



FY 2015 Secretary of Defense

Environmental Awards

Environmental Excellence in Weapon System Acquisition, Small Team
Fairchild Air Force Base

Introduction

Fairchild Air Force Base's (AFB) mission is to provide aerial refueling and airlift service. From senior leadership to the shop level, Fairchild AFB's environmental programs are a top priority. As stated by the Wing Vice Commander, it is Fairchild AFB's environmental policy to "investigate and evaluate new and innovative technologies and practices as appropriate, [and] establish and implement an effective pollution prevention (P2) program." Building on this, Fairchild AFB has become a leader in P2 and "green" acquisition, and the base Environmental Management System (EMS) Cross Functional Team (CFT) members are at the front of these programs. Led by Mr. Jeffrey Johnson, Mission Support Group Deputy Commander, and Lieutenant Colonel Donald Vandebussche, Maintenance Group Deputy Commander, the EMS CFT is comprised of Unit Environmental Coordinators (UECs) from all squadrons and associate units with support provided by the base Environmental Office. Thirty-one base organizations are actively represented by their designated UECs. Every UEC is a

seasoned employee familiar with their unit's mission and operations. Their operational knowledge is a huge asset as they work toward integrating environmental considerations into all unit processes. The EMS CFT reports directly to the base Environmental, Safety, and Occupational Health Council (ESOHC), chaired by the Wing Vice Commander. This strong representation from organizations throughout the base has been instrumental in incorporating Environmental, Safety, and Occupational Health (ESOH) considerations in all forms of acquisition.

Background

Located on over 4,300 acres in northeastern Washington, Fairchild AFB is responsible for providing aerial refueling, as well as rapid and reliable passenger and cargo airlift and aero-medical evacuations. The base is home to the 92nd Air Refueling Wing (92 ARW) and multiple associate units including the 141 ARW (Washington Air National Guard (ANG)) and the 336th Training Group (Air Force Survival,

Evasion, Resistance, and Escape (SERE) School). The 92 ARW and 141 ARW operate and maintain 34 KC-135 Stratotanker aircraft with the principal mission of air refueling. Another major tenant organization is the Armed Forces Reserve Center, which opened in 2010 and is comprised of approximately 850 Army Guard and Reserve personnel assigned to 18 units with various missions. The largest employer in eastern Washington State, Team Fairchild AFB encompasses more than 5,100 active-duty military, members of the ANG tenant unit members, and civilian employees.



Fairchild AFB KC-135s

Fairchild AFB operates and maintains 34 KC-135 aircraft with the principal mission of air refueling. Fairchild has developed base-level programs that incorporate ESOH considerations. These programs also contribute to the overall AF weapon system acquisition program.

Program Description

Fairchild AFB has been a leader within the Air Force, demonstrating how each base can develop and implement base-level programs that contribute to the overall Air Force weapon system acquisition program. The integration of ESOH considerations in every type of acquisition has taken persistent and continuous effort by members of the EMS CFT. This persistence has paid off and Fairchild AFB

personnel take seriously their role in meeting program goals as part of his or her mission.

Incorporating ESOH Risk Management into the Acquisition Process

Representatives from the base ESOH Offices are an integral part of the design and development of projects, services, and materials acquired at Fairchild AFB. These same offices are an integral part of the EMS CFT and the ESOHC, and have a genuine interest and understanding of how ESOH must be considered and incorporated in all acquisitions. Representatives from all ESOH Offices attend design multi-functional team, pre-performance, and pre-construction meetings as needed, to ensure ESOH is being considered in all acquisitions. These representatives also work closely with Contracting Office personnel to ensure compliance with Department of Defense Directive (DoDD) 5000.1, *Defense Acquisition System*, from the conceptual stage through implementation and execution.

A detailed environmental specification is incorporated into the base design standards to ensure all environmental requirements are being met on construction projects. These specifications ensure that green procurement is being incorporated in construction and encourages more environmentally preferable product substitutions when available. Similar language is incorporated in all service contracts. The result—thousands of pounds of recycled products have been incorporated in several construction contracts. Materials such as insulation, carpet, concrete, tile, reinforcing steel, and roofing materials have been used on the base.

