

**SUMMARY PAGE**  
**MARINE CORPS AIR STATION IWAKUNI**

1. Award category:  
Pollution Prevention, Individual/Team
2. Name of nominated team:  
Mike Farkas  
Ryan Leming
3. Titles of Nominees:  
Mike Farkas: Pollution Prevention and Hazardous Waste Program manager  
Ryan Leming: Solid Waste Manager
4. Nominees' telephone numbers (commercial and DSN):  
Mike Farkas: COM 011-81-827-79-6963; DSN 315 253 6963  
Ryan Leming: COM 011-81-827-79-3039; DSN 315 253 3039
5. Nominees' E-mail addresses:  
Mike.Farkas@USMC.mil  
Ryan.Leming@USMC.mil
6. Nominating individual's name:  
Melanie Bengtson
7. Nominating individual's E-mail address:  
Melanie.Bengtson@USMC.mil
8. Nominating individual's telephone numbers (commercial and DSN):  
COM 011-81-827-79-6853; DSN 315 253 6853
9. Nominees' mailing address (appropriate for receipt of trophy):  
FACILITIES DEPT  
ATTN ENVIRONMENTAL DIV  
PSC 561 BOX 1871  
FPO AP 96310-0019
10. Nominating individual's mailing address:  
FACILITIES DEPT  
ATTN ENVIRONMENTAL DIV  
PSC 561 BOX 1871  
FPO AP 96310-0019

SUBMITTAL FOR  
**2008 SECRETARY OF NAVY – DEFENSE  
POLLUTION PREVENTION – INDIVIDUAL/TEAM  
MARINE CORPS AIR STATION IWAKUNI**



**INTRODUCTION:**

**a. Mission:** Marine Corps Air Station (MCAS) Iwakuni maintains and operates facilities and provides services and materials to support the station’s tenants and commands including about half of the First Marine Air Wing (1<sup>st</sup> MAW) headquartered on Okinawa. Elements of the 1<sup>st</sup> MAW at Iwakuni include five Unit Deployment Squadrons (UDP) of Marine Air Group-12 (MAG-12); the Marine Aviation Logistics Squadron-12 (MALS-12); the Marine Wing Support Squadron-171 (MWSS171); and the Marine Air Control Squadron-4 (MACS-4).

Other tenants include the Japan Maritime Self Defense Force 31<sup>st</sup> Fleet Air Wing; the U.S. Naval Hospital Branch Clinic; Combat Logistics Company (CLC)-36; 11<sup>th</sup> Dental Detachment; 3<sup>rd</sup> Dental Battalion; Department of Defense Schools (DODDS), Mathew Perry Schools; and the Department of Defense Reutilization and Marketing Office (DRMO).

**b. Geographical Setting:** MCAS Iwakuni is located at the southern end of Honshu, the main island of Japan, on the Nishiki River Delta. At present, the station has about 13,000 personnel, including Japanese national employees.

Starting in the 1600s the people of the area began reclaiming land from the Seto Sea, and over 350 years some 2000 acres were added. The largest part of the reclaimed land comprises the Kawashimo delta on which the air station is built. The Japanese government bought a large portion of the reclaimed land in 1938 to establish a naval air station. After World War II, the station was occupied by various military forces from the United States, Britain, Australia, and New Zealand.

The Marine Corps first took control of the installation as Marine Corps Air Facility Iwakuni in 1958. The station, which is just over 1,300 acres, was officially designated as MCAS Iwakuni in 1962. Its mission includes support of operations, maintenance and supply of tenant units and ships.

MCAS Iwakuni is now relocating a runway 1,000 meters offshore by reclaiming a half mile of the Seto Island Sea in a 10-year project. Barge loads of land reclamation fill material for the Iwakuni Runway Relocation Project were excavated from Atago Mountain in Iwakuni City and carried by three miles of conveyor to the barge for transport. Once finished, the station's size will increase to over 1,800 acres. The project is scheduled to be completed in 2010. Its main purpose is to reduce noise and safety concerns, strengthening the positive relationship between the station and local community.

## **BACKGROUND:**

Team members:

Mike Farkas: Pollution Prevention (P2)/Hazardous Waste Program Manager

Ryan Leming: Solid Waste and Qualified Recycling Program (QRP) Manager

Both work in the Environmental Division, Facilities Department, MCAS Iwakuni.

## **POSITION DESCRIPTION:**

Mr. Farkas manages the P2 and hazardous wastes programs at MCAS Iwakuni. He provides guidance and oversight to the hazmin center, the Consolidated Hazardous Materials Reutilization and Inventory Management Program (CHRIMP), and the hazardous waste consolidation program, which are operated by the Logistics Department. He works with installation and tenant organizations to identify and implement P2 opportunities.

Mr. Leming manages the solid waste operations including the station landfill. MCAS Iwakuni is the only installation in Japan operating a landfill. Mr. Leming also manages the QRP. He supervises five wage-grade employees, all of whom work for the Environmental Division. Mr. Leming develops the yearly budget for the QRP, identifies opportunities for recycling materials in the local community, prepares proposals and evaluates bids for recyclable materials, and provides guidance to the QRP Board.

