

INTRODUCTION

Commander, Fleet Activities, Yokosuka (CFAY) Environmental Division's Environmental Quality Programs are arguably some of the largest and most diverse within all DOD service components. CFAY is a forward-deployed naval base located just inside Tokyo Bay on the Pacific Ocean side of Honshu, one of the five major islands of Japan. The main naval base is approximately 43 miles south of Tokyo, and 18 miles south of Yokohama. CFAY's area of responsibility (AOR) also includes housing areas at Ikego and Negishi; fuel terminals at Hakozaki and Tsurumi; an ordnance depot at Urago; Yokohama North Dock and Nagai. As the Navy's largest and most strategically important overseas installation, CFAY hosts 83 tenant commands that support operating forces throughout the Western Pacific, from Hawaii to the Arabian Gulf. With a population of greater than 24,000 military and civilian personnel, CFAY manages over 1,700 acres of land, 1,500 buildings, 8,200 feet of berth, and 233 million gallons of POL storage facilities. The base's primary mission is to maintain and operate base facilities for the logistical, recreational, administrative support and service of the U. S. Naval Forces Japan, 7th Fleet and other operating forces assigned with in the Western Pacific. CFAY supports 11 high operational tempo warships forward-deployed to Yokosuka, including the 7th Fleet flagship, the USS BLUE RIDGE (LCC 19), and the only permanently forward-deployed nuclear aircraft carrier, the USS GEORGE WASHINGTON (CVN 73).

BACKGROUND

CFAY's Environmental Division manages over twenty multi-media environmental programs, integrated through a capstone Environment Management System (EMS). Its diverse workforce is staffed with more than 30 US and Japanese environmental professionals that is composed of engineers, environmental specialists, program managers, program analysts, and technicians. Organized to focus on Program Management, Compliance, Hazardous Waste Management, and Recycling; CFAY has established itself as a leader in environmental performance, resource protection, and mission orientation.

The CFAY EMS program is rigorously measured against its designated performance metrics to monitor and demonstrate continuous improvement of all its significant environmental aspects and it is used to ensure proper implementation of environmentally sound measures in accordance with the Japan Environmental Governing Standards (JEGS) and other applicable Japanese and U.S. regulations, laws, policies, and requirements. Through the use of Environmental Working Groups (EWG), EMS Management Reviews, Executive Environmental Compliance Boards (EECB), and comprehensive community outreach and public awareness programs, CFAY strives to strengthen fleet, family, community, and mission readiness, in addition to bolstering U.S. - Japan relations.

PROGRAM SUMMARY

As the first Navy Installation in Japan to declare conformance with ISO14001, CFAY is committed to continually improving its environmental performance through the use of effective environmental management and planning. CFAY's EMS program serves as the primary tool for integrating sound environmental practices into all operations and business practices, fostering communications throughout all levels of the installation, and gaining commitment from all personnel working and living at Yokosuka and its outlying areas.

Program success is evident and can be witnessed in CFAY's unprecedented environmental performance over the past two fiscal years. The rate of recycling has increased by 446.12% over the last two fiscal years (up from 5,280 tons in FY09 to 28,835.38 tons for FY11), corresponding to an increase in solid waste diversion from 37.20% in FY09 to 74.4% in FY11, well above the 50% mandated by the DoD Measure of Merit for FY15. The volume of hazardous waste decreased by 64% and Petroleum, Oils, and Lubrication (POL) spills decreased by 71.9%, down from 57 at the end of FY09 to 16 at the end of FY11. With the inclusion of Energy Conservation and Solid Waste/Recycling as significant aspects in CFAY's EMS program, greater improvements are expected for FY12 through continued expansion of Qualified Recycling Program (QRP) support services, continued waste reduction/diversion efforts through improvements in CFAY's contract review process and continued process improvements facilitated by CFAY's own EMS program that continuously analyzes all installation projects for environmental concerns.

ACCOMPLISHMENTS

Environmental Management System (EMS)

➤ *Setting/Meeting Goals, Objectives, and Targets*

Throughout FY10 and FY11, CFAY focused on setting and achieving additional, more aggressive goals for EMS, specifically the inclusion of Energy Conservation and Solid Waste/Recycling as two more significant aspects in addition to spill prevention, which generated a sizeable reduction of POL spills. CFAY continues to push and expand the EMS program despite the challenges of increased workload and limited funding as well the difficulties in communicating with 83 tenant commands and activities.

➤ *Continuous Improvement*

During the FY10 and FY11 EMS, CFAY proactively ensured all standard operating procedures (SOPs) were updated for all processes involving significant environmental aspects, including targets and objects for Energy Conservation and Solid Waste/Recycling. Site surveys were conducted to observe ship refueling/defueling operations in an effort to reduce fuel spill occurrences. CFAY's proactive approach in identifying EMS strengths and weaknesses through site surveys and one-on-one

interviews with supervisors, subordinates, military, civilian, contractor, and local Japanese National employees.

➤ **Management Review (MR) and Cross Functional Team (CFT)**



Recent EMS site visits confirmed the existence of EMS awareness and environmental consciousness amongst personnel throughout CFAY's AOR. This is a tribute to strong support for CFAY's EMS program by senior management. During routine briefs to the Installation Commander, local commanders, and other executive level personnel CFAY was able to communicate important environmental issues.

