

JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY ENVIRONMENTAL QUALITY INDIVIDUAL MS. SHARON L. WALIGORA





Fig. 1: JEBLCFS

<u>Introduction:</u> As Hampton Roads' first joint base, and the major east coast operating base supporting Overseas Contingency Operations, the mission of the base is to "contribute to maximum military readiness by providing sustained superior service."

Joint Expeditionary Base Little Creek – Fort Story (JEBLCFS) (*Fig. 1*) provides support services to 131 shore-based resident commands and 24 home ported Navy and Auxiliary ships. Consisting of 3,838 acres with seven-and-a-half miles of beachfront training area, 1,503 facilities, and 61 piers, the base employs 21,520 military and civilian personnel. Located in Virginia Beach, Virginia, it is the only bare-beach Joint Logistics Over-The-Shore training site within DOD; the only

east coast Advanced Explosive Ordnance Disposal Training facility; and supports nearly all Navy Special Warfare training requirements.

JEBLCFS lies within the Chesapeake Bay watershed (*Fig. 2*). Little Creek Harbor is a 470-acre tidal estuary of the bay, serving as wildlife habitat and pollutant filter. Riparian forest and dune systems, critical to coastal ecosystems, and freshwater lakes and saltwater bodies are found on base. JEBLCFS is adjacent to the Atlantic Ocean and Chesapeake Bay, which are substantial sources of recreation and commercial industries including fishing. Chesapeake Bay is North America's largest and most biologically diverse estuary.

<u>Background:</u> Environmental protection is an integrated, ongoing, critical part of the installation's mission; environmental staff and command counterparts work to protect resources and comply with regulatory permits in order to keep training sites and facilities fully operational at all times. As a former military officer, Ms. Waligora fully understands military training and mission needs. The need to stay in compliance is accentuated by the installation's location in an environmentally-sensitive area.



Fig. 2: JEBLCFS Location

The Environmental (EV) Division is part of JEBLCFS Public

Works Department and is led by Ms. Waligora, the EV Division Director, who works directly for the Public Works Officer. The position, also known as the Installation Environmental Programs Director (IEPD), is "dotted lined" to the Base Commander for a direct line of communication. Ms. Waligora communicates routinely with the Base Commander and senior management on critical EV issues. EV Division staff consists of one Environmental Protection Specialist (EPS) Team Leader, three EPS team members, and one Natural Resources Specialist (NRS). EV permits are centrally managed by the Hampton Roads' EV Core staff (in Norfolk), while the EV Division, organized in geographical compliance zones, interfaces daily with resident commands and operational process owners to build strong rapports and guarantee compliance. She tirelessly coordinates the work of both her staff and EV Core for program success. The high standards set by the IEPD keeps the staff striving for, and achieving, excellence in all media.

A small EV installation staff makes achieving goals a challenge; risk management and attention to detail are continuously employed to maximize staff efforts. Ms. Waligora's work has directly resulted in the installation

continuously having a fully-conforming Environmental Management System (EMS). After the last two External Audits, held in 2011 and 2014, the installation was able to immediately re-declare ISO 14001: 2004 conformance. During our last External Audit, auditors recognized 8 outstanding practices which were exported to other commands and regions; most significant was the base-wide high level of EMS awareness.

Ms. Waligora's hard work resulted in many **partnerships** with community and resident commands as she:

- Continued "Operation Turtle" to prevent approximately 100 turtles each year attempting to cross Shore Drive (a major roadway) which is adjacent to base. This is an ongoing partnership with City of Norfolk, the Fix-It Foundation, and various local businesses.
- Coordinated Construction Battalion Maintenance Unit (CBMU) 202, U.S Army, EODTEU TWO, Port
 Operations, Safety, Morale, Welfare, and Recreation (MWR) and Training and Ranges Department
 volunteers, along with base residents and employees to move 1,125 Christmas trees to sand-fenced areas
 to collect sand and stabilize dunes.
- Organized and conducted Earth Day celebrations, attended by over 100 children at the base's two Child Development Centers (CDCs), with MWR and Recycling staff volunteers.
- Served as Zone Captain for the annual Clean the (Chesapeake)
 Bay Day with staff collecting in excess of 2,000 lbs. of trash.
- Extended US Fish and Wildlife Service Memorandum of Understanding (MOU) providing cost-free beach patrolling for endangered sea turtles.

