



Robins Air Force Base Environmental Advisory Board (EAB)

Fact Sheet



Volume 7, Issue 3, February 2013

The Robins AFB EAB

Recognizing the importance of public involvement in environmental matters, Robins Air Force Base (Robins AFB) has established the Environmental Advisory Board (EAB). The mission of the EAB is to encourage participation of surrounding communities in the Base's environmental programs and allow community members and other stakeholders to have meaningful dialog with Base officials. Specifically, the EAB serves to promote community awareness and obtain constructive community review, comment, and input on current and proposed actions associated with environmental programs at Robins AFB. The EAB supports the Air Force environmental mission of sustaining readiness, being a good neighbor, protecting human health and the environment for the Base and community, and making smart business decisions.

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February 2013 EAB Meeting

The winter EAB meeting was held Thursday, February 7, 2013, at Centerville City Hall in Centerville, Georgia. The topics briefed included: "SS-C508 (Building 169) Update on Progress" and "A Tool to Meet Air Force Energy Reduction Goals - Building 59 Energy Management System".

This *Fact Sheet* provides a summary of the information and topics discussed during the meeting.

The next meeting will be held on Thursday, May 2, 2013.

OPTIMIZED ENERGY MANAGEMENT SYSTEM BEING DEVELOPED FOR BUILDING 59

Building 59 is the Large Aircraft Corrosion Control Paint/Depaint Facility at the Base. The 225,000 square feet (sf) facility includes two 65,000 sf hanger bays, used to depaint and paint aircraft, a small-parts paint bay, common central facility systems, and a process equipment plant. The facility optimizes the paint removal and application process for the C-5, C-17, and other similar sized aircraft.



Building 59 is the Large Aircraft Corrosion Control Paint/Depaint Facility. The paint and depaint hangers can fully enclose the C-5 aircraft.

Due to the size of the building and very strict process and environmental control requirements (e.g., lighting, air flow, temperature, relative humidity, concentrations of particulates, etc.), the building has a large energy demand, consuming almost 10 percent of Base's annual energy usage. Although the current heating, ventilation, and air conditioning (HVAC) and lighting systems in Building 59 are operating as intended, recent audits of the facility have identified significant cost savings opportunities though system optimizations (e.g., reduction in electricity and gas usage).

To address these findings, the Base's Environmental and

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OPTIMIZED ENERGY MANAGEMENT SYSTEM BEING DEVELOPED FOR BUILDING 59 (CONT'D...)

Ergonomics Office has teamed with Geosyntec Consultants and the University of North Carolina at Charlotte to demonstrate and validate a new and innovative Energy Management System (EMS) at Building 59. **Dr. Brian Adair** of Geosyntec Consultants gave an overview of the project at the EAB meeting.

The funding for the project will be provided by the Department of Defense (DoD) through the Environmental Security Technology Certification Program (ESTCP). The ESTCP program promotes the transfer of innovative technologies from proof of concept to field or production use.

