



# 2008 Secretary of Defense Environmental Awards

## Pollution Prevention – Team Columbus Air Force Base

The mission of Columbus Air Force Base is to defend the United States of America by developing the world's best warriors, leaders, and professional military pilots. With an intense respect for global and local communities, our environmentally proactive approach strives to protect human health and natural resources.

Commitment to excellence in environmental program management has not only resulted in an impressive record of regulatory compliance, but has also enhanced our credibility as a team partner in the community. Moreover, as motivated pioneers of green initiatives, our daily practices surpass previously accepted standards and demonstrate continued dedication to preventing pollution.

The Columbus AFB Pollution Prevention (P2) Team is comprised of the Solid Waste, Hazardous Waste, Hazardous Materials, and Stormwater Program Managers, who work together tirelessly to safeguard our most valuable natural resources.

The members of our community firmly believe that responsible use of such resources requires attention and effort at all levels.

### SIGNIFICANT ACCOMPLISHMENTS

These accomplishments demonstrate our commitment to continual improvement - beyond compliance - in pollution prevention at Columbus AFB.

- ◊ Columbus AFB P2 Manager appointed by Governor to Mississippi Recycling Task Force.
- ◊ Continued exemplary compliance record - 2008 marked the 16th consecutive year without a Notice of Violation.
- ◊ Innovative glass recycling program has reused 72,000 pounds of glass as a raw material in the manufacture of cement.
- ◊ Significant increase in utilization of alternative forms of energy including Biodiesel.
- ◊ In 2007 and 2008, educated over 800 local students during annual Earth Day celebrations.
- ◊ Recognized as recycling leaders in the State of Mississippi by diverting an astonishing 1.7M pounds of solid waste from landfill disposal.



## INTRODUCTION

Notably, the 14 Civil Engineer Squadron Natural Resources Element respectfully guards our natural infrastructure including water, soil, flora and fauna, and air resources. These proud professionals establish and implement procedures compliant with governing regulations and permits, while effectively prioritizing environmental campaigns at every level of operation. The Columbus AFB P2 team actively provides senior leadership with instrumental evaluations of potential environmental impacts and pollution prevention opportunities to ensure conscientious use of base and community resources.



According to the 14 FTW Commander's Environment, Safety and Occupational Health (ESOH) Policy Statement, each member of the Columbus AFB community **must actively seek opportunities for pollution prevention**, waste reduction, and safe work practices. In our systematic approach to continual improvement in ESOH performance, we enforce responsible use of water, energy, alternative fuels, and environmentally friendly products and services.

Columbus AFB personnel recognize that land, air, and/or water quality degradation compromises the 14 FTW flying mission. Therefore, we demonstrated commitment to preservation and enhancement of natural and workforce infrastructure elements by expanding our existing environmental management system to establish a functioning Environment, Safety, and Occupational Health Management System (ESOHMS) in early 2006.

Leveraging the incredible support of wing leadership, Columbus AFB developed the command's first ESOHMS cross-functional team, chaired by the Vice Wing Commander. This unique combination of operations, logistics, medical, civil engineering, communications, contracting, safety, and finance representatives developed, and aided in the implementation of, a conforming ESOHMS. This holistic management approach assesses mission impacts of current and future safety/occupational health risks. Additionally, one-hundred percent of all incoming active duty military and civilian personnel affiliated with Columbus AFB receive P2 awareness training, and all employee workstations are enabled to access more than 100 environmental awareness-level training courses.

## BACKGROUND

Columbus Air Force Base, located in northeast Mississippi, overlooks the Tennessee-Tombigbee Waterway in rural Lowndes County, and is home to the 14th Flying Training Wing (14 FTW) of the Air Force Air Education and Training Command (AETC).

In 1942, based on the critical need to increase the number of pilots during WWII, Columbus was selected as the site for an Army Air Corps Flying School. Following the war, the need for pilots declined dramatically and the base was closed until the start of the Korean War in 1951.



Currently, the 14 FTW flies approximately 250 sorties annually over 175, 500 cubic miles of unrestricted airspace, and is the busiest flying wing in the U.S. Air Force. The primary mission of the 14 FTW is Specialized Undergraduate Pilot Training in the T-1A "Jayhawk," T-6A "Texan," and the T-38C "Talon" aircraft.

