
Navy Region Europe Africa Southwest Asia (Detachment Bahrain) Submission

For the
Chief of Naval Operations
Environmental Award

Award Category
“Environmental Quality – Overseas Installation”



Supporting Family, Fleet, and War Fighters

Region Detachment Bahrain was created as a result of the realignment of Navy Region SouthWest Asia to Navy Region Europe, Africa, SouthWest Asia. Its purpose is to ensure the Navy Region Commander maintains close support relationship with the Naval Component Commander, COMUSNAVCENT/ COMFIFTHFLT and associated installations leading from the front line at the "Tip of the Spear." NAVCENT has assigned the Environmental team of Region Detachment Bahrain as the regional environmental coordinator for all Navy processes in the Central Command Area of Responsibility (AOR).

Truly Professional Team – Mission First

Our Environmental Team (EVSWA) enables all Navy Installations and activities in the most dynamic theater in the world to maintain the highest standards of excellence and accomplishments despite severe manpower and financial constraints. The period of October 2012 through September 2014 was a highly dynamic, demanding, and productive period. EVSWA continues to provide exceptional oversight of the environmental program at Naval Support Activity, Bahrain (NSA), Isa Air Base, and the Ports of Jebel Ali (Jeb) and Fujairah (Fuj) in the United Arab Emirates (UAE). In addition, our EVSWA team's assigned area has further expanded to include the expanded waterfront development area at NSA II, the UAE Coast Guard Base, and five (5) Mine Counter Measure (MCM) and ten (10) Patrol Coastal (PC) home-ported ships.

Program Summary

The objective of our Environmental Program (ENV) is to support the mission and operations of the Installations and COMFIFTHFLT by 1) maintaining compliance with applicable environmental laws and regulations, 2) protecting human health and the environment, and 3) implementing Pollution Prevention (P2) initiatives to reduce the generation of hazardous waste and its associated costs.

One of the most outstanding features of the ENV is the achievement of over fifty percent reduction in quantity and cost of hazardous waste disposal during the past two years. The program also identifies opportunities to reduce, reuse, or recycle hazardous and solid wastes. The program has been repeatedly recognized for its innovation, versatility and proactive approach in enhancing the awareness of our personnel and the Host Nation

(HN). This is the same ENV team that has won numerous environmental awards in years past and we wish to highlight the accomplishments of NSA Bahrain, but also show our broader efforts throughout the SouthWest Asia region.

The environmental program personifies the Navy core values of Honor, Courage and Commitment by emphasizing the importance of a clean and healthy environment.

We are taking action...

EVSWA continued its tradition of excellence by initiating new programs and improving existing ones, thereby enhancing the Quality of Life for FLEET, personnel, and surrounding communities.

Fleet Readiness --- Contingency Planning:

EVSWA, moving forward in our resource constrained operating environment, champions the design, coordination, and facilitation of the annual oil and hazardous substance spill preparedness and response workshops. Multi-level spill scenarios focus on putting the Warfighter first to enable operational success by acting judiciously in maintaining preparedness to respond to OHS spills that would negatively impact mission readiness. The workshops encourage participation from all members of the response community; including US Joint and Coalition Forces, host nation representatives from the Regional Organization for the Protection of the Marine Environment (ROPME), Government, maritime and private industry. The greatest benefit is realized with participation in group discussions, led by the DET BAHRAIN Regional Environmental Coordinator (REC), which focuses on the talent and initiative of our sailors and civilians to produce solutions employing varying strategies and tactics to rapidly mitigate spill incidents to maintain mission readiness. The positive impact of the workshop is seen in the use and evaluation of spill contingency plans in this non-threatening environment. The most significant impact is realized in the unified Gulf Community cooperation and support during actual spill incidents which is directly related to the magnitude of the impact to the environment.