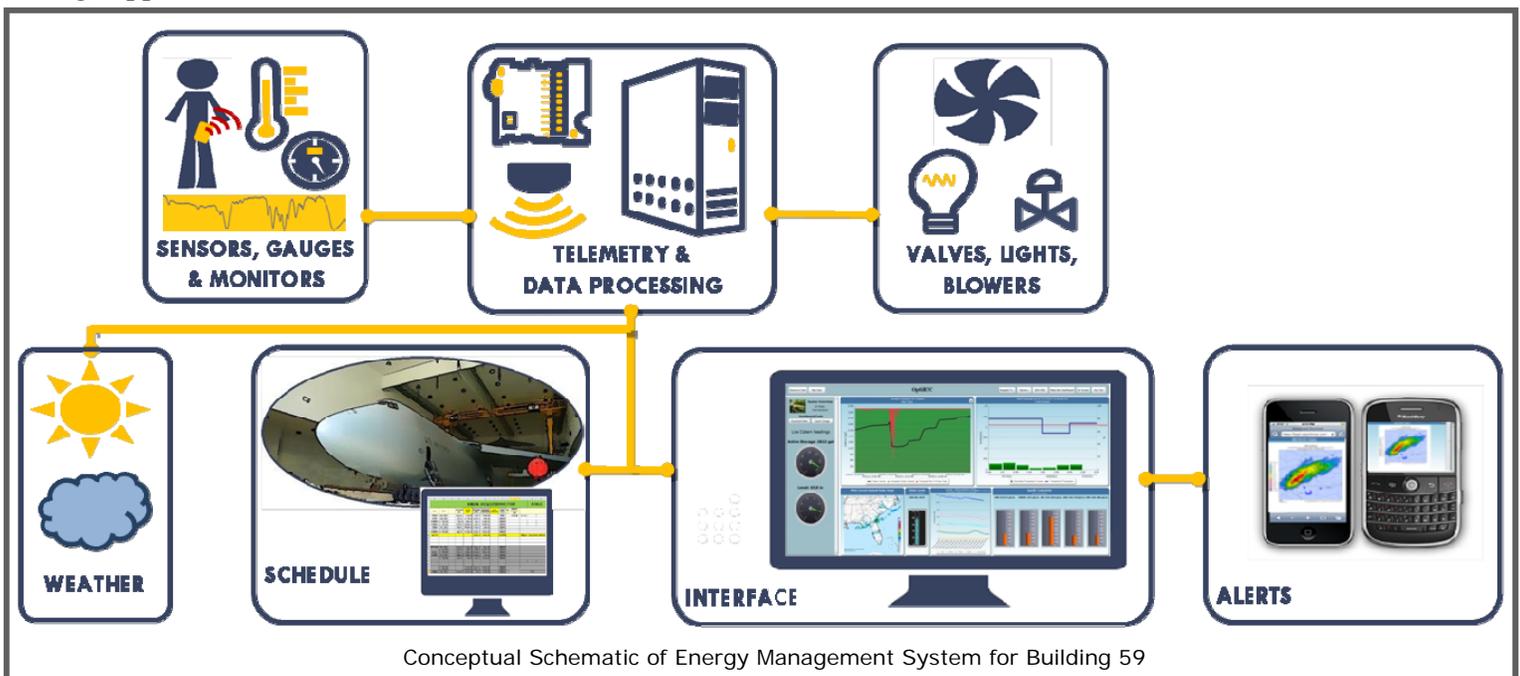
The overall objective of this project is to capture significant cost and energy savings using the EMS. The EMS will be based on Geosyntec's recently developed Real Time Control and Monitoring Information package (OptiRTC™), which will be installed in the challenging work environment of Building 59.

The additional benefits of the EMS will include improved work environment, personnel health and safety, work flow, and product quality while meeting environmental regulations. The EMS will also increase the ability of building personnel and other stakeholders to identify, prioritize, and effectively communicate needed maintenance, system upgrades, and other energy savings opportunities.

In general, the EMS will be based on augmenting (rather than replacing) the existing controls system with a management approach that processes, manages, analyzes, and effectively communicates disparate data streams with customized, intuitive graphics and familiar computer interfaces, distinguishing the EMS from conventional energy management approaches that may not always address the hurdles of interacting with complex data and analyses.

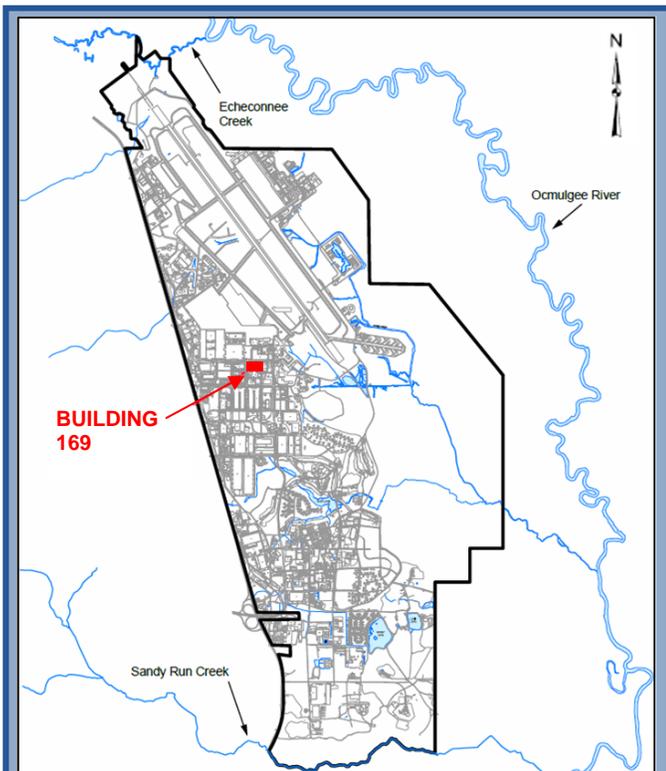
The EMS will also employ non-intrusive load monitors to improve equipment operations. As in the case of many industrial facilities, 20 percent or more of Building 59 energy is likely wasted when equipment is improperly operated or poorly maintained (e.g., clogged filters). Such waste often goes unnoticed since the system performs the desired functions, albeit at greater cost.

Augmentation of the existing controls systems will allow the EMS to be readily translated to other DoD facilities. Energy savings of just 10 percent (already identified by recent Building 59 audits as potential savings) represent annual savings of about \$450,000 per year at this demonstration site alone. These cost savings represents millions of dollars when similar savings are scaled to DoD facilities worldwide.