## **AWARDS AND SERVICES:**

Both Mr. Farkas and Mr. Leming have received cash awards from the station for their outstanding work.

## **ACCOMPLISHMENTS:**

### **Reductions Achieved:**

#### Rag recycling

Mr. Farkas increased the availability for UDP squadrons and other station units to utilize the rag recycling contract. This program has significantly decreased the



amount of contaminated absorbent materials being processed out as hazardous waste.

#### Aerosol can puncturing

Aerosol cans are punctured at the conforming storage area and contents are segregated for disposal. Cost for disposal is minimized due to the fact that only the liquid is wasted out, and there is no cost for the pressurized can. Punctured cans are processed through the QRP as scrap steel.

#### Petroleum contaminated soil remediation (bio-cell)

POL spills that contaminate soil are cleaned up and the soil is transported to one of two “bio-cells” where it is mixed with grass clippings provided by the station’s lawn care service at no charge. Soils are rotated and monitored until total petroleum hydrocarbon (TPH) testing reveals levels are low enough to be used as cover material for the station landfill. Approximately 90 tons of contaminated soil was processed in FY08. To dispose of this POL contaminated soil through the waste contractor would have cost approximately \$95,000.

#### Antifreeze recycling

Antifreeze is recycled onsite through a local company, and the product meets all Mil-Spec requirements. In FY08 4.9 tons were recycled at a cost of \$4,635. The cost to dispose of that antifreeze as hazardous waste would have been \$9,179, resulting in a savings of \$4,544 plus the cost avoidance of buying new antifreeze.



#### Parts washer solvent recycling

Safety-Kleen Parts Washer Service maintains the quality of the solvent tanks through periodic maintenance and eliminates the hazardous waste stream of spent cleaning solvent. All solvent is recycled by a local contractor.

#### Household hazardous materials (hazmat) reuse

The HazMin Center accepts and maintains a household hazmat reuse locker where individuals can drop off excess household hazmat and pick up various other items at no cost. This reduces the amount of household hazmat being wasted out.

#### Rechargeable battery recycling

A variety of rechargeable batteries including nickel metal hydride, lithium ion, and nickel cadmium are now being recycled at no charge to the government through the Japan Battery Recycling Center. The cost for disposal of these batteries as hazardous waste would be \$1.36/lb.



## Recycling Program:

MCAS Iwakuni has a Qualified Recycling Program (QRP), which recycled 971 tons during FY08. This included 501 tons of paper products and 470 tons of scrap metal. Revenues have grown steadily during the last five years, culminating in total revenues of \$259,000 for FY08, nearly double that of FY07.

The QRP recycles the following paper products:

1. cardboard
2. colored paper, including single ply cardboard such as food containers
3. newspaper
4. white paper
5. shredded office paper



Scrap metals that are recycled include:

1. heavy and light steel
2. aluminum
3. copper wire
4. stainless steel
5. lead

Processed metals that are recycled include:

1. aluminum cans
2. steel cans

Lead acid batteries are also being recycled. Previously they were disposed of as hazardous waste, at a cost of \$1.36/lb. In FY08 18.9 tons were sold through the QRP for \$4,750.



The QRP has also begun to recycle soft plastics, including all warehouse plastic wrap. This constitutes a large waste stream but now all warehouses segregate it from the trash and bring it to the QRP for recycling.

Record revenues of \$259,000 were achieved during FY08, and cost savings (total solid waste management costs) of approximately \$62,000 were achieved by recycling.

In January 2007, DRMOs in Japan discontinued their normal operations of reimbursing QRPs for the sales of scrap materials. They began to combine their waste contract with their sales contract, using the sales to offset the costs associated with disposal. This forced Mr. Leming to look into other options to ensure the QRP would continue to reap the benefits of scrap metal sales aboard the installation. After stockpiling scrap metal for nine

months, he was able to obtain sales authority from the Trade Ministry of Japan and solicit a contract for bids. High prices for scrap metal due to high demand from China greatly contributed to the record revenues for FY08. While the present demand for recyclables has decreased, Mr. Leming has been successful in getting more than one contractor to bid on recyclables, thus increasing competition and prices.

An obvious benefit of the QRP has been to divert waste streams from the station's landfill. A combination of diversion and better management of the landfill has significantly increased the projected life of the landfill. In the mid-1990s it was predicted that landfill capacity would be fully utilized by 2000, necessitating closure. However, in FY09 there remains enough unutilized capacity for at least ten more years of operation.



Stations activities and tenants have benefited from the recycling program. The QRP purchased an industrial shredder for both office and private use. Offices can bring records and individuals their personal papers and use the shredder, saving many hours of effort spent using much smaller-scale shredders.

Other services offered by the QRP are twenty-four hour drop off locations, including at the mid-rise housing units, and recycled paper pick-ups.

The QRP frequently provides tours for station residents and students to educate them about recycling. Revenues from the QRP were used to fund construction of several bus shelters around the station. The QRP also sponsored the Single Marine Program for an Earth Day trash clean-up activity in the nearby Iwakuni community and hosted a barbeque afterward. Mr. Leming has also utilized the local Armed Forces Network (AFN) for public service announcements to educate station personnel about recycling.