Environmental specifications also require contactors to provide detailed information regarding the use of hazardous materials (HAZMAT) on base. This information is used to meet regulatory reporting requirements, ensure the safety and protect the health of Air Force personnel, and provide opportunities to reduce exposure risks.



New Wing Headquarters Building

The new base Wing Headquarters Facility was designed to achieve LEED Silver status. Energy and water saving concepts were installed to meet sustainability goals. Light harvesting, occupancy sensors, and low flow water fixtures were used throughout the building.

The base's Leadership in Energy and Environmental Design (LEED) program review is incorporated into the facility design process to ensure new facilities are built to maximize energy efficiency and sustainability. In 2013/14, two new high visibility buildings, the Wing Headquarters Facility and Air Force Survival School Support Facility, highlighted the base's commitment to sustainability by obtaining LEED Silver status. The LEED design included light harvesting; occupancy sensors; low flow water fixtures; efficient heating, ventilation, and air conditioning systems; and other sustainable practices.

Green Procurement Program (GPP) compliant items are clearly labeled at the base supply store, making it easy for customers to make "the right" choice. In 2013/14, over one million dollars of recycled and "green" supplies were purchased at the base store and website highlighting the outstanding partnership with store management. Green purchases associated with vehicle maintenance include the purchase of recapped tires, re-refined oil,

and reclaimed antifreeze. The use of lead tires weights has also been eliminated to further reduce ESOH risks.

ESOH Risk Management

The operation and maintenance of the KC-135's and support equipment receives constant vigilance from the ESOH Offices. The three offices work closely together with members of the EMS CFT to support the common goal of being protective of personnel and the environment. For example, the base recently eliminated the use of chlorinated solvents and identified a "greener" alternative that reduces risk to human health and the environment, but still meets performance specifications. This substitution also achieved reductions in greenhouse gases.

Potential ESOH risks associated with the maintenance and sustainment of assigned weapon systems are often associated with the use of HAZMAT by shop personnel. To ensure all ESOH protection measures are being considered, no HAZMAT can be purchased and used on the base until the ESOH team thoroughly evaluates the product. The Hazardous Material Management Process (HMMP) Team, chaired by the Deputy Base Civil Engineer and primarily composed of CFT UECs from specific key organizations (including Safety, Bioenvironmental, and Environmental) identifies personal protection, storage, and handling requirements associated with each product. Not until the analysis and recommendations are provided to the customer, can the product be acquired for use.

HAZMAT Management and Pollution Prevention (P2)

Fairchild AFB utilizes the web-based HAZMAT tracking system called the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS) to track all HAZMAT used on the base, including all associate units and contractors. Many members of the EMS CFT are responsible for their shop's

HAZMAT management and utilize EESOH-MIS to ensure all items are properly managed. Fairchild AFB also requires barcoding of all non-contractor HAZMAT items. EESOH-MIS generated barcodes are placed on all HAZMAT items, which track the items from the time it is placed in inventory, issued to the user, used, and finally returned to a central location for proper disposal. This true cradle-to-grave tracking helps the base control and minimize the amount of HAZMAT being purchased, stored, and used in shops. A big benefit of reducing HAZMAT use and/or using more environmentally preferable products is the associated reduction in hazardous waste generation and in turn reduced liabilities and risks to human health.

HAZMAT management is a critical component of ESOH programs at Air Force installations. Proper HAZMAT management minimizes risks for environmental impacts, promotes the safety of the workplace, and protects personnel by reducing and controlling exposure to hazardous chemicals. Going beyond Air Force Instruction (AFI) 32-7086, *Hazardous Material Management*, Fairchild AFB developed a base-specific HAZMAT Management Plan. Several key members of the EMS CFT reviewed and provided input into the development of the plan. The plan provides guidance to Fairchild AFB personnel on the proper procedures associated with the procurement, use and tracking of HAZMAT. The plan also outlines and explains the legal and policy drivers that govern the HAZMAT management, clearly defines base organization's roles and responsibilities, and includes the explanation and outline of procedures and policies to support Fairchild AFB's efforts to reduce associated risks and compliance with regulatory requirements. The plan also provides shop-specific requirements for preventing and preparing for the potential of small-scale release of HAZMAT stored specific to each shop. Implementing policies to prevent the release of HAZMAT while simultaneously preparing for potential spills, both small and large, is integral to the overall HAZMAT strategy at Fairchild AFB.