Fig. 3: Ms. Waligora, JEB Commander, and Smokey Bear at Arbor Day tree planting.

- Continued partnership with local Elementary Schools allowing Smokey Bear at Arbor Day tree planting.
 students to grow oysters in floats on our oyster reef, and monitor the oyster growth monthly throughout the school year as a Chesapeake Bay protection project.
- Worked with Virginia Department of Forestry and Arbor Day Foundation to hold Arbor Day celebrations at the CDCs and garner 17th and 18th annual Tree City Awards (*Fig. 3*).
- Coordinated Construction Complete Ceremony for DASN (Environment), Commander Navy Region Mid-Atlantic (CNRMA), USEPA Region 3 Regional Administrator, base and state officials. With partners EPA and Virginia Department of Environmental Quality (VDEQ), our Restoration Advisory Board (RAB) is fortunate to have two community members serving for over 21 years.

Awards:

- May 2015 EPA Superfund Construction Completion Milestone
- 2015 Base Commander Letter of Appreciation
- 2014 Hampton Roads Sanitation District (HRSD): JEBFS Platinum Award
- 2013 2015: 4 HRSD Pollution Prevention Partner Awards
- FY2013 CNO Environmental Quality, Non-Industrial Installation
- FY2013 SECDEF Citation for Meritorious Achievement for Environmental Quality
- FY2013 SECNAV Environmental Quality, Non-Industrial Installation
- FY2013 CNO Environmental Restoration, Team
- FY2013 Navy Platinum Energy and Water Management Award
- FY2013 and FY2012 CNRMA Community Service of the Year Award Environmental Stewardship
- FY2013 JEBLCFS Bainbridge Award (CNRMA EV Community Service Award was a prerequisite)
- 2013 Governor's Environmental Excellence Award for Sustainability
- 2013 Humane Society of the United States Humane Wildlife Stewardship Award for "Operation Turtle"

2013 HRSD Outstanding Environmental Compliance Awards: JEBLC - Silver and JEBFS - Gold

<u>Program Summary:</u> JEBLCFS's EV program consists of a very active ISO 14001:2004-compliant EMS program, implementation of Sustainment Study base-wide goals, use of a Cross-Functional PWD Team to meet sustainment goals, and hands-on natural resources conservation.

EMS is stressed and provides everyone with a tool to incorporate risk management in daily work while focusing on significant aspects and objectives. Significant aspects are: Air, Drinking Water, and Tank compliance. Objectives are: Reduce NOVs by 20% and improve compliance and program management. The primary benefit of the program is the installation has a successful EV compliance program while the base's carbon footprint and operational costs are reduced through cross-functional teamwork.

The program goal is to protect human health and the environment while supporting the mission. Although environmental impacts are not the first thing on everyone's mind when executing their mission, Ms. Waligora made it a priority to ensure all personnel working on the installation received EMS indoctrination and basic environmental awareness training. She designed a wallet-size EMS "green card" with our Environmental Policy Statement, Significant Aspects, and Objectives; it is carried by all military and civilian personnel.

The key to her success is unwavering dedication to support both the military mission and preserve the natural environment through leadership focused on EV protection and goal attainment, effective educational programs, and incorporation of sustainment goals into future construction and training plans.

Remarkably, over the last two years and 11 regulatory inspections, under Ms. Waligora's direction the installation had zero inspection discrepancies.

Accomplishments:

EMS: JEBLCFS' EMS is reviewed and updated on a bi-monthly basis, with all Hampton Roads installations through a regional Environmental Quality Management Board (EQMB). Ms. Waligora is an active participant and meets all deadlines to support the EQMB mission. EMS process and document changes proposed by her have been incorporated into the regional EMS. The EQMB sets objectives and targets which are discussed and approved by EV managers. Success is tracked and published for EQMB members and chain of command use. Monthly "Dashboard" Metrics are published for NAVFAC and JEBLCFS leadership review. The base EV staff works quickly to resolve any discrepancies; thus, maintaining high grades in the metrics. Ms. Waligora and her staff are extremely passionate about their mission and are recognized as Hampton Roads' EMS leaders.