Additionally, workshops and tabletop exercises specific to the Forward Logistic Support Sites in

the Ports of Jebel Ali and Fujairah, United Arab Emirates have emphasized local coordination with the Port Harbor Masters, the Fujairah and Dubai Municipalities, and the Port Operator Dubai Ports World (DPW). Participation has increased from one or two HN representatives to fifteen or more in each location. This continual process improvement has resulted in enhanced cooperation, coordination and identification of realistic expectations during actual spill incidents.

Reaching New Heights of Excellence

Winner of the FY 13 CNO and SECNAV Environmental Quality Awards in the individual/team category. Recipient of recognitions from the Qatar Armed Forces, United Arab Emirates, and ROPME.

Host Nation Engagement:

EVSWA diligently works to remain a contributory member of the Bahrain and Arabian Gulf environmental community, at times taking on a leadership role, but always supportive of local and regional efforts to improve the quality of the environment. The "Earth Day" community outreach programs have been highly successful. Several years ago the environmental staff began promoting a Navy Family earth day celebration inside the fence-line. The past two years, EVSWA integrated Host Nation activities into a weeklong celebration including family oriented "green" awareness training, exhibits promoting recycling and tips on pollution prevention, and community cleanup. The Kingdom of Bahrain Environmental Affairs Directorate recognizes the US Navy civilian and military members as professional and progressive environmental stewards.

Program Transferability:

EVSWA has embraced the challenge to expand the highly successful environmental programs to include the addition of a new waterfront area that doubled the size of the U.S. footprint, increased resources at risk, including the impact of fuel transfers at the waterfront, ship to shore handling of hazardous waste, and an increase in the number of above ground fuel oil storage tanks in use. The result is more frequent interaction with Bahrain Port Services and the Port Safety Director to aggressively integrate and manage the new risks associated with the waterfront into the NSA Bahrain Environmental Management System. The need to identify and control the expanded risk required modification to the training program for pollution prevention, fuel transfers, hazardous waste handling procedures, site inspections, and documentation. This increased the workload of the staff without an adverse impact to the daily enforcement of the existing risk management program. The result of this effort is the seamless transition of operations from the old Mina Salman Navy Pier to the new waterfront wharf without an increase in environmental staff resources.

A key to supporting the Navy's long-term mission is to ensure that new programs are maintained and transferred between changes in command. Through the development of instructions and proper training of shop and other facility personnel, the continuity and longevity of beneficial waste reduction, pollution prevention, environmental training, and spill response programs will be maintained. In time, lessons learned and pitfalls overcome will become standard tools that others will learn from and apply to other areas of environmental management.

Further evidence of positive host nation engagement is seen in the continuous effort by EVSWA to nurture the relationships between the US Navy and the Fujairah Municipality, Port Authority, and UAE Coast Guard. This effort has resulted in successful negotiations and planning for the construction of a new building to be located inside the UAE Coast Guard Base

in Fujairah for occupation by US Navy Forces Fujairah. Although construction and completion of the project is more than a year away, the detailed planning to project well-established and successful environmental programs, such as, pollution prevention, recycling, fuel transfers, and waste handling that are in place throughout the SWA AOR into the daily operations of this new forward logistics support site are another example of the positive impact of the supporting command to enhance mission readiness of the supported commands, specifically the warfighter.

Environmental Management System (EMS)

Environmental Awareness is excellent throughout the AOR in spite of difficulties presented by frequent staff rotation. The Environmental Staff deploys an aggressive day-to-day hands-on execution and management of the EMS. The process for finding and correcting compliance deficiencies is excellent and well documented. The EMS program is efficient and effective primarily due to the engagement and endless support of the leadership combined with excellent use of multi-media advertising to promulgate the NSA Bahrain EMS. The practice of face-to-face contact, use of bulletin boards, brochures, emails, newspaper articles, Earth Day, and posting on the NSA Bahrain website illustrate a commitment to promoting installation wide environmental management. The environmental staff is committed to nourishment of the program through proactive initiatives; such as, on the job training conducted by the environmental staff to ensure newly assigned HW Handlers are supervised until they reach the acceptable level of competency. Daily, weekly, monthly follow-on site visits and inspections ensure proficiency remains high. A second initiative was the development and distribution of the COMPLIANCE CHECK – A Practical Guide to Environmental Issues, which is a model for the Navy overall. Shop Environmental Coordinators receive a personal laminated copy of the guide. The Guide is an excellent tool with step-by-step guidance to achieve all environmental media requirements applicable to the base. The third initiative is proactive management and control of