➤ **Training**

100% EMS awareness training (about 7,000 CFAY personnel) was achieved throughout CFAY's AOR. This was in addition to 30 spill prevention courses offered over two years for both Japanese and English speaking personnel. Although online EMS trainings modules were initially available, they were only in English. CFAY succeeded in translating more than 50 pages of offline content for personnel without access to computers. CFAY also developed and maintained a structured line of communication with the more than 100 tenant commands, activities and organizations. These rates were tracked in a database designed and maintained internally at CFAY's Environmental Division.



Waste Reduction Efforts

➤ **Waste Diversion**

The CFAY Qualified Recycling Program (QRP) diverted thousands of tons of recyclable material from landfills. Improvements in data tracking and expanded collection efforts contributed to a remarkable increase in solid waste diversion from 37.27% by the end of FY09 to 74.4% by the end of FY11, far exceeding the Executive Order (E.O.) 13514 mandate for 50% diversion by FY15. CFAY recycled/diverted 28,864.78 tons of waste per year, translating into 6.58 pounds per person per day (or 73.1. This includes a staggering 90.9% diversion rate for construction and demolition debris due in large part to CFAY contractors utilizing local Japanese recycling facilities for material that cannot be recycled through the installation QRP, due also in part to CFAY's aggressive efforts to track waste disposal and recycling efforts by scrutiny of the contracting process.

➤ **Recycling Efforts and Accomplishments**

QRP revenues increased from \$380,000 in FY10 to \$731,000 in FY11. Such funds were used in part to pay for a variety of projects related to energy/water conservation associated with over 800,000 kWh in energy conservation and over one million gallons of water conservations all totaling over \$500,000 in cost savings for CFAY. Over \$15,000

in QRP revenues were utilized for promoting energy conservation and environmental stewardship and more than \$80,000 in QRP funds were used to replace old QRP collection containers and purchase new containers to support the QRP's expansion efforts. A new direct sales contract is expected to generate a 74% over previous year's revenues.



➤ *Hazardous Waste Reduction*

CFAY has always placed a high level of importance on the need to reduce HW as well. With proactive steps taken to reduce hazardous waste by source reduction and increased recycling efforts, CFAY has continued generating smaller volumes of hazardous waste with annual tons disposed currently at 500 tons and 50 tons of hazardous waste now being recycled through the QRP.

Effective Use of Funds

➤ *Reduction of Funding Expenditures*

CFAY has realized over \$1.5 million in cost reductions associated with recycling efforts and persistence, identifying ways to reduce expenditures while at the same time implementing measures to enhance the environment, and an average of 30 natural resource volunteer activities per year including insect surveys, aquatics surveys, and on and off-base beautification activities that significantly reduced work related costs.

Community Relations

➤ *Environmental Awareness*



Whether relying on volunteers, civilian, military, contractor, or Japanese employees, the success of CFAY's environmental programs are positively correlated to the success of its public awareness program. Team members have gone to great lengths to initiate base-wide educational programs regarding the importance of environmental stewardship and responsibility. Team members brief all CFAY personnel, residents, and family members regarding CFAY's Environmental Department at weekly Area Orientation Briefings. Similarly, U.S. and Japanese personnel are briefed at work-related orientations. Additionally, CFAY submitted environmental articles on a regular basis to the installation newspaper as well as environmental advertisements to the Armed Forces Network (AFN) television station and to the installation movie theaters.

➤ *Community Involvement*

CFAY made involved all military and civilian personnel, base residents, and their Japanese neighbors in the development and implementation of community events. Not only does this effort maintain positive working relations with the host country, it also fully contributes to the success of the military mission. Highlighted environmental events involving the community





include cultural and historical resource tours, environmental/safety fairs, monument clean up/base beautification events, eelgrass planting and flounder (fish) releasing events, and the implementation of an Adopt-A-Monument program.

Environmental Planning and Analysis

➤ Promoting Long Term Operational Sustainability

Despite force deployment, rotation, and absence of its military and civilian personnel, CFAY's environmental program soundly adheres to the concept of program transferability. To execute initiatives aimed at transferability, CFAY and executive level personnel throughout the base assessed, reviewed, documented, and disseminated FY10 and FY11 strategic goals designed to support the military mission. The established checks and balances and metrics identified in CFAY's Strategic Plan, in addition to detailed documentation, data collection, and the maintenance of current plans, notes, and instructions by key personnel, enable CFAY to achieve its many goals independent of leadership transference.

➤ Integrating Environmental Analyses Into Planning and Decision Making

As a means to achieve and/or exceed all identified environmental strategic goals, CFAY worked both productively and efficiently in all areas related to environmental protection including pollution prevention, resource preservation, and planning and analysis efforts. Recently, to increase CFAY's efficient management of environmental resources, multiple team members collaborated with offices/personnel throughout CFAY's AOR (i.e., the Environmental Division, the Requirements Division, the Facility Engineering and Acquisitions Division [FEAD], Naval Facilities Engineering Command Far East [NAVFAC FE] planners, etc.) to produce a responsible approach to environmental protection. As a result, CFAY detailed environmental concerns for each work request. New processes were developed, which mandate the review of all work requests, negative decisions, and environmental protection plans to the environmental department for review and approval.