FY 2014 CHIEF OF NAVAL OPERATIONS (CNO) ENVIRONMENTAL AWARDS COMPETITION
ENVIRONMENTAL QUALITY – OVERSEAS INSTALLATION
AWARD ACHIEVEMENT PERIOD 1 OCTOBER 2012 – 30 SEPTEMBER 2014

INTRODUCTION

Installation Mission

U.S. Naval Air Facility (NAF) Atsugi, Japan has a unique mission providing facilities, services and material that support over 2,500 personnel and over 100 aircraft of Carrier Air Wing FIVE (CVW-5), Helicopter Maritime Strike Squadron FIVE-ONE (HSM-51), and 36 tenant commands, including Commander, Fleet Air Forward; Aircraft Intermediate Maintenance Detachment (AIMD); and Fleet Readiness Center Western Pacific (FRCWP). NAF Atsugi is the only U.S. Naval Air Facility that supports five aircraft types consisting of an entire carrier air wing that supports the Navy's only forward-deployed carrier battle group. The U.S. Navy operates NAF Atsugi jointly with the Japan Maritime Self Defense Force (JMSDF) and works daily to foster and promote relationships and friendship with the host nation while supporting the U.S. Navy's "Tip of the Sword," ensuring stability in the Western Pacific.

Population and Acreage

NAF Atsugi is host to over 10,000 military and civilian personnel and family members including 2,500 JMSDF personnel and 1,200 Japanese civilians. The joint use arrangement with JMSDF provides unique international military cooperation and makes it an enjoyable place to work and live. NAF Atsugi resides on a total of 1,250 acres of land. NAF Atsugi also provides support for the Auxiliary Landing Field Kisarazu, Iwo To, and inactive properties currently in caretaker status at Naval Support Facility (NSF) Kamiseya.

Setting

NAF Atsugi is located in the most highly developed, urbanized, and industrialized portion of Japan, within 25 miles from the foot of world famous Mount Fuji in the heart of the Kanto Plain and on the main island of Honshu. NAF Atsugi is also near the ancient capital city of Kamakura, the port of Yokohama, and the hot springs of Hakone. Tokyo, the largest city in the world, is located within 20 miles of NAF Atsugi. The neighboring cities in a 3-mile radius have a combined population of over 2 million people. U.S. Military installations Yokosuka, Yokota, and Camp Zama are all within a 20-mile radius, allowing NAF Atsugi to work together with nearby installations to share available resources and experience. The Tade River, a major water source for agricultural irrigation, enters NAF Atsugi at the north end where the installation's two million gallon fuel farm is located and exits at the south end where the installation's more than one million gallon per day wastewater treatment plant is located.

BACKGROUND

Program Summary

At NAF Atsugi, the Naval Facilities Engineering Command Far East (NAVFACFE) Public Works Department (PWD) Atsugi Environmental Division (EV) oversees implementation of all requirements of the Japan Environmental Governing Standards (JEGS). The JEGS are a combination of U.S. and Japanese environmental laws, installation rights, Status of Forces Agreements and other international agreements that are frequently updated by U.S. Forces, Japan (USFJ) and the Government of Japan (GOJ). The EV team manages the following programs: air emissions; wastewater; petroleum, oil and lubricants; underground storage tanks; drinking water; pesticides; natural and endangered species; environmental management system; radon; historic and cultural resources; asbestos; lead-based paint; hazardous waste; solid waste; PCBs; spill prevention and response planning; and hazardous waste removal and disposal.