documents. Documents and records inventory is maintained in a strictly controlled library system, with an alpha-numeric code for ease in access and control. The EMS coordinator has identified the significant aspects that impact the new waterfront area operations.

Defense Environmental International Cooperation (DEIC) Program:

EVSWA successfully competed for DEIC funding aiming at fostering relations with the Host Nations through improving the Gulf Cooperation Council (GCC) planning and capabilities to monitor and report illicit discharges into the Marine Environment. EVSWA facilitated the first workshop which was held in Kuwait with high-ranking participants of the GCC and US Gov. This workshop resulted in compiling information about the current status of each country's surveillance program. Two additional workshops will be held in FY15 to conduct gap analysis, make recommendations, and develop final road map and strategic plan for effective surveillance of illicit discharges in the ROPME Sea Area.

US CENTCOM frequently draws on the expertise of the EVSWA to plan, design, and facilitate DEIC program projects in SWA. The most recent was to help the Qatari Armed Forces develop Waste Management Plan. Our Regional Environmental Coordinator (REC) provided well-received training and recommendations. He was recognized for his efforts by the State of Qatar Chief of Environmental Security.

Taking Care of the Fleet

Over the past two years, ENV has shown exceptional commitment to environmental protection and earned the admiration, respect, and recognition of the host nations (HNs). This dedication has strengthened our long-lasting relationship with the HN's and enhanced the U.S. Navy's image in this AOR.

The achievements during the preceding two years are a testament to the successful management of the environmental program. These achievements include management and

procurement for programs benefiting the mission of the Navy within the AOR, as well as the community relations programs that strengthen the positive relationship with the host nation and surrounding community. The successful management of the environmental program is also responsible for the successful integration of pollution prevention programs across diverse civilian and military activities reducing costs, increasing environmental compliance, and reducing exposure of personnel to toxic materials.

What is particularly noteworthy about our environmental accomplishments is the fact that the programs did not sacrifice other areas of environmental compliance to increased regulatory scrutiny or operating expense. By specifically targeting source reduction and recycling, the programs actually reduced costs by over two million dollars. The implemented programs also target the life-cycle nature of the activities thereby assuring continued savings into the future.

Breaking through Operational Barriers

- Diverted over 1,950 tons of aluminum cans, scrap metals, tires, wood, plastic bottles, paper, cardboard and others from the solid waste stream achieving a disposal cost avoidance of over \$300,000 generating over \$100K of sale proceeds used to support ENV initiatives (Table 1).
- Initiated P2, HAZWOPR, and spill response-training programs ensuring compliance with the Final Governing Standards (FGS), and HN requirements. This training provided personnel the skills and knowledge necessary to safely handle hazardous waste, respond to spills, and conduct P2 assessments.

Connecting with Customers

Published articles on environmental protection in the base's "Desert Times" newspaper reinforcing commitment to the community and the environment.

Provided monthly environmental management system (EMS) and HW handling training to base

HW handlers. Additionally, established P2 training to educate base personnel about different P2 aspects including recycling, waste reduction, and material substitution.

Excelling as a Force Multiplier...

During the past two years, ENV responded to more than 1,600 service calls supporting 190 U.S. Navy and coalition ships with processing over 20,000 drums of shipboard used HAZMATs offloaded in Bahrain and United Arab Emirates (UAE).

