

# Commander, Navy Region Southwest NAVAL BASE SAN DIEGO, CA

## 2009 SECRETARY OF DEFENSE ENVIRONMENTAL AWARDS ENVIRONMENTAL QUALITY - NON-INDUSTRIAL INSTALLATION NOMINATION

### INTRODUCTION

Naval Base San Diego (NBSD) encompasses the NBSD main-site, the Broadway Complex in downtown San Diego, the Mission Gorge Recreation Center, the NAVFAC facilities at NMC San Diego, and 16 family housing sites. NBSD main-site occupies approximately 598 hectare (ha) of land and 132 ha of San Diego bay, with 13 Piers and two channels offering 17257 meters (m<sup>3</sup>) of berthing. NBSD has an on-base population of 29,000 military, Federal civilian and contracted employees. NBSD is divided into two distinct areas: the maintenance and repair area along the shoreline (wet side) and the community facilities complex east of Harbor Drive (dry side). NBSD supports 56 ships, and 156 tenant commands. NBSD is also home to Military Sealift Command, Maritime Administration, and U.S. Coast Guard ships, as well as numerous other U.S. vessels. In addition, NBSD provides services including housing, security, public works, environmental, supply, and administrative facilities for tenant units.

San Diego is America's sixth largest city and has become home to technology, telecommunications, and biotechnology companies. San Diegans take tremendous pride in their community and the local environment. In the spirit of community partnership, NBSD is a

vigilant caretaker of its property, steadfast in compliance with environmental laws and regulations. NBSD has assumed this responsibility with an aggressive compliance oversight program and has developed superior relationships with San Diego's elected officials and the regulatory community.

### BACKGROUND

**Environmental Aspects** NBSD manages 77 San Diego Air Pollution Control Board (APCD) permitted sites and/or equipment, 47 San Diego County Department of Environmental Health permitted hazardous waste (HW) collection sites, nine underground storage tank (UST) permits, 11 Food Establishment Wastewater Discharge permits, an Industrial Wastewater (IWP) permit, and two National Pollution Discharge Elimination System (NPDES) permits (one for the facility industrial sites and one for the graving dock). In the past fiscal year, NBSD has had 209 site visits by six different regulatory agencies with no NOVs or formal enforcement actions.

**Environmental Organization** The NBSD Environmental Department is comprised of nine Environmental Protection Specialists. These personnel report to the Installation Environmental Program Manager who in turn reports to the NBSD Public Works Officer for

environmental compliance. The program support lead is responsible for updating monthly inspection schedules, tracking inspection completions, internal deficiencies, regulatory visits, etc. and subsequently compiling this data into a tracking database and from this data developing a trend analysis to identify areas of possible concern. The trend analysis data is used by our training lead to develop specialized training based on identified deficiencies. To date, a robust training program consisting of 13 modules was created.

**Community Involvement** NBSD has established working relationships with the City of National City, the City of San Diego, the Main Street Association, the San Diego 8<sup>th</sup> District Council, the Barrio Logan Association and General Dynamics/NASSCO.

## PROGRAM SUMMARY

Using the facility environmental policy, NBSD has established the following goals and objectives:

- Maintain or improve environmental compliance to support mission.
- Improve environmental processes and functions.
- Reduce costs.
- Improve responsiveness to customers.
- Improve the quality of environmental services that are delivered.
- Maximize operational flexibility.

These goals are measured through a system of metrics and surveys as part of NBSD's Environmental Management

System. NBSD has established a monthly inspection program that identifies environmental aspects and sets an inspection schedule. NBSD environmental staff performs over 500 inspections monthly in addition to the extensive program management support they provide. NBSD has also established air, water, and hazardous waste Personnel Qualification Standards for staff environmental professionals and provides annual training in current law and regulations to ensure all personnel remain current in environmental regulations.

An external EMS audit of the NBSD EMS program was conducted 18-21 May 2009 and the audit team found NBSD's EMS program to be ISO 14001:2004 compliant. NBSD subsequently self-declared ISO 14001 compliance on July 21, 2009 in accordance with DOD EMS policy.

## ACCOMPLISHMENTS

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

Naval Base San Diego's EMS program has identified 150 air, health, and water aspects that support sixteen tenant commands within the NBSD footprint. In addition, NBSD's Environmental staff inspects industrial sites listed in the facility Storm Water Pollution Prevention Plan (SWPPP), storage containers and tanks subject to the Spill Prevention Control and Countermeasures (SPCC) program, and other facility operations. To manage this program the Environmental Staff has established the following parameters:

**Goal:** Provide NBSD with the finest environmental compliance support by developing a rigorous inspection, review, and training program.

**Objective:** Identify all aspects, develop inspection frequencies and individual inspection checklists for each aspect, develop a training program that familiarizes personnel working at sites or operating equipment with their responsibilities, and ensure all environmental staff receives EMS training.

**Target:** Inspect all aspects at least monthly and develop a written record of all inspections. Provide annual EMS training to all personnel operating permitted equipment or at permitted sites. Annually review permit list to identify opportunities to retire permits.