Management Approach
The environmental programs at NAF Atsugi are proactively and comprehensively managed in accordance with written environmental management procedures and the EMS program. Environmental program managers manage their programs using the Compliance Tracker tool developed by NAF Atsugi EV (discussed in Accomplishments) to assess and document compliance status with 900 requirements and develop and track plans of actions and milestones with responsibilities and required levels of effort. NAF Atsugi's internal audit program includes EMS Manager completion of a detailed status review of each program's compliance status with the program manager on a quarterly basis. The Environmental Division Director reviews Compliance Tracker data with EV staff and reports real time compliance status to the senior installation management (monthly) and Regional Environmental Coordinator (quarterly). Mission risk and level of effort are the primary factors considered during senior leadership meetings to prioritize work. Weekly cross functional team meetings with supported commands and other PWD staff are held to focus attention and resolve specific issues prioritized by senior leadership to be of significant importance. The environmental impacts of planned or future projects are anticipated using an environmental checklist and innovate PEAR Review (discussed in Accomplishments). Impacts of the management tools and processes discussed in Accomplishments were created to ensure that these program improvements extend well beyond the next fiscal year and after frequent personnel turnover.

Stakeholder outreach is a critical component of NAF Atsugi's EMS and is regularly conducted at all management levels with all tenant commands. On at least a quarterly basis the environmental director meets with senior leadership from tenant commands during the XO's department head's meeting to communicate roles, responsibilities and expectations of all tenants, request commitment of resources to maintain compliance, maintain open lines of communication with senior leaders to alert of training opportunities and resolve or focus on work practice issues when necessary. At the middle management level, weekly focused cross-functional team meetings are held to focus on specific challenges associated with one program area. CFT meetings are focused, limited to one program area issue, and well attended due to results driven agendas. NAF Atsugi PWD also provides comprehensive environmental hazardous waste minimization, management and pollution prevention training to a wide range of squadrons and tenants at least quarterly.

In addition to military and civilian DOD installation personnel, other stakeholders including residents of military housing and other personnel, are required to attend Area Orientation Brief training where they are introduced to the Commanding Officer's environmental policy and informed of ways to reduce waste and emissions. For example, residents are informed during training that they can drop off and pick up free household hazardous materials, e.g., cleaning supplies and motor oil at the housing self-help office or the auto hobby shop. Residents are further educated of this waste saving opportunity during Earth Day and Energy Fair event activities, on the base information channel, and giant electronic marquee as residents enter the base.

Environmental Management System
NAF Atsugi's EMS is fully integrated into NAF Atsugi work practices and conforms to DoD and NAVFAC EMS policy and guidance and go beyond meeting requirements as discussed in Accomplishments below and Management Approach above. NAF Atsugi's significant aspects are waste, water, and energy. All currently meet or exceed reduction goals, ahead of the EMS goal of end of FY 2015 EMS reduction goals.

Community Involvement
In addition to several extremely popular events with open Japanese citizen access to the base, meaningful partnerships with various city Boards of Education as well as the Prefectural Board of Education affects the management of environmental aspects of the mission. Negotiations with the Kanagawa Prefectural Board of Education in 2013 resulted in an informal working agreement that outlines how consultation and coordination with the host nation regulatory agency will be conducted. This is a significant agreement, a first in Japan, and is similar to a Cooperative Agreement, Programmatic Agreement or use of a Program Alternative. Additional outstanding and unique community involvement work is discussed in Accomplishments.

EV Staffing/Gapped Positions Challenge
The single greatest challenge for NAF Atsugi's PWD in FY2014 was filling gapped positions required to manage its environmental programs. This year, an increased number of gapped positions was created by strict enforcement of the 5-year rule which required many USCS personnel to return to the U.S., creating gapped positions; the inherent staffing challenges for overseas installation.

When fully staffed, the EV team consists of six USCS environmental professionals, six Japanese Master Labor Contract employees and one active duty military member who collectively manage all of the aforementioned environmental programs and provide critical support to NAF Atsugi. However, the EV had an average vacancy rate of 33% over the past two years. In fact, it was without a division director for 3 months, a hazardous/solid waste and PCB program compliance manager for 4 months, a hazardous waste handler for 4 months and an environmental services branch head (responsible for hazardous waste pickup and disposal) for 5 months. Despite the staffing challenges, and in part because of the staffing challenges, NAF Atsugi PWD created and implemented outstanding environmental management innovations that have been shared with colleagues, the Regional Environmental Coordinator and HQ personnel for consideration for implementation Navy-wide.