Supporting the Local Community...

Led a team of service members, DoD civilians, DoD Dependent School (DoDDS) children and host nation personnel in participating in a weeklong Earth Week celebration that included various activities aimed at increasing awareness and making pledges to protect the environment. Earth Week emphasized that every day is Earth Day – a time to act to protect our planet.

- More than 75 passersby visited the ENV awareness booth for tips on energy conservation and pollution prevention.
- More than 300 military and civilians collected over 80,000 pounds of trash of which over 50% were recycled.

Overseas Drinking Water Program -- Protecting our Families and Troops

Meticulously managed the drinking water monitoring program for NSA I / II, ISA AB, and satellite locations including AV Unit, DoDDS, Harbor Patrol Unit, and the Port of Jebel Ali (UAE) ensuring personal health and safety.

With the issue of new Navy Overseas Drinking Water (ODW) regulations, DET BAHRAIN re-focused significant efforts to promptly achieve full compliance and ensure Military members and their families are provided drinking water that meets or exceeds US water quality standards. The recent establishment of the ODW Program and the push to comply with the new requirements with no additional resources, required refocusing of labor and management efforts to take on new responsibilities such as lead coordinator for the Installation Water Quality Boards (IWQBs) for NSA Bahrain and Isa Air Base, reporting to the Chair of the IWQB, the Installation Commanding

Officer. Working closely with the Regional Water Quality Board (RWQB), DET BAHRAIN aggressively executed and achieved all near-term new compliance requirements.

- Declaration of drinking water being "Fit for Human Consumption" for NSA I, NSA II, and Isa Air Base, which required extensive coordination with the Army Corps of Engineers and investigation to correct water chemistry concerns at Isa AB new plant.
- Achieved full operating capability for the Isa Air Base IWQB. NSA Bahrain IWQB already at full operating capability. Both IWQBs reporting progress monthly to Water Quality Oversight Council (WQOC) via RWQB
- Obtained Provisional Navy certification for Operators in Responsible Charge/Assistant Operators in Responsible Charge for all DET BAHRAIN Navy ODW Systems
- Conducted Sanitary Surveys (SS) at Isa AB and WQOC SS for other Bahrain ODW Systems including NSA I/ II, AV Unit, BANZ warehouse, and DoDDS.
- Submitted Plan of Action and Milestones to the RWQB/WQOC. Majority of deficiencies have been corrected
- WQOC and RWQB both recommended issuance of a Conditional Certificate to Operate (CTO), one of the first issued in the Navy
- Extensive search resulted in finding a local supplier of National Sanitation Foundation (NSF 60) chemicals eliminating the need for increasing storage capacity and in reducing procurement cost by more than 50% when compared to the CONUS cost.
- Implemented a new management strategy for drinking water systems found at multiple Cooperative Security Locations that are not part of the new ODW Program.
- Timely preparation and delivery of the annual drinking water Consumer Confidence Reports (CCR) to water consumers.

Environmental Quality Assessment (EQA)

The EQA has three tiers, including an annual self-audit conducted by the activity, external audit sponsored by the major claimant (usually every three years), and the audit conducted by the Inspector General. ENV was exposed to

internal and external audits while the Qualified recycling Program was exposed to an IG audit. ENV was commended each time for its proactive approach in implementing plans and initiatives to improve compliance posture. The few deficiencies noted were corrected in less than 90 days.

ENV staffs conduct regular inspections of installation facilities for compliance with the FGS and US Navy policies. ENV works closely with customers to fix deficiencies promptly.