In 2007, Columbus AFB trained 326 pilots (one-third of all new Air Force pilots) and 24 international student pilots from 20 allied countries. The 1,341 military and 2,017 civilian employees of Columbus AFB proudly deliver unmatched training, maintenance, and support to the Air Force and over 6,200 retired military in the Columbus area.

## We Couldn't Do It On Our Own

Community outreach and awareness are keys to the success of Columbus's environmental programs. The Columbus AFB Pollution Prevention team maintains positive working relationships with more than 45 active community partners including universities, government agencies, industries, and local municipalities. The partnering approach educates, involves, and empowers local citizens with regard to environmentally sound practices. Our initiatives truly embody the Wing's "BLAZE" motto: Building Leaders, Advancing Integrity, Service Before Self, and Excellence in All We Do.



Using the "BLAZE" motto, the P2 team developed the BLAZE ESOH card to remind employees, contractors, and visitors of our commitment to the environment.

CAF伯 proudly collaborates with its neighbors to strengthen recycling and waste reduction efforts in northeast Mississippi. In fact, recent initiatives demonstrate the noteworthy accomplishments of innovative partnerships between Columbus AFB and its surrounding businesses and schools.

Columbus AFB successfully negotiated with the Truck Driver Training Division of the East Mississippi

Community College to arrange for no-cost transfer of glass off-base. Between 2007 and 2008, approximately 72,000 pounds of pulverized glass were transferred to Holcim, Inc., a local cement manufacturing company. The glass, which is collected from industrial, administrative areas, and military housing areas, is beneficially reused as an aggregate in the cement production process. This joint venture has enjoyed continued success since its inception and confirms Columbus AFB's devotion to cost effective, community-oriented waste reduction and recycling. This program was recognized as an Air Force "Best Practice" during the 2007 Commander-In-Chief Installation Excellence visit.

Columbus AFB also leveraged the expertise of the Mississippi State University Masters of Business Administration Program to develop a Qualified Recycling Business Plan. This partnership saved the Air Force approximately \$50,000 and provided critical hands-on experience for MBA students. The business plan identified areas of improvement in manpower and operations which saved the Air Force an additional \$28,000. In 2007, the base reached out to the local U.S. Army Corps of Engineers office, and provided assistance in conducting a solid waste study. The Corps was able to reduce several waste streams and observe an approximate savings of \$20,000.



Despite the unpredictability of the recycled glass market, CAF伯 secured a long-term solution for beneficial reuse of our glass.

The Annual Columbus AFB Earth Day Celebration is energized by our belief that children are the future. The base goes to great lengths to encourage community youth involvement and spread environmental awareness through engaging activities.



*Continuing a 4-year tradition at the 2008 Earth Day events, a representative from the Mississippi Museum of Natural Sciences educated our 4<sup>th</sup> graders about the local alligator species. The wildly popular "Gator" attraction was just 1 of 15 environmental learning stations offered during the day-long event.*

The Columbus AFB P2 team also uses “America Recycles Day” to reach out and educate local children.



In 2007, approximately 800 children in area schools participated in a Recycled Holiday Ornament Contest. Cash prizes, provided by local sponsors, were awarded to the top three contestants and the

classroom with the highest participation received a pizza party. All ornaments were proudly displayed at the Columbus Lowndes Public Library.

## **Everyone Has a Role to Play in Minimizing Waste**

We recognize that every base employee has a unique perspective on sustaining the mission, and everyone can participate in the discussion of alternative approaches to daily activities. As examples of gathering input and putting the ideas into action, we have succeeded in removing five air emissions sources, thus eliminating 700 gallons of hazardous waste and saving 300 man hours in painting operations since 2007.

Recycling is crucial to Columbus AFB’s pollution prevention efforts, and in 2008, the base realized a 230,000-pound reduction in solid waste disposal by recycling used oil, fluorescent bulbs, tires, batteries, and the bead blast and cornstarch used in paint removal.