Necessity is the Mother of Invention
Difficult situations inspire ingenious solutions. After completion of the internal audit, two environmental issues became apparent to the EV team. First, sufficient environmental reviews of construction/rehabilitation projects and services contracts were not being performed because adequate resources did not exist to completely evaluate projects without disrupting construction and service contract schedules. Second, environmental issues were addressed based on the "fire of the day" instead of a long range programmatic focus. Both issues were caused in large part to a lack of resources. Instead of lamenting the staffing shortfall, the EV team worked with the rest of the PWD Atsugi to efficiently use available resources as described in detail below in the accomplishments section.

OUTSTANDING ACCOMPLISHMENTS

Award Winning Innovation and Creativity
The NAF Atsugi PWD has improved efficiencies and effectiveness through creative and awarding-winning innovations that leverage technology to meet program requirements. Using the first-in-Navy lifecycle Preliminary Environmental Assessment Review (PEAR) process and tools created by NAF Atsugi PWD, in 2014 alone, more than 30,000 environmental requirements were considered for more than 50 construction/rehabilitation projects and service contracts.

First Navy Installation Worldwide to Perform Life Cycle Environmental Impact Assessment for all Construction and Renovation Projects

The most noteworthy of this year's accomplishments is creation and implementation of the PEAR process and tools which received an Innovation Award from NAVFAC FE's CO. The PEAR process fully integrates EMS into project reviews which improves environmental quality by considering all life cycle environmental impacts of proposed projects prior to completion of design documents. Particular focus is placed on significant environmental aspects which has effectively contributed to meeting or exceeding aspect goals. When faced with the challenge of revising the environmental review process, NAF Atsugi proactively modified management practices and procedures in anticipation of a future requirement - the revised 2015 ISO 14001. NAF Atsugi met the life cycle review requirement of the revised standard in FY2014 although the compliance period is from 2015 through 2025.

The challenge was to develop a technically strong, repeatable, efficient, thorough, and professional process that creates a deliverable to serve a number of purposes: meet the life cycle review requirement, consider all 600

environmental requirements, create of record of review and action recommended/taken, and communicate to design engineers, contracts personnel, and senior leadership required actions to address actual or anticipated non-compliance associated with a proposed action. NAF Atsugi PWD engineers met the challenge by creating a multi-tabbed, macro-driven spreadsheet based on a contractor's summary of applicable requirements that includes the following key features: a hot button aspect assessment to identify potentially impacted environmental program areas (excerpt provided above) , a hot button work phase selection to indicate the applicable project phases (preconstruction, construction, or O&M), contract mechanism dropdown menu to indicate which of 5 sets of specifications will be used to define work requirements, database of standard contract clauses to address specific environmental requirements, and macros that link the database to the contract type, impacted program areas and deliverable. The review process includes a review of each of the factors listed above and an assessment of more than 600 requirements in a repeatable, record-creating way, that defines roles and responsibilities of personnel required to address issues. Most importantly, this fully integrated EMS approach to a technically strong and comprehensive review process ensures compliance with requirements and reduces significant sources of waste and harmful discharges and emissions without negatively impact construction and contract schedules. Only a 2-day to 2-week turnaround time is required to complete the review, depending on the life cycle considerations and project complexity.

First Navy Installation in Far East to Maintain a Real Time Stoplight for All Environmental Programs

JEGS 2012 Chapter	Program Area	Requirement	Compliance		Non-compliance Fix Difficulty			Non compliance Resolution Lead	
			Indicator	(%)	Hard (%)	Medium (%)	Easy (%)	EV Division (%)	Others (e.g.,NAF, Tenant, PWD) (%)
4	Waste Water	JEGS 2012		91	50	25	25	100	0
		Stormwater Plan		92	0	0	100	100	0
		OPNAV 5090.1D		100					
11	Pesticides	OPNAV 5090.1D		100					
		Military Directives, Instructions, Standards, and Handbooks		100					
12	Historic and Cultural Resources	JEGS 2012		100					
		OPNAV 5090.1D		100					