Using a Plan of Action and Milestones (POAM) to correct Internal Audit (IA) findings, these findings were communicated to the EQMB and other installations as lessons learned. Changes were made to Internal Audit Plans (IAPs) to ensure specific inspections were carried out in the Hampton Roads area to correct deficiencies before they became regional regulatory inspection and IA findings. Following the External Audit, she authored "Lessons Learned" briefing for Navy Region Mid-Atlantic (NRMA) to assist installations in improving their EMS. This brief is used as a reference tool for the region and has been exported to other Navy regions.

Stakeholders at all levels are involved in the EMS process to address significant aspects. In addition to soliciting improvement ideas from the PWO, base front office, and resident commands, she works closely with the Recycling Manager to maximize recycling opportunities and collect recycling data from all stakeholders.

Feedback from classroom and on-the-job training is incorporated for continuous process improvement. One area identified was the need to effectively communicate the installations EV policy and EMS goals. Ms. Waligora drafted 30 articles that are randomly selected and distributed on a weekly basis, published in the Plan of the Week, and "advertised" on electronic reader boards at the entrances to the installation. Additionally, she has made arrangements for many of the items to be published on the JEBLCFS CNIC public page in order to emphasize the installations dedication to environmental protection and compliance.

The NAVFAC MIDLANT Cross-Functional Team addressed hazardous material usage, transportation, energy, recycling, and pollution prevention throughout the Mid-Atlantic Region. Respective groups work independently on Executive Order (EO) 13423, 13514, (now 13693) goals. JEBLCFS PWD strives to implement these goals.



Using the business card and environmental green color concept designed by Ms. Waligora, 20,000 "Green Cards" containing EMS "CARE" slogan, significant aspects, objectives, targets, spill, and EMS training information were disseminated base-wide (*Fig. 4*). CARE brochures and posters are posted at pass offices and work areas.

Classroom and on-the-spot training has been conducted for 3,566 personnel on EMS, Spill Prevention Control and Countermeasure Plan, and spill reporting. Spills are tracked and analyzed to preclude recurrence. Disseminated

information and training provided to personnel proved to be extremely valuable tools. During the installation's most recent External EMS Audit the audit team was greatly impressed with the base-wide level of EMS knowledge. To further communication at higher levels, in addition to weekly bullets, she briefed DASN (Environment), the Navy Chief of Engineers, NRMA staff, and NAVFAC MIDLANT COs, XOs, and Operations Officers on EV program status.

The positive impact of our EMS is demonstrated by an outstanding compliance record and increased awareness. Spills, regardless of size, and other EV issues, such as marine mammal strandings, are readily reported as personnel know why they are required to report and how such data helps improve our program.

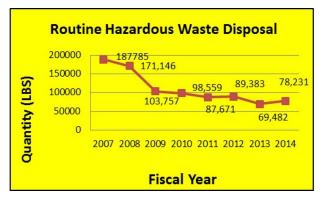


Fig. 5: Hazardous Waste Disposal in Pounds (LBS)

Waste Reduction Efforts: Ms. Waligora's proactive and aggressive approach to recycling and waste minimization resulted in a major decline of routine hazardous waste (HW) disposal since 2008. Through the use of pollution prevention, such as hazardous material control and waste minimization, a 58% reduction in off-site routine HW disposal was achieved with a 58% reduction in disposal costs and cost-avoidance of approximately \$211K (Fig. 5). The large decline of routine hazardous waste disposal was due in part to Ms. Waligora

providing information to resident commands on the use of greener solvents, aqueous parts washers, cross decking of

materials, shelf life extensions, and the concept of "ordering only what you need". The Minimization Guide was widely disseminated to gain as broad a support base as possible.

The Recycling Program consists of the collection, segregation, and sale of scrap metal, aluminum cans, cardboard, paper, antifreeze, concrete and construction debris, lead-acid batteries and other commonly recyclable items. Executive Order 13514 set a goal to divert 50% of solid waste by the end of 2015. Ms. Waligora has taken a personal interest in ensuring that everyone does their part in our recycling endeavor, including educating the children at the CDCs. Each year, as part of the Earth Day celebrations, she personally has taken the



Fig 6: CDC Sea Turtle Education

opportunity to educate children about recycling and protection of our environment (*Fig. 6*). JEBLCFS has an average diversion rate of 43% for the past six years, with a realized cost savings of \$1.25M.