Various approaches are used to encourage base employees and residents to recycle including the “Recycler of the Month” and “Industrial Recycler of the Quarter” programs. Our efforts have been so successful that recycling rates in military family housing soared from 12% to over 84% by 2007. In recognition of this incredible effort, the P2 team used proceeds from the sale of recyclable materials to pay for base residents to use the pool for an entire month.

The Columbus AFB Recycling Center receives and processes cardboard, mixed paper, white paper, plastics, glass, aluminum and steel/bi-metal cans, scrap metal, toner cartridges, and electronics waste (e-waste). The Recycling Center staff also provides weekly desk-side pickup across the base.



*Columbus AFB supports participation in a recycling lifestyle by providing eye-catching banners and “kid-friendly” recycling bins in our park areas.*



The Columbus AFB P2 team also endorses the “green” way of life with our Recycling Logo/Mascot—Bully Bob the Frog! Bully Bob was developed to help raise awareness and interest in recycling. Today, Bully Bob is featured on all pollution prevention promotional items and informational pamphlets.

The Columbus AFB P2 team donated 500 recycled-content cloth bags to the base commissary on Earth Day 2008. Since this initiative, the commissary now offers cloth bags as an alternative to plastic and brown bags, empowering consumers to “go green!” Columbus also fosters a partnership with Meridian Naval Air Station commissary to recycle cardboard. The Meridian Naval Air Station is not equipped with a qualified recycling program and prior to this arrangement, they were discarding cardboard with municipal trash. This partnership nets Meridian approximately \$6,000 per year and saves additional money on landfill transportation and fees.

Through its many efforts, Columbus AFB has diverted from land disposal and recycled materials an astonishing 1.7M pounds of solid waste. As a result, we are a recognized recycling leader in the State of Mississippi and throughout the Air Force.

In keeping with our way of life, we proudly unveiled “One Store Solutions”, a revitalized retail outlet dedicated to providing environmentally safe products. In November 2007, the store, which we carefully renovated with recycled-content carpet and furniture and low/no-VOC paint, began offering approximately 180 environmentally preferable products including paper, binders, trash bags, and a variety of cleaning supplies. In

recognition of the need to provide a market for post-consumer content goods, Columbus AFB set an ambitious target of \$1.2M annually for acquisition of recycled products.



*Columbus AFB offers a variety of environmentally preferable products for purchase.*

Additionally, in 2008, the Columbus AFB P2 team collaborated with its grounds contractor to divert 671,000 lbs of green/wood waste from disposal to composting and mulch to realize a total savings of \$60,000. The finished compost is used in family housing and for base beautification and landscaping projects.



*We put our green waste to work instead of paying for off-site disposal.*



## **Energy Can Neither Be Created Nor Destroyed...**

Columbus AFB is steadfast in its objective to identify and eliminate wasteful practices and understands the need to explore alternative energy sources to support our mission. In light of our country's uncertain economic outlook, the P2 team remains especially dedicated to sustaining and promoting energy awareness by taking the following actions:

- Using smaller sized vehicles whenever feasible.
- Performing increasingly stringent review of vehicles used for Temporary Duty Assignments.
- Encouraging multiple person taxis.
- Ordering alternative fuel vehicles when available.
- Using Low Speed Vehicles to decrease fuel consumption.

These actions resulted in a 12,000 gallon reduction in fuel consumption. Columbus AFB also increased use of biodiesel (B20) by 84% as of 2007. Currently, Columbus AFB relies solely on B20 to fuel all diesel fleet vehicles. We have also seen a 26% decrease in JP-8 jet fuel with the transition from the T-37 to the T-6 airframe. Additional efforts to reduce aircraft fuel are currently being evaluated.

Facility energy consumption was also a P2 Team Focus for 2007 and 2008. Accordingly, Columbus AFB demolished six "energy hog" facilities to reduce energy use and avoid the unnecessary pollution associated with its production. The base also diverted from land disposal and recycled 93% (60M pounds) of the resulting demolition debris, including furniture and fixtures, which were donated to the Habitat for Humanity Re-Store.

## **Taking the Environment Under Our Wing**

Trees play an integral role in removing carbon dioxide (a greenhouse gas) from the atmosphere and converting it to oxygen. Columbus AFB understands the importance of seeking opportunities to conserve forested lands and actively encourages, plans, and participates in initiatives to sustain tree life in and around the Columbus AFB community.