To minimize risk to personnel and the environment, EMS CFT members assist in the education of base personnel to help them understand and follow procedures for HAZMAT management, substitution, and minimization. In 2014, new X-ray equipment was purchased for the Non-Destructive Inspection shop, which eliminated the use of HAZMAT and hazardous waste generation and decreased occupational health exposure. The base also chose to extend service of parts washers from 16 to 20 weeks, which saved \$2,000 and reduced hazardous waste by 4000 pounds annually.



Hazardous Material Pharmacy

True cradle-to-grave HAZMAT management starts at the HAZMAT Pharmacy. The Pharmacy is the primary source of supply for base hazardous materials. Utilizing the AF HAZMAT database management system has allowed the base to minimize the HAZMAT stored on base and reduce the associated ESOH risks.

To manage one of base's largest waste streams effectively, the base fully implemented the use of jet fuel spill pad wringers in every shop, reducing the hazardous waste stream by 2,500 pounds and recovering/reusing fuel with a savings of \$1,200.

Another significant stride in P2 acquisition at Fairchild AFB over the past two years involves water and energy conservation efforts. Water conservation is a priority at Fairchild AFB. Years of planning culminated in a “Smart Irrigation” system project, which allows the base to irrigate 166 acres of improved grounds strategically with an estimated savings of 72 million gallons of water and \$22,000 every year. Fairchild AFB was the first facility in eastern Washington to dispense both biodiesel (B20) and E-85 alternative fuel, issuing over 110,000 gallons in 2013/14 and reducing fossil fuel use by over 15 percent. Utilizing these domestic fuels allows the installation to reduce their dependency on foreign sources of fuel and provides a positive impact on regional air quality.

P2 was also incorporated in building construction and demolition by requiring contractors to maximize diversion. In 2013/14, construction and demolition projects salvaged, recycled, or reused 34,000 tons of concrete and asphalt; 6,700 tons of soil; and 1200 tons metal and wood. This includes over 6,100 tons of material recycled from apron and taxiway projects.

Internal Execution and Documentation

P2 concepts are integrated throughout shops, offices, and living spaces across the base to minimize ESOH risks. As an additional duty, the EMS CFT members are responsible for implementing all aspects of the environmental management program within their organizations. EMS CFT members are also expected to work in cooperation with unit safety managers and facility managers. The Environmental Office has developed several plans in-house, which provide the guidance and requirements associated with the various environmental programs, including hazardous waste management, HAZMAT management, P2, and green procurement. These plans are updated annually, incorporating input from key EMS CFT members and the Safety and Bioenvironmental Offices.



Jet Fuel Pad Wringer

Personnel utilize one of the several jet fuel spill pad wringers on base. These wringers remove excess fuel from the pads. By purchasing and fully implementing the use of wringers, the base was successful in reducing one of its largest hazardous waste streams by 2,500 pounds.

External Coordination of ESOH Risks Management

Key members of the CFT work closely with federal, state, and local regulators. As a long-time leader in P2, Fairchild AFB was one of four organizations in the state of Washington to test and provide input on the functionality of the new P2 reporting software. The software has been fully functional for the past two years and organizations and industries across the state have benefited from this effort.

Training and awareness is the key to any successful ESOH program and Fairchild AFB has seized every opportunity and media source to promote P2 and green procurement. Fairchild AFB has fully embraced the new Air Force eDASH website as the “go to” information source for all Fairchild AFB environmental

programs. EMS CFT members receive green procurement, HAZMAT management, and hazardous waste management training during their required initial training, with refresher awareness provided routinely at the EMS CFT meetings.



Buying Green

In a partnership with the Envision National Industries for the Blind base supply store, shoppers can purchase green products. These products are clearly marked on the store shelves. In the past two years, over one million dollars of recycled and “green” supplies were purchased at the store and associated website.

