Prevention, Control and Countermeasures (SPCC), Storm Water Pollution Prevention Plan (SWPPP) and the Hazardous Waste Management Plan (HWMP). The Station also drafted an Integrated Natural Resource Management Plan (INRMP) for Naval Radio Transmission Facility (NRTF) LaMoure in LaMoure North Dakota and ~~then~~ updated the INRMP for the Acoustic Research Detachment Bayview in Bayview Idaho. The LaMoure INRMP is expected to be signed in December 2020.

g. Technical Merit: During FY19, NAVSTA Everett has diverted over 1,642,320 pounds of material to recycling, composting and reutilization and achieved a 76% one-day waste diversion rate, through workforce education and base events such as Earth Day Dumpster Dive competitions. During FY20, NAVSTA Everett diverted over 1,731,000 pounds of material to recycling, composting, and reutilization. Due to COVID-19, we were unable to hold an Earth Day event in FY20. All SPCC and SWPPP actions are completed and updated annually. Stricter controls are in place to prevent and respond rapidly to spills and to protect water and storm water while minimizing effects to mission.

h. Stakeholder Interaction: In January 2020, NAVSTA Everett developed the Environmental Insight newsletter that is published monthly and shared with Environmental Work Center Coordinators who post it at their work sites to aid in continual environmental learning. Environmental outreach and emerging issues are brought to the Installation this way to aid in workforce awareness

3. Summary of Accomplishments

a. Recycling Program

(1) NAVSTA Everett continues to exceed the diversion requirements from Executive Order 13693 with a 46% overall diversion rate in in FY19 and a 48% overall diversion rate in FY20. Recycling education and outreach is always in the forefront. This includes providing program information to the recently homeported destroyers (USS RALPH JOHNSON (114), USS SAMPSON (102) and USS KIDD (100)) as well as to any visiting ships.

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b. Education, Outreach and Partnership

(1) The station's promotion of environmental quality is evident in the success of the 2019 Earth Day and Energy Awareness Week events. Hailed as two of the most successful events at the Station, the Earth Day celebrations featured participation by active duty Sailors, DoD civilians, and MWR patrons at NRS(T) Jim Creek. The coalition of volunteers made this one of the most successful community environmental quality projects of the year. Activities included tree planting and trail cleanup efforts that resulted in volunteer's participation in the improvement of habitat.

(2) In FY19, the Energy Awareness Weeks promoted energy conservation and recycling. Started in FY15, the program continues to expand. For FY19 the focus included, awareness training to Sailors, weeklong static displays, and a one-day Energy Fair highlighting local companies' energy projects and capabilities.

(3) Four Boy Scout troops visited NAVSTA Everett recycling center in November 2018 to satisfy portions of their sustainability merit badge. The Scouts were able to see firsthand how decisions were made to prevent waste, re-use products and recycle waste. This merit badge also considers the areas of energy, water, and re-use. The Integrated Solid Waste and Recycling Manager addressed each of these topics with the scout troops. COVID-19 restricted access for other groups.

(4) NAVSTA Everett maintains a robust Government-to-Government relationship with local tribes. The 1974 Boldt decision affirmed Native American treaty fishing rights to provide for 50% of the expected fishery harvest annually. These fishing rights allow for tribal fishing and crabbing either proximate to the Installation or upon areas deemed allowable by the Commanding Officer. During FY19, the Standard Operating Procedure (SOP) for the Notification of Tribal Fisheries Managers of Ship Movements/Port Security Barriers (PSB) Opening onboard NAVSTA Everett was successfully completed. The intent of this SOP is to lay out all of the procedures that NAVSTA Everett will do to notify tribes of PSB openings. When the PSB opens, the water way needs to be free of tribal crab pots to ensure safe navigation of naval vessels. Ongoing meetings with tribal fishery managers during January 2019 resulted in the culmination of the SOP that has thus far resulted in strengthened communication. This prevents the need for Port Ops to relocate crab pots as was done frequently in the past and enhances the working relationship with local tribes.

c. Environmental Management System

(1) In FY19, Forty-six projects received environmental review, consultation, and permit support that provided operational and project support ahead of schedule. In FY20, Thirty-two projects also underwent environmental review.

(2) Below is listed the FY19-20 objectives of the EMS and the degree to which NAVSTA Everett attained relevant objectives.

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- i. Reduce copper loading in storm water at Outfalls A, B, and C.

By placing oyster shells, physical barrier filters, conducting frequent outreach and communication to tenants to follow permit requirements and increased cleaning of trench drains with PWD Production, we were able to achieve 25% reduction of copper at Outfall A and 17% reduction of copper at Outfall B.

- ii. Lead reduction during 2019 and beyond at Small Arms Range.

In FY19, lead was reduced by 23% using frangible rounds. In FY20, lead was reduced by 92% using nearly all training ammunition as frangible rounds.

- iii. Pollutant reduction and energy conservation at Jim Creek.