Indicator	
100	100% compliance
60	60 >= % compliance < 100
60	<60% compliance
	Compliance assessment is incomplete
	Compliance assessment is 100% complete

The Compliance Tracker tool (stoplight excerpt provided above) won an Innovation Award from the NAVFAC FE CO as part of the PEAR tool creation award. Not only is the Compliance Tracker used as a comprehensive environmental program management tool as discussed in the Management Approach section above, but it also rolls up to a real-time stoplight summary of compliance with each of 50 applicable and individual requirements (including JEGS, OPNAV 5090.1D, and instructions) for each program area. With a quick glance, senior leadership can determine areas for program improvement and make informed risk-based decisions based on additional information provided on the stoplight and related to each noncompliance area including: percent known compliance status (i.e., has compliance with the requirement been assessed?), noncompliance fix difficulty (easy = minimal effort to resolve, medium = 1 to 5 days work required by program manager or practice owner, hard = significant amount of time required, e.g., contract action), and noncompliance resolution lead which integrates EMS requirements by identifying roles and responsibilities in a graphic visual manner. (Environmental program spreadsheet excerpt is provided below.)

C11. CHAPTER 11 PESTICIDES	Compliance Note	In Compli-ance (Y or N)	Internal or External Audit Finding Number and Description	Proof of Conformity/Compliance (e.g., Section number of management plan, etc.)	Location of Record to Demonstrate Conformity (e.g., file cabinet number, share drive path)
C11.3.4. All pesticide applicators will be included in a medical surveillance program to monitor the health and safety of persons occupationally exposed to pesticides.	Need to ask supervisor for MLC personnel information. There are strict MLC rules regarding medical information. Currently, all applicators are in compliance	Y	N/A	See shop supervisor to make request	Shops have this personnel data, but there are strict privacy rules regarding MLC employees. See shop supervisor in Bldg 150 and Golf Course, Bldg 1460
C11.3.5. All pesticide applicators will be provided with personal protective equipment appropriate for the work they perform and the types of pesticides to which they may be exposed.	All applicators are issued proper PPE based on Safety and the work they do. Finding was based on wrong type of glove the pest control shop was using. This has been corrected	Y	External - N61057-E-PM-MJ-04-2012	The shop PPE or applicator lockers (visual) verified by IPMC 29 Sep 2014	The shop PPE or applicator lockers Bldgs 150 and 1455

The Compliance Tracker has been shared with colleagues, FEC and HQ staff and is transferable and scalable; it could be added to compliance trackers of each installation in a FEC or throughout Navy or DOD to roll up an accurate and comprehensive real-time environmental posture. The level of effort for staff to maintain the Compliance Tracker is not negligible but certainly attainable given NAF Atsugi's staff's abilities to complete and maintain the Compliance Tracker despite its high percentage of 2013 and 2014 gapped positions.

Exemplary Community Outreach

Stakeholder outreach at NAF Atsugi is exemplary. Consultation with various city Boards of Education as well as the Prefectural Board of Education is frequent and comprehensive and has resulted in an agreement to that outlines how consultation and coordination with the host nation regulatory agency will be conducted. Numerous site visits by city and prefectural government personnel occurred and regular open communication was encouraged and successful. Although usually written entirely in English, the ICRMP is currently being translated into Japanese to assist in an easier exchange of information with the Host Nation representatives. This will be the first ICRMP in the Far East that has been entirely translated into the language of the Host Nation. This effort has been praised by the Board of Education in building bridges of communication between the US and Japan. It is suggested that other installations translate not only their ICRMPs, but also other environmental documents such as Integrated Natural Resource Management Plans too. Plans are underway for other environmental documents to be translated.

In Spring of 2014, an off-site petroleum spill to the Tade River brought contamination onto NAF Atsugi via the river. NAF Atsugi spill response personnel were alerted of the spill by mindful maintenance personnel and sprung into action to prevent the petroleum from leaving NAF Atsugi. Spill response personnel deployed boom and lowered a spill gate to capture oil on the surface of the water while allowing the clean river water to flow beneath the spill gate. City administrative personnel greatly appreciated the work and visited the installation to thank senior military personnel for thoughtful and responsible actions that prevented further City contamination.