All Contracting Squadron personnel have been trained on green procurement ensuring legal requirements are incorporated, implemented, and enforced in all new contracts and purchases. One-on-one training with design engineers and construction managers is paying off. These key team members understand the requirements associated with green acquisition and HAZMAT management and understand why the program is so important. Monthly

training is also provided to all new government purchase card (GPC) holders. 300 new GPC cardholders were trained on base-specific GPP and HAZMAT requirements, exceeding Air Force computer based training requirements. Resource managers, authorizing officials, and Quality Assurance Personnel also receive training on green procurement.

The ESOH message reaches thousands of Fairchild AFB team members and their families through the base Safety Day, Earth Day/Arbor Day celebrations, ESOHC meetings, and newcomer’s briefings. The Environmental and Safety Offices annually assess and inspect every facility across the base including industrial workplaces, associate units, offices, and services facilities. Approximately 125 locations are visited at least annually, with major industrial facilities visited monthly. ESOH managers are highly visible in base shops, with over 2,500 man-hours spent during shop visits in environmental alone. The Environmental Office distributed 6,000 environmental brochures base wide and provided ESOH briefings to 1,500 newcomers. Through plans, newspaper articles, brochures, briefings, meetings, computer-based training and informational booths, every base employee has been touched by the ESOH message.

Sharing the ESOH message through community outreach is a priority of Fairchild AFB. Skyfest 2014 was a huge success. The base Environmental Office booth was a great way to share the “green” word with the public at this 2-day event with over 210,000 spectators learning about conservation, green acquisition, and sustainability. By volunteering over 40 hours to base and city elementary schools with the environmental and conservation message, base personnel hope to inspire future generations to also make ESOH considerations a part of their day-to-day lives. At the base small business vendor’s fair, the Environmental Office booth was able to reach and educate hundreds of vendors and base personnel about green acquisition processes and requirements, and how they support the Air Force mission.



Fairchild AFB “Skyfest” Air Show

Approximately 210,000 community members attended the base Air Show in 2014. Attendees were given the opportunity to learn more about the base’s green purchasing program. Emphasizing the base’s commitment to “Fly Green, Buy Green,” the base Environmental Office set up an informational booth at the two-day event.

Summary of Accomplishments

Fairchild AFB has been a leader within the Air Force, demonstrating how each base can develop and implement base-level programs that contribute to the overall Air Force weapon system acquisition program. Using a myriad of programs, the EMS CFT has minimized ESOH risks across the base. This has been accomplished by utilizing a variety of environmental plans, using multiple venues for training, and implementing HAZMAT and hazardous waste minimization efforts.

As the result of EMS CFT efforts, Fairchild AFB has been successful in the area of P2 acquisition. Green purchasing and HAZMAT management is considered in all construction contracts, service contracts and commodity purchases, including acquisitions that support the base weapon system. All levels of the procurement process, from the designers and contract personnel to engineers and construction managers, contribute to green acquisition that supports and sustains a sound ESOH program.

Fairchild AFB has a well-established EMS. A comprehensive EMS Environmental Action Plan (EAP) for the P2 Program established

objectives and targets for improving both the GPP and HMMP program. The EMS CFT members have contributed greatly to the positive strides made in these environmental programs over the past two years. During the 2014 Unit Effectiveness Inspection, Fairchild AFB was in conformance with their EMS with zero major findings. Astoundingly, inspectors noted a 90+ percent EMS awareness with leadership setting standard for others.

Awards

Fairchild AFB has garnered numerous Air Force and Air Mobility Command (AMC) awards for a broad range of environmental programs including P2, environmental quality, sustainability, natural and cultural resources, energy conservation, and P2 acquisition. In the past two years, Fairchild AFB has received nine AMC awards and one Air Force award. In 2008, Fairchild AFB received the Secretary of Defense Award for Environmental Excellence in Weapon System Acquisition, and in 2011 received the Air Force award in the same category. Fairchild AFB is proud to be nominated by the Air Force for the Secretary of Defense Award for Environmental Excellence in Weapon Systems this year.