Removal of 1950s era Worthington generator resulted in the replacement with energy efficient modern Mitsubishi generators. The contract has been awarded and the Worthington has been removed. Mitsubishi generators to be online by 14 Dec 20.

d. Material Management

(1) In FY19, A tremendous opportunity presented itself when Public Works Utilities needed to dispose of excess diesel fuel that had been stored since 1994. Twenty-five years ago, a 120,000 gallon backup diesel fuel tank was placed to support the steam plant (B. 2300) in case natural gas supply were interrupted. When the sole carrier was relocated, the steam plant became obsolete. Re-purposing 25-year-old fuel is difficult because it does not meet the ultra-low sulfur content requirements of newer diesel engines. Each disposer and refinery contacted for recycling quoted very high disposal costs. This prompted a search to discover whether it could be used by other nearby federal entities. The Coast Guard buoy tender USCGC Henry Blake (WLM 563) (also homeported at NAVSTA Everett) and the USCG Station Seattle had ability to utilize this fuel resulting in substantial cost savings to both parties. In total, 82,253 gallons of # 2 diesel fuel were re-purposed in FY19.

(2) The NAVSTA Everett gun range is in the process of changing from lead based ammunition to frangible rounds. While the use of frangible rounds will increase the annual ammunition cost by \$11,853, the payback will come in two months due to significantly lower disposal costs. Using just 49% frangible rounds results in one metric ton of hazardous waste reduced during each three-year berm cleaning cycle. For FY20, the gun range plans to utilize nearly 100% frangible rounds. This will result in fewer tons of lead disposed as well as \$63,915 in hazardous waste disposal fees saved annually.

(3) The Security Department's armory and indoor range completed a second upgrade in FY19 to contain lead pollution that posed risks to air quality, storm water and personnel safety.

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(4) Despite the addition of one Arleigh-Burke Class Destroyer in 2018, water consumption increased only by 3% in FY19 when six destroyers were homeported here from October 2018 until February 2019.

e. Storm water management

(1) With the increased quantity of destroyers homeported at NAVSTA Everett comes additional maintenance availabilities on Piers A and B. The increased industrial activity has made compliance more difficult with already very low allowable limits of copper and zinc. During FY19, allowable limits on both metals were exceeded monthly. The installation continues to go upstream looking for contributors to the high numbers. To combat this problem, The installation developed a list of Best Management Practices (BMPs) that the maintenance work must follow. They include (taken from Environmental Notice of Corrective Action):

a. During periods of contracted shipboard maintenance, the piers and trench drain must be monitored daily and the trench drain is cleaned out weekly. Accumulation of contractor related trash in the trench drain system is not acceptable.

b. Ensure the Chromated Copper Arsenate (CCA) wood is covered at all times or it must be removed from the piers and South Wharf. This includes containers built out of CCA wood.

c. A barrier to the CCA wood such as paint or Thompson's water seal may be provided. A laboratory analysis of copper leachate must be provided if the wood is painted or the barrier is applied. If the wood passes the leachate test, it does not need to be covered.

(2) In addition to these BMPs, the installation looked at the overall cleaning aspect of the piers and found that the pressure washing of the piers results in significant deposition of sediment into the trench drains. This sediment is high in copper metals so it continued to leach into the storm water system during the summer months of low rainfall and low industrial activity on the piers. The installation developed a preventative maintenance (PM) action that brings PW staff out to remove sediment from trench drain on a quarterly basis. The frequency of trench drain cleaning increased from once annually to quarterly. This removal is important because many of the metal contaminants associated with pier side maintenance adhere to soil particles so leaving those in the trench drain historically resulted in the re-release of metals back into the storm water.

(3) In addition to developing BMPs and a PM, the installation is actively placing an oyster shell treatment measure in the pier trench drains to help absorb copper before it hits the storm water outfall on the Snohomish River. The placement of oyster shells puts NAVSTA Everett at the forefront of deployment of this technology. Since their placement, NBK and other Installations are now utilizing this effective technique to reduce copper loading to storm water outfalls. Independent laboratory testing has found copper reduction anywhere from 20-50% depending on site variables. Approximately 600 pounds of oyster shells were acquired in September of FY 19 for placement into trench drains on Piers A and B and the South Wharf

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during FY20. At the end of FY20, the comparison of results shows that copper discharges to storm water were reduced by 25% in the area where the oyster shells were placed.

f. Natural Resources Management

NAVSTA Everett's Natural Resource Manager (NRM) helped to keep a high-voltage electric transmission line project stay on schedule at Jim Creek and was able to cut a year off the project time-line. The NRM's work also avoided visual impacts to MWR patrons, operational impacts to PWD staff and antenna crew, and eliminated wetland impact associated with the previous alignment alternatives. This up-front work, consultations, and permitting occurred from May 2019 until July 2020.

Initially, the NRM's support in identifying the wetland location of the new proposed pole location allowed the contractor to complete a feasibility study that determined the cost to re-align the poles was not cost or operationally effective.

Additionally, once the decision occurred to maintain the existing alignment, the NRM quickly coordinated with the Army Corps of Engineers (USACE) and National Marine Fisheries Service (NMFS). Through the effort, NAVSTA Everett located ESA and CWA exemptions for the pole replacement, allowing the construction to move forward without waiting for a one-year long USACE permitting process.

NAVSTA Everett expeditiously coordinated with NMFS to allow work to occur during the annual 45-day fish window. NAVSTA Everett developed BMPs that the contractor could agree to which also demonstrated our ability to retain the no-effect Endangered Species Act (ESA) determination previously agreed to by NMFS. Due to our efforts, this NWCF project was completed before the 30 Jun 21 deadline established by NAVFAC HQ PWBL.