Navy policy directed storm water low impact development (LID) be incorporated into new construction projects by 2011; JEBLCFS exceeded this goal by creating 9 LID sites prior to 2008. During FY 2014 and 2015, 29 sites were added for a total of 105 sites collecting 64.03 acres of runoff.

JEBLCFS Storm Water Pollution Prevention Committee meets annually to discuss Best Management Practices (BMPs) and to address resolutions of newly-identified pollution issues. Ms. Waligora implemented a policy to purchase drain inserts and absorbent socks; these items are strategically placed around the installation to reduce non-point source discharges in industrial areas. A new product - metal absorbing drain insert - was installed in an area that consistently exceeded regulatory levels for heavy metals. The first sample taken after the drain insert was installed, allowed JEBLC to meet the regulatory limits for the first time in over 4 years. Additional inserts were installed at other base locations resulting in metal discharges below permit benchmarks.

Environmental Restoration: Protecting human health and the environment has been at the forefront of all decisions made by Ms. Waligora, which was evident during the remediation of 14 Environmental Restoration (ER) sites. The assessment of vapor intrusion at Sites 11 and 13 demonstrated commitment to assuring employees of buildings within and adjacent to the sites are not exposed to contaminants associated with the underlying groundwater plume. Additionally, she partnered with the Public Affairs Officer (PAO) and health and geology specialists to provide a public information session regarding indoor air testing for vapor intrusion to provide the barrack's occupants with timely information regarding air testing in their buildings.

Ms. Waligora reviewed all ER draft documents and memorandums, and briefed the CO on decision documents which required his signature. A total of 14 documents were reviewed by Ms. Waligora and 3 documents were presented for signature. In addition, she reviewed 2 RAB meeting information packages and attended those meetings.



Fig. 7: Ms. Waligora Accepts Construction Complete Ceremony Plaque

29 acres have no land use restrictions.

As a whole, during this achievement period the ER program at JEBLCFS completed a time-critical removal action, established an action decision document and remedy-in-place for one site, and initiated Remedial Action (RA)-Operation activities for one site, while continuing RA-Operation activities for 8 sites. Additionally, the second Comprehensive Five-Year Review for JEBLC was completed. The ER program at JEBLC has worked to accelerate EV cleanup achieving facility construction completion four months ahead of the Navy's end of FY 2015 goal. The JEBLC Preliminary Closeout Report was signed on 11 May 2015. Also, during this period, approximately 31 acres were made available for potential reuse. Of the 31 acres,

The most significant achievement for JEBLC ER program was reaching the Construction Completion milestone – only the second installation in NRMA to do so (*Fig. 7*).

Environmental Compliance Assessment and Management Program: Ms. Waligora's staff utilizes 41 media-specific checklists to cover requirements of federal, state, and local regulations in support of 11 compliance permits. She ensures the staff conducts and uses EMSWeb to document the 5,520 inspections prescribed by JEBLCFS' IAP. JEBLCFS resolves 98% of all findings during the quarter in which they occurred and has a less than 1 percent repeat finding rate. EPSs are asked to come up with solution options for any compliance issues discovered that day prior to their departure from the site or by the end of the business day. Solutions are implemented either on-the-spot, or, for more complex problems, after discussion with the Team Leader and EV Director, and after additional resources and funding have been secured. Quarterly, she and her staff conduct root cause analysis and risk assessment on compliance discrepancies. Long-term solutions are identified and forwarded to commands for incorporation as owners of their EV compliance program. This type

of leadership and chain of events has required her staff to interface closely with commands. Due to Ms. Waligora's tireless efforts, her staff has become a well-honed and self-sufficient team, becoming the regional go-to team for advice on EMS and problem solving.

As a result of an outstanding compliance record, JEBLCFS enjoys a cooperative relationship with its regulators and remains in a positive negotiation posture with respect to permit requirements. Working closely with VDEQ, the storm water permit was negotiated down from an individual to a general permit; thereby, reducing laboratory and permit fees by \$6K annually.

Budgeting is done through EPRWeb exhibit submittals. In FY14, in addition to regional projects, the base invested \$1M in labor, compliance, and natural resources projects; in FY15, another \$1M was invested.