### **Program Implementation**

- The NBSD environmental inspection program is divided by media: hazardous waste, air, and water. Each media has a minimum of two personnel assigned to manage and oversee the program.
- Each program team developed individual inspection checklists for each aspect, which were then reviewed and assigned an alphanumeric code by the Environmental Manager.
- Each staff member develops an inspection schedule for the aspects they are responsible for. The inspection schedules include: location of inspection, point of contact, permit number if

applicable, type of equipment or operation, inspection frequency, applicable checklist, and approximate duration of inspection. This schedule is easy to use and interpret and makes the transition of new employees into our system easy.

- Based on customer requests and years of field experience, 13 training modules addressing a wide variety of environmental topics was developed for classroom training complete with certificate. Many of our training modules are now a mandatory annual requirement.
- A deficiency notice (DN), in triplicate, was developed as a method for tracking internal deficiencies identified by the environmental staff. The DN identified the discrepancy(s), annotated the corrective action(s) needed to be taken, and the time frame in which the corrective actions needed to be completed. Ships receiving a DN are required to schedule a mandatory training session with our environmental office before the DN can be closed out.
- This data is also used to develop a trend analysis of identified discrepancies to focus our training and corrective actions on.

### **Program Summary**

NBSD's EMS implementation is reaping huge benefits. NBSD staff collectively contributes over 10,000 man hours annually to conducting

field inspections, providing OJT to personnel, reviewing environmental processes, and looking for opportunities to reduce environmental liabilities. The extensive training program we've incorporated trains over 500 personnel annually and is attended by representatives from all metro facilities and is having a major impact on environmental compliance. NBSD has received 218 site visits from seven different regulatory agencies in 2009 and has not received any notices of violation.

NBSD's Environmental Management System has proven to be an extremely effective tool for identifying operations where environmental impact may be minimized or eliminated through new processes. The result is the approval by regulators to retire permits for these activities, reducing liability and resulting in cost savings to the Navy. During 2009, 9 permits have been retired resulting in approximately 4K annual dollar savings to the Navy.

The EMS audit team specifically singled out NBSD's program for some of its innovative ideas and stated it was the best program they had seen.

### **WASTE REDUCTION EFFORTS**

NBSD hosted an electronic waste turn-in event to collect eWaste from NBSD shore activities. Over 8 t of debris was diverted from hazardous waste, saving the taxpayer approximately \$10,000 in disposal costs. This event was supported by personnel from Defense Reutilization Marketing Offices (DRMO)

and Navy Region Southwest (NRSW) Recycling. Shore commands relinquished any government owned electronic devices or appliances that were no longer used. Nearly 8.5 t of discarded electronics and component parts were collected and transferred to DRMO and 1.3 t of appliances were sent to NRSW Recycling. Material collected included 221 monitors, 65 computer processing units, 62 servers, 42 printers and numerous other items such as televisions, refrigerators, microwave ovens, fax machines, copiers and coffee makers. Approximately \$430,000 worth of material was collected. There was such an overwhelming response to the event that NBSD will host similar events in the future. The next electronic waste turn-in event will support NBSD's afloat commands.

### **ENVIRONMENTAL COMPLIANCE ASSESSMENT AND MANAGEMENT PROGRAM**

**Self-Assessments** Internal EMS audits are conducted to review all aspects of environmental compliance. These audits may be scheduled on the basis of need or the results of previous audits, but are done not less than annually. An individual audit may be limited to a sampling of EMS elements or specific areas and may be both random and/or focused on certain activities based on their importance and/or results of previous audits.

Each audit addresses the following:

- Audit scope and objectives,
- Audit criteria to be applied,

- Contacts and coordination with the auditor(s),
- Audit dates, times and other logistics,
- Review of previous audits, records, profiles and descriptions,
- Responsibilities for writing the audit report and for follow-up actions.

Audit criteria are based on ISO-14001. The focus of audits is to ascertain that the EMS has been effectively implemented and is functioning in accordance with established procedures. Audit findings are based on objective evidence that is properly corroborated and authenticated.

Auditors report to management on the results of the audit and, should corrective actions be required, the IEPM will finalize corrective and preventive actions to address the audit findings.

A Root Cause Analysis will be conducted in accordance with the NBSD Internal Assessment Plan Handbook. The Environmental Media Managers will investigate the underlying cause of the nonformance and ensure corrective and preventive action is completed. The EMS audit is closed when the auditor has briefed the IEPM and any corrective/ preventive actions have been accomplished.

**Zone Inspection Program** NBSD's Commanding Officer has implemented an extremely effective zone inspection program. Zone inspections are conducted three times each week with one inspection headed by the

Commanding Officer, the second by the Executive Officer, and the third by the Command Master Chief. Each of these inspection teams is supported by personnel representing Safety, Public Works, Tenant Liaison and Federal Fire. Currently, each building is visited twice annually. One aspect of these inspections is to discover potential environmental infractions. Tenant commands are notified of environmental findings discovered at their facilities by navy message, and the findings are tracked by NBSD Facilities Department to ensure corrective action is taken. During 2009, 15 environmental findings were recorded during zone inspections that would have resulted in regulatory violations and fines. The zone inspection program was also instrumental in identifying excess electronic devices and appliances being stored throughout the facility and served as the impetus for the implementation of the Electronic Device Recycling Day held in October of 2009.