Waste Reduction

NAF Atsugi implements processes through EMS that increase diversion of waste from landfills through innovative use of contracts and a neighboring installation's Qualified Recycling Program (QRP). A solid waste contract was negotiated by NAF Atsugi to provide cost incentives to the waste services contractor to segregate and recycle rather than dispose of waste. The cooperative region QRP leveraged regional contracts for pickups for mixed metals, used petroleum oil and lubricant (POL), wooden crates, and cardboard. Improvements in data management along with these changes in SW diversion and recycling allowed NAF Atsugi to report one of the highest total diversion rates in the Navy. NAF Atsugi's current C&D diversion rate is 97% and the current combined solid waste and C&D diversion rate is 58%. This is quite an accomplishment because, unlike other installations, NAF Atsugi does not have a QRP or a waste segregation facility located on the installation.

In FY13 and FY14, NAF Atsugi recycled 5,340.27 tons of material. The following amounts of each type of material were recycled during FY14 alone: POL (diesel fuel, JP-5, Hydraulic oil, Engine oil used oil (6,215 gallons), scrap metals (311), cardboard (200), wood (262 tons), and C&D (1,971 tons). The diversion of POL waste material from the landfill to a recycling facility not only had a positive environmental impact but also saved the government more than $10,000. Additionally, on average 40,000 gallons of off-spec JP-5 is diverted from an incinerator to the base boiler plant for steam production.

NRRF Totsuka and NSF Kamiseya Shutdown

Aggressive utilization of local military, local national shop personnel and the Qualified Recycle and Defense Reutilization and Marketing Office programs were critical to the successful environmental clean-up and preparations to return of property to GOJ at Navy Radio and Receiving Facility (NRRF) Totsuka and Naval Support Facility (NSF) Kamiseya. These efforts to identify, segregate and proactively pursue recycling options resulted in diverting over 1,000 tons of accumulated solid waste from the aging facilities while ensuring the facilities were ready for return to the GOJ. In addition, 1,500 lbs of hazardous waste was shipped off-site.

Drinking Water Meets EPA Standards as Fit for Human Consumption

NAF Atsugi saves $5.8M year by producing its own water that meets or exceeds EPA drinking water standards. Unlike most Navy installations in Japan, NAF Atsugi's potable water system is considered by the REC to be one of the most complex systems in Far East because it utilizes its own groundwater supply source, treatment plant, and distribution system. The primary reason NAF Atsugi processes its own groundwater instead of purchasing from the local community (Kanagawa Prefecture) is cost. Another important factor was the ability to directly control the water supply for the installation. NAF Atsugi achieved potable water intensity reduction of 25.7% from 2007 baseline.

The EV team successfully executed the following challenging tasks to maintain compliance of NAF Atsugi's drinking water program and ensure the system is fit for human consumption:

- Awarded more than $1.5M drinking water projects to ensure compliance of NAFA drinking water meet the new CNIC Overseas Drinking Water standards, i.e. DW Material Evaluation Survey, GWIDSW Survey, Integrated Potable Water Management Plan, Cross Connection and Backflow Prevention Survey and Unidirectional Flushing Plan.
- Awarded a $373K project for ground water survey of drinking water wells to determine whether NAFA will be required to comply with more stringent Surface Water Treatment Rules (SWTR) which could be very expensive. Managed the completion of the NAF Atsugi Integrated Drinking Water management plan for an efficient management of Atsugi's drinking water system.
- Participated in the CNIC funded project to identify gaps between CNICINST 5090.1 (applicable US National Primary Drinking Water Standards) and JEGS/OEBGD.
- Developed a project for NAF Atsugi's drinking water distribution system to effectively implement the unidirectional flushing program
- Ensured complete record keeping requirements by collaborating with UEM to complete the documentation required for the new requirements of the Overseas Drinking Water (ODW) Program to meet or exceed the U.S. Safe Drinking Water standards. Completed all taskers for submittal given a short deadline to complete.
- Continue to address all environmental drinking water deficiencies and all other additional requirements needed to improve Navy overseas installation drinking water systems. Submitted application for drinking water certificate to operate (CTO) through NAVFAC FE PW6 for submittal to the RWQB.
- Completed Level I Overseas Drinking Water System Operator training in preparation with the Operator in responsible charge (ORC) and assistant ORC certification process.
- Collaborated with the UEM to complete the NAFA deficiency and compliance matrix for CNIC tasker submittal given a short deadline to complete.