In 2008, Columbus AFB celebrated Arbor Day in conjunction with Earth Day and included the Arbor Day Proclamation and tree planting events. Columbus also received its 6<sup>th</sup> Tree City Growth Award!



*Col Dave Gerber, 14 FTW Installation Commander accepts the 16<sup>th</sup> consecutive Tree City USA flag from Mr. Rick Olson, Mississippi Forestry Commission.*

The installation celebrated National Public Lands Day on October 20, 2007 with activities that included the unveiling of the Butterfly Gardens adjacent to the SAC Lake nature trails. Planting of the gardens was made possible through a Legacy Grant from the National Environmental Education Foundation, which provided the necessary funds to purchase plants and tools.



*Our green spaces attract visitors of all kinds.*

The Butterfly Gardens were designed, created and established solely through volunteer efforts, and our 45 volunteers worked hand in hand to plant 330 butterfly bushes and plants. The Butterfly Gardens will provide a place to observe, enjoy and study a diverse population of butterflies for years to come. As an added bonus, the garden's flowers generate seed that can be harvested and used by base gardeners.

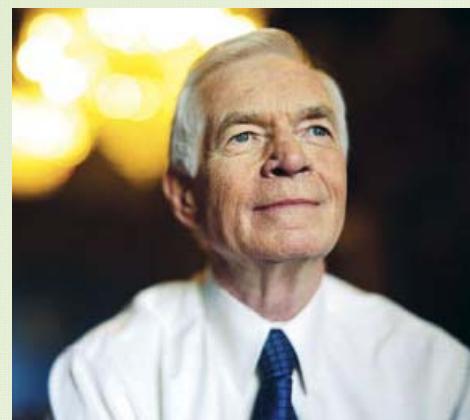
## **CONCLUSION:**

The Columbus AFB Pollution Prevention Team supports continually evolving and maturing environmental management programs which exceed compliance requirements, address all aspects of daily operations, and avoid harmful impacts. Our collaborative and inclusive approach merges a spirit of enthusiasm with a commendable willingness to take action. The personnel of Columbus AFB continue to espouse the philosophy of preventing pollution at the source, which is reflected in the efforts described herein. The P2 team works to ensure that both natural and workforce infrastructure impacts are afforded appropriate consideration early in the planning and

decision making process for all actions and activities at the base.

In recognition of its many efforts, Columbus AFB received the 2007 Air Force Environmental Flight Award, 2007 AF Thomas D. White Environmental Quality Award, and was recognized as a CINC Installation Excellence finalist.

Columbus AFB's P2 team is proud of its continued success in pollution prevention. The Civil Engineer Squadron and the entire "BLAZE Team" are dedicated to striking the critical balance between the success of the mission and stewardship of human and environmental resources. A true environmental leader, Columbus AFB strives to inspire its employees and members of the local community to reevaluate outdated practices, adopt new and improved techniques, and work together to protect and preserve our precious air, water, and land resources.



*"Columbus Air Force Base's excellence in environmental stewardship makes it a valued community partner and neighbor. Having been previously recognized for its environmental leadership, Columbus Air Force Base could have rested on its accomplishments. However, the base continues to focus on improving its environmental record by slashing hazardous material use and disposal, increasing recycling, and working with our universities on innovative solutions to be better stewards of our environment."*

-Thad Cochran, United States Senator



# 2008 Secretary of Defense Environmental Awards

## Pollution Prevention – Team Columbus Air Force Base



## Environmental Award Pollution Prevention — Team

---

Columbus Air Force Base

Nominee: 14 Civil Engineer Squadron Pollution Prevention Team

Nominating Individual: Peter A. Ridilla, Lt Col, USAF  
Commander, 14 Civil Engineer Squadron

Nominating Individual's E-mail Address: [peter.ridilla@columbus.af.mil](mailto:peter.ridilla@columbus.af.mil)

Nominating Individual's Phone Number: 662-434-7325

Shipping Address: 14 CES/CEAN  
555 Simler Blvd. Ste 114  
Columbus AFB, MS 39710