**Regulatory Interaction** NBSD has established working relationships with all local and regional environmental interests, most notably the San Diego County Department of Environmental Health, the California Department of Toxic Substance Control, the California Environmental Protection Agency, the City of San Diego Environmental Department, and the San Diego County Air Pollution Control Board. In 2009, six regulatory agencies visited over 200 sites at NBSD.

**Regional Oil Spill Working Group (ROSWG)**. The ROSWG reviews statistics and initiates ongoing Best Management Practices. The ROSWG is chaired by the Navy On-Scene

Commander (NOSC) based at NBSD. As a direct result of San Diego ROSWG efforts, there have been numerous improvements in Navy oil pollution prevention performance, both on a short-term, local basis, as well as sustainable long-term process improvements.

**Training Programs** NBSD has established a training program with the following self-contained modules designed for specific applications:

- Business Plan Training
- CDO Training
- Emergency Response Training
- Hazmat Training
- Hazwaste, Air, Water Training for Contractors
- Hazwaste Annual Training
- Medical Waste Training
- Pollution Prevention (P2) Training
- Ships Forces Training
- SPCC Training
- Storm Water Training
- SWPPP/NPDES Training
- UST Operator Training

Training is held monthly for mandatory requirements, such as hazardous waste coordinator certification, and as required for other areas.

**Water Resource Management** NBSD funded and executed 18 projects to replace existing landscape areas and improve high visibility landscaping. In addition to beautifying NBSD, these projects will achieve a return on investment of \$63K in water and \$52M in reduced grounds contracts for the next contract cycle by converting 78641 meters (m) of landscape to Xeriscaping, and will save an estimated 16277 cubic meters (m<sup>3</sup>) of water annually through the installation of artificial turf. In addition, Smart irrigation controllers save 16277 m<sup>3</sup> of water annually. These projects also eliminate fertilizer and pesticide use, thereby removing these chemicals from storm water due to irrigation and runoff. Additional planned turf and Xeriscape projects are estimated at \$3M and savings of 13M gallons of water.

### **EFFECTIVE USE OF FUNDS**

Mandatory compliance training for workcenter hazardous waste coordinators is required by California regulations, and NBSD has established a training program for all base personnel assigned these duties. The regulatory agencies have accepted NBSD's training program as meeting regulatory training requirements, thereby saving the Navy significant contracted training costs. NBSD also provides its training to other San Diego area Navy facilities. During the past two fiscal years, NBSD has trained 988 Navy personnel, resulting in a savings to the Navy of nearly \$300K in contractor training costs.

In 2009, NBSD reduced energy consumption 5% from baseline (26% since 2003). In addition, the reduction

in fluorescent lighting has reduced hazardous waste generation.

## **COMMUNITY RELATIONS**

NBSD initiated the “Clean Base – Safe Neighborhood” program encompassing four volunteer programs: The Main Street Neighborhood Cleanup; Operation Clean Sweep, a SD Bay shore, surface, and subsurface water clean up; Naval Base creek outfall clean up; and San Diego harbor debris pick-up initiative. These efforts demonstrate to the local community our commitment to the environment and enhance the close relationship NBSD enjoys with its neighbors. The program ensures a safer, cleaner environment, promotes trust, understanding, and good will with our neighbors, and mitigates inherent sensitivities often associated with a gated military installation. Individually, the four efforts encompass area neighborhoods, creek-lands and outfalls that terminate on NBSD, and the water around the base’s piers. Taken together, all of NBSD’s environmental stewardship efforts secure a more environmentally friendly atmosphere, promote base pride, and help maintain a close relationship with the community.

Chollas Creek flows through NBSD and carries trash from the city of San Diego to San Diego bay. NBSD has partnered with San Diego to clean up the trash by booming the creek and removing the trash before it reaches the bay. This joint effort removes an average of 8.5 tons of trash and loose debris from the creek keeping San Diego Bay clean.

NBSD hosted 14 tours in support of San Diego’s Working Waterfront Group—a group of businesses who serve as good

neighbors contributing to the community and who are organized to help protect the environment with programs to prevent pollution, preserve our natural resources, and educate the public on the importance of waterfront businesses in the community. These tours included NBSD as another stop in a series of bay-front locations toured by local leaders including civic, business, environmental and political representatives.

NBSD Port Ops, in coordination with NRSW NOSC, USCG, external agencies such as State Fish and Game and U.S. Fish and Wildlife, and local industry, executed a significantly expanded Annual Oil Spill Exercise. This highly successful and informative training exercise involved over 110 personnel focused on setting initial response objectives, equipment deployment, transitioning to Unified Command, utilizing the ICS Incident Planning Process, and deploying 2134 m of containment boom and nine skimming boats.