Hazardous Waste
NAF Atsugi's Environmental Services Branch has been very successful in reducing hazardous waste quantities and increasing opportunities for reuse or recycling.

In FY13 and FY14, NAF Atsugi PWD EV Division executed 30 hazardous waste shipments to DLA-Sagami. The FY14 total non-bulk hazardous waste shipped to DLA-Sagami consisted of 227 manifests and 141,884 pounds of hazardous waste, a 30% increase over FY13 (237 manifests and 108,882 pounds of hazardous waste), reducing a backlog of hazardous waste that had accumulated over 15 years. One example of NAF Atsugi's efforts to recycle material that would otherwise be disposed of as hazardous waste is the shipment of 14 cylinders of R-114 CFC & 6 gallons of 1,1,1 Trichlorofluoroethane CFC -113 solvent to DoD ODS Reserve for reuse. Another example is the off-site recycling of several transformers that were sampled and determined to be PCB free. As a result, 2,000 lbs of material was recycled through the QRP and NAF Atsugi was able to avoid disposal costs.

Cultural Resources
NAF Atsugi's cultural resource management program is noteworthy. Below is a list of accomplishments.

- ICRMP is current, approved, and was updated in 2013 and includes a comprehensive look at how cultural resources are identified and managed on U.S. controlled properties in foreign countries. The ICRMP includes and emic insider's view of identifying and determining what constitutes a cultural resource with significant coordination and input from the host nation's version of the State Historic Preservation Officer called Boards of Education.
- Negotiations with the Kanagawa Prefectural Board of Education in 2013 resulted in an informal working agreement that outlines how consultation and coordination with the host nation regulatory agency will be conducted. This is similar to a Cooperative Agreement, Programmatic Agreement or use of a Program Alternative.
- The PEAR process tied to EMS and inclusion of a digging permit process was instituted in 2013 that greatly improved the processing and comprehensiveness of the review of projects for impacts to cultural resources. A detailed tracking system was implemented so that all projects and work orders that were reviewed could be easily called up when information was needed and tracked. This allowed extremely timely run around time for project reviews with an average of a one day turn-around time. This, in turn, improved mission capability in that projects were quickly reviewed and could be on their way to implementation. The Cultural Resource Management Program is thoroughly orientated to mission so that no mission delays occurred because of cultural resources issues. The facilities for the Airwing were supported in a cost-effective and timely manner.
- Consultation with various city Boards of Education as well as the Prefectural Board of Education is frequent and comprehensive. Numerous site visits occur and regular open communication is encouraged. Although usually written entirely in English, the ICRMP is currently being translated into Japanese to assist in an easier exchange of information with the Host Nation representatives. This will be the first ICRMP in the Far East that has been entirely translated into the language of the Host Nation. This effort has been praised by the Board of Education in building bridges of communication between the US and Japan. It is suggested that other installations translate not only their ICRMPs, but also other environmental documents such as Integrated Natural Resource Management Plans too. Plans are underway for other environmental documents to be translated.
- Utilizing existing programs: All overseas employees, both civilian and military, and their dependents, must take an Inter-Cultural Relations class to orient themselves to living in a foreign country. The Cultural Resource Manager worked with the instructors of that class to include cultural resources awareness training. This saved time and effort by utilizing an existing program to disseminate cultural resources information for NAF Atsugi. This can easily be done at all other installations overseas with minimal effort.