PERFORMANCE-BASED REMEDIATION UPDATE FOR BUILDING 169

Building 169 is an aircraft parts repair facility located in the Greater Base Industrial Area. Soil contamination at the site was identified beneath the floor slab of the building in 2009. The remedy at the site currently consists of Institutional Controls to prevent exposure, including signage and Land Use Controls. The Excavation Plan for the Base Industrial Area has also been updated to include Building 169.



Building 169 is located in the northern portion of the Base in the Greater Base Industrial Area.

At the February EAB meeting, **Mr. Dean Williamson** of CH2M Hill briefed on the recent activities at the site. At the direction of the Georgia Environmental Protection Division (GA EPD), a focused Recovery Act (RCRA) Facility Investigation (RFI) has been initiated.

The goals of the RFI are to define the nature and extent of soil contamination around the perimeter of Building 169; complete a human health risk assessment and ecological exposure assessment for the contamination found around the perimeter of

the building; and develop a path forward corrective action strategy, as necessary.



Example photograph of a DPT rig similar to the rig used for the soil borings at Building 169.

As part of the field activities, 24 borings were drilled at the site in September and October 2012 using Direct Push Technology (DPT). Up to three soil samples were collected from each location. The samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), RCRA metals, hexavalent chromium, polychlorinated biphenyls (PCBs), and total organic carbon. The sample results were screened against the Regional Screening Levels (RSLs) and Soil Screening Levels (SSLs) in accordance with the United States Environmental Protection Agency (US EPA) and GA EPD protocols. Based on the evaluation of the data, six VOCs, 11 SVOCs, and hexavalent chromium were detected above the screening criteria.

The results of the field investigation activities were summarized in the RFI Report, which included background information for the site, a summary of findings, the conceptual site model, the baseline risk assessment, conclusions, and recommendations for path forward activities. The report was submitted to the GA EPD in February 2013.

ENVIRONMENTAL AWARDS

During the February EAB meeting, Mr. Alexander Stokes announced that the Robins AFB Environmental Management Branch recently won four General Thomas D. White Awards from the Air Force Material Command. These included the National Environmental Policy Act, Cultural Resources, Natural Resources, and Environmental Quality Awards. The Base also won the Environmental Quality Award at the Air Force level and is now competing for recognition as the best in the DoD.

Receipt of these multiple awards demonstrates the Base's continued efforts to strive for excellence in its environmental programs. These successes would not be possible without the continued support of the local community.

NEW EAB MEMBER ELECTED

EAB members unanimously voted to appoint Mr. Penrose Wolf to the EAB at the February meeting. Mr. Wolf is a retired lawyer, who practiced both corporately and privately for 40 years in Hartford, Connecticut. He currently does Pro Bono work through the Georgia Legal Services Program.

Mr. Wolf maintains an interest in and close contact with the City of Perry government. He is currently Chairman of the Board of Commissioners of The Housing Authority of the City of Perry.

He has been living in Perry, Georgia for the past five years with his wife, Sallyann, and notes that they are now well embedded in the middle Georgia lifestyle.

Acronyms

AFB	Air Force Base
DoD	Department of Defense
DPT	Direct Push Technology
EAB	Environmental Advisory Board
EMS	Energy Management System
ESTCP	Environmental Security Technology Certification Program
GA EPD	Georgia Environmental Protection Division
HVAC	Heating, Ventilation, and Air Conditioning
PCB	polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RSL	Regional Screening Level
sf	square foot
SVOC	semi-volatile organic compound
VOC	volatile organic compound
US EPA	United States Environmental Protection Agency

For more information regarding the EAB, please contact **Ms. Charline Logue, Robins AFB EAB Manager**, at (478) 327-9268 or visit <http://www.robinseab.org>

Environmental Advisory Board Members

Mr. Alexander Stokes, Robins AFB Installation Co-Chair	Dr. Dan Callahan, Warner Robins Community Member	Ms. Debra Jones, Warner Robins Community Member	Mr. Don Thompson, Macon Community Member
Dr. Linda Smyth, Macon Community Co-Chair	Mr. James Harden, Warner Robins Community Member	Mr. Mike Maffeo, Macon Community Member	
Ms. Lila Llamas, US EPA Region 4 Hazardous Waste Division	Mr. John Harley, Centerville Community Member	Dr. Brian E. Rood, Macon Community Member	
Ms. Mary Brown, GA EPD Hazardous Waste Management	Mr. Stephen Johnson, Macon Community Member	Dr. Joseph Swartwout, Fort Valley Community Member	