To provide a "how to" for the installations customers, Air, HW, and Explosive HW Guidebooks are in use to define local EV policies, guidance, and operational procedures, including standardized compliance procedures and recordkeeping forms for air equipment and HW Accumulation Area operators. These have been standardized across five installations in Hampton Roads so personnel transferring from one local base to another know to follow the same standard procedures. To prevent storm water pollution, control nuisance animals, and keep the base litter free, Ms. Waligora designed decals which were installed by her staff on all trash dumpsters instructing personnel to "Keep critters out and litter in". The 600 signs reinforce our EMS Program while serving a practical purpose to meet program goals.

To minimize paper usage, she directed the use of standardized, engraved, and reusable, HW accumulation and drum storage area signs, which are easily seen and can be relocated when not needed, resulting in less maintenance and labor to replace worn or damaged paper signs. A similar signage program is used at deep sinks reminding personnel that chemical and paint disposal in the sinks is prohibited.

Classroom and on-the-job training is conducted for resident commands, covering general and media specific subjects. Over the last 4 years, Ms. Waligora and her staff have conducted training for more than 11,000 sailors, marines, and soldiers. Training is also completed online through the Environmental Compliance Assessment, Training, and Tracking System (ECATTS).

To improve ship compliance and knowledge of environmental regulations, Ms. Waligora developed a homeported ships training program. The program resulted in improved compliance in all media in the pier area and timely hazardous waste processing for disposal.

Ms. Waligora's staff manages 34 oil water separators and numerous sanitary sewer pretreatment devices. To ensure proper operation, Pretreatment Device Management Plans and self-assessment inspection checklists were developed. Based on a sound compliance record, the Water Program Manager negotiated monitoring frequency reductions at all waste water sampling locations resulting in annual analytical savings of \$9K.

In support of the construction program, and existing Executive Orders, Ms. Waligora is instrumental in reviewing all major projects. As part of the review process she routinely discusses concerns and through teamwork, recommendations are provided to the Construction Managers, design teams, and contractors, resulting in the implementation of BMPs or emerging technologies alleviating EV impacts and permit requirements. She and her staff reviewed 29 construction designs for EV compliance criteria, attended 310 preconstruction meetings, and held two training sessions for Construction Managers and Engineering Technicians. A Pre-Construction Conference Checklist was updated to provide contractors with work site environmental requirements; this checklist was exported for regional use. Storm water instructions to define requirements relating to erosion and sediment control, construction permitting, and post construction BMPs were put in place. This increased communication reduced the potential for illicit discharges to sanitary and storm systems. Construction site inspections are conducted bi-weekly by an EV contractor and coordination is conducted with FEAD to ensure storm water standards are met.

<u>Effective Use of Funds:</u> Ms. Waligora partnered with US Fish and Wildlife Service to develop a MOU for cost-free patrolling of JEBFS beaches for endangered sea turtles. This MOU saves approximately \$30K annually in Navy labor dollars and provides relocation of discovered turtles and nest without costly military training mission disruption.

As a Natural Resources project, with a cost of only \$10K, She partnered with Port Operations and Amphibious Construction Battalion Two to install shells as habitat for the naturally-occurring Virginia Oysters in Little Creek Cove. This reef, built in 2010, supports the Chesapeake Bay 2000 Agreement to increase oysters - which serve as filters (each oyster can filter 50 gallons of water each day) - and improve water quality. As



Fig. 8: Annual Christmas Tree Recycling

community outreach and partnership with local elementary schools the oyster reef is used annually for science experiments; thus, the reef was a sound investment paying immeasurable dividends in positive public relations.

Ms. Waligora established an annual Christmas Tree recycling program via partnership with resident commands and community volunteers, saving over \$50K in labor and equipment cost to move over 500 trees annually for dune restoration and stabilization (*Fig. 8*). The commands gain a training evolution and volunteer hours while

solid waste is reduced. As a trained forester, she ensures trees are protected and trees removed for construction are replaced. 157

surplus trees were planted during the award period, improving air quality and carbon sequestration capacity.

<u>Community Relations:</u> As described above, JEBLCFS IEPD participates in many outreach initiatives and partnerships. Additionally, in 2014 and 2015, approximately 400 volunteers participated in Clean the Bay Day and removed over 12,000 pounds of trash on base.

