# **Community Relations Plan**

## Robins Air Force Base, Georgia

prepared for



## AFCEC/CZO Robins Installation Support Team

submitted by

Geosyntec Consultants, Inc. Warner Robins, Georgia Contract No. FA8501-10-D-0001, D.O. 0005

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### LIST OF ACRONYMS AND OFFICE SYMBOLS

ABW	Air Base Wing
ACW	Air Control Wing
AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFMC	Air Force Materiel Command
ALC	Air Logistics Center
AOC	Area of Concern
ARB	Air Reserve Base
ATSDR	Agency for Toxic Substances and Disease Registry
BCE	Before the Common Era
CAP	Corrective Action Plan
CEG	Civil Engineer Group
CENTER	Warner Robins Air Logistics Center
CERCLA	Comprehensive Environmental Response, Compensation, and Liability
	Act
CRP	Community Relations Plan
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study
DoD	Department of Defense
EAB	Environmental Advisory Board
ERP	Environmental Restoration Program
ft <sup>2</sup>	Square feet
FY	Fiscal Year
ga epd	Georgia Environmental Protection Division
HRS	Hazard Ranking System
HWMU	Hazardous Waste Management Unit
IRA	Interim Remedial Action
IROD/RAs	Interim Record of Decision/Removal Actions
JSTARS	Joint Surveillance Target Attack Radar System
LF04	Landfill No. 4
LTM	Long-term Monitoring
MDS/SGPB	Bioenvironmental Engineering Services
MXW	Maintenance Wing
N/A	Not Applicable
NFA	No Further Action
NFRAP	No Further Response Action Planned
NPL	National Priorities List
O&M	Operations and Maintenance
OU	Operable Unit
PA	Public Affairs
PA/SI	Preliminary Assessment/Site Investigation



PBR	Performance-Based Remediation
PCE	Perchloroethene, also known as Perchloroethylene
PP/ROD	Proposed Plan/Record of Decision
RA	Remedial Action
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA/PSA	RCRA Facility Assessment/Potential Source Assessment
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy in Place
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SWMU	Solid Waste Management Unit
TCE	Trichloroethene, also known as Trichloroethylene
U.S.	United States
USAF	United States Air Force
US EPA	United States Environmental Protection Agency
WP14	Sludge Lagoon and Waste Pit 14
WR-ALC	Warner Robins Air Logistics Complex



## Section 1 Introduction

Recognizing the importance of public involvement in cleanup programs, this Community Relations Plan (CRP) has been developed for Robins Air Force Base (Robins AFB) to provide information on the two-way communication mechanisms established between the base and the local communities. The plan documents the level of awareness and interest concerning the cleanup process.

Environmental cleanup activities at Robins AFB are part of a larger Department of Defense (DoD) environmental program entitled the Environmental Restoration

The purpose of this CRP is to continue sharing knowledge and encouraging community participation related to the cleanup of environmental contamination at Robins Air Force Base. This CRP reflects the specific interests, priorities, and opinions of individuals from the local communities.

Program (ERP). ERP activities are primarily governed by two federal laws, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the Resource Conservation and Recovery Act (RCRA). CERCLA establishes the legal requirements for identifying, investigating, and cleaning up inactive hazardous waste sites. RCRA requires corrective action for releases of hazardous waste or constituents from past or present practices and operations that pose a threat to human health and the environment from any Solid Waste Management Unit (SWMU) at a storage, treatment, or disposal facility with a RCRA permit. Information concerning the ERP process and the specific cleanup activities at Robins AFB is provided in Section 2.0. Section 2.0 also describes the location, history, and mission of Robins AFB.



Annual CRP updates keep the community informed as the program progresses.

This CRP reflects the specific interests, priorities, and opinions of individuals from the local communities. Information was gathered from interviews conducted every two years from 1996 to 2012 throughout local cities including Warner Robins, Centerville, Perry, Byron, Fort Valley, and Macon. Interviewees have included representatives of local municipalities, the business community, as well as members of the Robins AFB Restoration Advisory Board (RAB), rechartered in June 2006 as the Environmental Advisory Board (EAB). These interviews were conducted by a representative of the Robins AFB and an independent consultant. A summary of the results of these interviews and profiles of the various communities are presented in Section 3.0. A summary of the EAB and its relationship to the local communities is also provided in Section 3.0.

Section 4.0 identifies the community relations goals and objectives and associated activities that have taken place over the last several years and future objectives to improve two-way communication between Robins AFB and the various area communities. The structure and function of the EAB is described in Section 4.0.

Following these sections, the remainder of this document consists of the following appendices that contain supporting information:

#### Appendix A Community Relations Contacts

Lists names, addresses, and phone numbers of the central point of contact for the public, key Robins AFB representatives, federal and state agencies, local elected officials, and EAB membership.



#### Appendix B Public Information Locations

Lists the locations of the information repository and the administrative record that contains documents related to the Robins AFB ERP and lists information on recommended locations for public meetings.

#### Appendix C EAB Fact Sheets



EAB Fact Sheets are produced following each quarterly EAB meeting and present technical information briefed in the meeting in an easily readable format supplemented with appropriate graphics. Presents EAB Fact Sheets produced during 2013 following the EAB meetings held in February, May, and August.

The public's point of contact for questions is the Robins AFB Public Affairs (PA) Office. The contact information for the PA office is provided below:

Public Affairs Office 78 ABW/PA 620 Ninth Street, Suite 230 Robins AFB, Georgia 31098

Phone: (478) 926-2137



## Section 2 Description of Robins AFB and the ERP

The purposes of this section are to describe the location, history, and mission of Robins AFB and to review the nature and extent of environmental issues at the base, including the objectives of Robins AFB's ERP activities and specific details on environmental sites.