Waste Management and Resource Recovery

- In this AOR, Jebel Ali and Bahrain are the only authorized shipboard HAZMAT offload locations. Continually update the Shipboard HAZMAT offload procedures reflecting current policies. Ships receive a copy upon entering the AOR.
- Inspect all used shipboard HAZMATs prior to offload to ensure compliance with applicable laws.
- Diverted over 1,490 tons of otherwise hazardous waste and reduced disposal cost by over \$6,100,000 (Table 2).
- Over 4,000 drums weighing over 300 tons of oily rags were **washed and reused** reducing disposal cost by \$1,660,000.
- Recycled over 1,300 drums of used oil reducing disposal cost by over \$1,800,000
- Over 19,000 of used HAZMAT drums were washed and re-used resulting in a cost avoidance of over \$490,000.
- Diverted over 225 tons of aerosol cans, oil filters, batteries, toner cartridges, and fluorescent light bulbs (Table 2) reducing HW disposal cost by over \$890,000.
- Decreased HW disposal quantity and cost by more than 50% (Table 3). Total HW disposal quantity was approximately 310 tons at a disposal cost of about \$670,000 for the two years combined. These figures are over 50% lower than the Region Det Bahrain's baseline of 1,600 tons at a disposal cost of over \$2.92M.

Environmental Management System (EMS)

The few deficiencies resulting from the NSA Bahrain most recent external EMS audit in January 2013 were fixed promptly leading to the re-declaration of conformance with ISO 14001:2004 in March 2013. The EMS policy and implementation plan are regularly updated identifying new environmental aspects and objectives/targets; effectively implement a robust EMS training program for all installation personnel, and to maintain senior leadership engagement in the EMS process. Enhancements to existing, mature environmental programs have resulted in increased awareness and communication, and provided for a more comprehensive approach to identifying and documenting priorities, enabling improved funding justifications and communications to Senior Leadership

Environmental Effects Abroad of Major Federal Actions

- ENV has implemented the Environmental User's Guide to comply with the EO 12114, FGS, DODINST 6050.7, SECNAVINST 5090.6A, and DODINST 4715.5
- Successfully completed thirteen (13) Record of Negative Decisions (RoND) for projects at NSA I & II, Isa AB, and the UAE.

Lead Environmental Component (LEC)

Supporting the Regional Commander role as the NAVCENT N40, our team has flawlessly executed the N40 functions of Regional Environmental Coordinator, Shore Navy On-Scene Coordinator, and Lead Environmental Component (LEC).

The FGS documents for the countries of Bahrain and the UAE were the first to be developed and approved within CNREURAFSWA. Our shore NOSC program is a model to emulate. Our long lasting partnerships with the Host Nations continue to pay dividends helping our mission and protecting our personnel.

**SOLID WASTE RECYCLING PROGRAM
TABLE (1)**

CATEGORY	(TONS)	CATEGORY	(TONS)
Mixed Paper	79.95	Tires	17.38
Cardboard	909.87	Cooking Oil/ Grease	99.56
Scrap Metal	251.32	PET Bottles	19.11
Aluminum Cans	16.91	Mixed Plastic	62.06
Textiles	7.33	Scrap Wood	522.37
		TOTAL	1,985.86
		Cost Avoidance (\$)	304,369.86

**RECYCLING / REUSE PROGRAM
TABLE (2)**

CATEGORY	(TONS)	COST VOIDANCE (\$)
Used Oil	559.36	1,852,555.26
Dirty Towels	312.79	1,662,783.79
Fluorescent Bulbs	46.68	190,157.84
Fuel/Oil Filters	33.25	148,090.96
Aerosol Cans	10.35	45,241.22
Batteries	72.20	307,824.92
Empty Oil Cans	63.04	214,513.86
Toner Cartridges	19.57	103,259.02
Used HW Drums	381.72	492,418.80
In-country HW Management		1,085,060.33
TOTAL	1,498.96	6,101,906.00

**HAZARDOUS WASTE DISPOSAL PROGRAM
TABLE (3)**

CATEGORY	QUANTITY (TONS)	DISPOSAL COST (\$)
Region Baseline (NSA, ISA, UAE)	1,600.00	2,920,899.00
HW Disposal Qty (FYs 13&14)	308.60	669,334.26