<u>NEPA:</u> The CNRMA Site Approval Process mandates completion of all NEPA requirements before site approval can be granted. As part of the planning process an Environmental Checklist (EC) is prepared for each proposal. This checklist is routed to all media and NEPA experts to determine required level of regulatory permits and NEPA for the proposed action. Training evolutions must also meet EC and NEPA requirements. During the award period, Ms. Waligora reviewed 156 ECs and 154 Records of Categorical Exclusion.

The EC process provides compliance media and natural and cultural resources managers the opportunity to preview an action, perform a site visit and look for ways to avoid EV impacts while the project is in planning stages. As such, the EC checklist provides an avenue to avoid and mitigate EV impacts early and avoid potential costs associated with those impacts. NEPA documents are reviewed by Ms. Waligora for quality and use of concise, direct language. Both a Statement of Technical Review and a Legal Sufficiency Review are completed before NEPA documents are forwarded to the region for FONSI approval. After project completion, facilities become part of the installation IAP and inspections for new equipment are carried out by EV staff in frequencies prescribed in applicable permits. Any natural resources mitigation sites, such as wetland areas, are added to the INRMP and monitored for success in accordance with permit requirements.

Looking for ways to become a sustainable installation, as directed in EO 13514, in 2012, JEBLCFS finalized a pilot program to study and test the methodology for developing a sustainability program which was exported other DOD installations. Energy, Green Building, Socioeconomics, Water, Ecosystem Services and Transportation were focus areas. Baseline data was developed for these focus areas and goals set using respective federal mandates. This study continues to be used to incorporate conservation of resources and pollution prevention into current and future base construction and operations.

<u>Leadership:</u> Due to unavoidable hiring process difficulties, in addition to her own responsibilities, she has acted as the NRS for 9 months. In this capacity, she partnered with the USDA, MWR, Housing, and Security to

develop a comprehensive Canada Goose Control Plan on base. To avoid Bird Airstrike Hazard incidents, as well as health issues, 101 geese were removed. Additionally, Ms. Waligora analyzed on-going bat study data to ensure identification and protection of any sensitive bat populations, coordinated eradication of invasive plant species, coordinated and reviewed documents for a turtle-lighting survey, coordinated with NAVFAC LANT to ensure preliminary jurisdictional wetland determinations did not lapse, coordinated near-shore surveys, and established a feral cat trapping program. She met with state and federal agencies to complete the Annual Natural Resources Metrics. Ms. Waligora also completed the Chesapeake Bay Annual Data Call. Signs were designed and installed to educate the public on the importance of maintaining our riparian buffers. Over \$531K in Natural Resources projects were executed in FY14 and 15. She is the base POC for all Cultural Resources issues.

In the Drinking Water program, she coordinated with MWR, Preventive Medicine, Navy and Marine Corps Public Health Center, and PAO to develop a public response program due to high lead results from Priority Area Testing at a CDC. As part of the effort, a PAO Briefing Card and Q&As were developed as well as a letter to the CDC children's parents. This information was used to develop a CNRMA-wide response when other CDCs in the region also experienced high-lead results.

As the senior EV Director in the area, she is often called by other IEPDs seeking advice. Not one to shy away from field work, she has planted trees, installed sand fencing for dune protection, installed drain blockers, collected trash, and responded to spills. Ms. Waligora mentors her staff to ensure they receive not only required training, but training to improve their skills for enhanced productivity and career advancement. Most importantly, she holds her folks accountable for their responsibilities.

Professional Development: To continuously improve on a personal level, after decades of being out of college, involving hundreds of hours of off-duty study time, Ms. Waligora went back to classes and passed the Professional Engineer Exam. To be a more effective EV Director, in a program impacting construction activities and new at the installation level, she completed three classes and passed Virginia Storm Water Management Combined Administrator Exam, at her own expense, to earn her certificate. She is enrolled in Erosion and Sediment Control classes to earn another certificate. To enhance innovation and efficiency at the base, Ms. Waligora attended the Remediation Innovative Technology Seminar, Environmental Contracting Course, Hazardous Substance Incident Response Management Refresher, Incident Command System 300 Refresher Course, and Oil and Hazardous Substance Spill Response Tabletop Exercise. Knowledge gained in classes is directly utilized to educate staff, effectively incorporate new requirements, continually improve processes, and define new high standards for program excellence.