Robins AFB is located in the geographic center of Georgia.

### 2.1 BASE DESCRIPTION

#### 2.1.1 Location

Robins AFB is located in the geographic center of Georgia, adjacent to the city of Warner Robins, within Houston County (see Figure 2-1). The base is 16 miles south of Macon and 100 miles south of Atlanta. Interstate I-75, United States (U.S.) Highways 41 and 341, and state highways 247 and 11 are the primary transportation links to the neighboring communities of Warner Robins and Centerville to the west, Perry to the south, Fort Valley to the southwest, Byron to the northwest, and Macon to the north. The Ocmulgee River borders the base on the east. The base covers approximately 7,000 acres of upper coastal plain, of which 2,200 acres are jurisdictional wetlands. The base also owns two parcels of land in Huber, Georgia (11 acres) and Jeffersonville, Georgia (0.8 acres).

The base consists of 3.8 million square feet ( $ft^2$ ) of maintenance shops, 1.7 million  $ft^2$  of administrative space, and 3.5 million  $ft^2$  of storage space. The base's runway is the second largest in Georgia, measuring 12,000 feet long by 300 feet wide, with two 1,000-foot overruns.

#### 2.1.2 History

Robins AFB traces its history to June 1941, when Macon city fathers and civic leaders, with the help of U.S. Representative Carl Vinson, influenced the U.S. War Department to construct an Army Air Corps supply and maintenance depot in Houston County. The site was adjacent to the small town of Wellston, which at that time had a population of 47 families. The defense buildup preceding World War II was under way, and the Middle Georgia area was chosen primarily because it had land for an airfield, an abundance of pure water from artesian wells, and an abundant labor pool. These were important points to consider in 1941 when emphasis was on speed of construction.



First Headquarters Building at Robins AFB, 1942

Ground was broken officially on September 1, 1941, by the first depot commander, Colonel Charles E. "Steve" Thomas, and leading members of the Macon and Middle Georgia business and political communities. Officially dedicated on April 26, 1943, Robins Air Force Base, originally known as Robins Field (named after Brigadier General Augustine Warner Robins), played a key role in winning World War II. Robins AFB has hosted numerous units and organizations and even a major command. The primary function of the base has always been to act as the home of an Army Air Corps, then Air Force, Depot. Originally known as the Georgia Air Depot, it was renamed several times, as follows: the Southeast Air Depot, Wellston Air Depot, Wellston Army Air Depot, Warner Robins Army Air Depot, Warner Robins Air Service Command, and Warner Robins Air Technical Air Service Command. At the end of World War II, as its function changed and satellite bases were closed, the name changed several additional times. In 1946, the Depot became the Warner Robins Air Materiel Area, and the installation was renamed to Robins AFB in 1948 after the Air Force became a separate service. The Depot designation changed again



in April 1974 when its new world-wide responsibilities led it to be renamed the Warner Robins Air Logistics Center (Center).

The decades following World War II were a time of challenge and change for the base. After World War II, the employee population was reduced. During the Korean War, Robins AFB workers swiftly and heroically retooled and fitted hundreds of mothballed B-29s, which played a key role in saving the Republic of South Korea from Communist aggression. In the 1960s and 1970s, Robins AFB played an important part in the Southeast Asia "Pipeline," which supplied vital materiel to U.S. troops fighting in Vietnam. The changing requirements of a "Jet Age" Air Force added a new dimension to the logistics challenge and led to the development of Robins AFB as an avionics center and a huge, sprawling complex of diverse missions supporting the United States Air Force (USAF) worldwide. That support was called upon once again during operations Desert Shield and Desert Storm in the Middle East. C-141 aircraft managed by the Center were the backbone of the airlift to Saudi Arabia. C-130s, also managed by the Center, provided valuable transport capabilities for the allied forces. Workers surged parts needed to keep aircraft flying and accelerated the maintenance and repair of aircraft vital to the war effort. Another Robins AFB responsibility, the F-15 Eagle, proved its superiority during repeated air strikes over the Persian Gulf.

To better achieve an operational sustainment process, Air Force Materiel Command (AFMC) leadership decided in 2004 to reorganize the entire Command along more military lines. In this process, the Air Logistic Centers were divided into new unit organizations that changed directorates into wings, divisions into groups, and branches into squadrons. From 2004 to 2012, the Warner Robins Air Logistics Center had two Wings [the 78th Air Base Wing (78ABW) and the 402d Maintenance Wing (402MXW)] and the Aerospace Sustainment Directorate. In 2012, AFMC leadership again reorganized the Command, and the Warner Robins Air Logistics Center was redesignated as the Warner Robins Air Logistics Complex (WR-ALC), and it became part of the Air Force Sustainment Center based at Tinker AFB in Oklahoma.

The history at Robins AFB also included past waste disposal practices that were standard for the times. These practices sometimes led to unintended environmental contamination. Though these practices have long since been discontinued, the ERP efforts today are targeted at total cleanup from this past contamination. Table 2-1 references the history of base operations at Robins AFB.

#### 2.1.3 Military Mission

The WR-ALC has worldwide management and engineering responsibility for the repair, modification, and overhaul of the F-15 Eagle, C-130 Hercules, C-5 Galaxy, U-2 Dragon Lady, Special Operations aircraft and helicopters, and analytical condition inspection and system support management for the C-17 Globemaster III.

Among its missions, the WR-ALC determines the spare parts, supplies, and equipment needed to support the weapon systems and commodities for which it has management responsibility. The WR-ALC budgets for, purchases, distributes, maintains, and repairs these weapon systems and commodities. The WR-ALC is logistics manager for the F-15 Eagle, C-130 Hercules cargo aircraft, and C-5 Galaxy aircraft; the U-2 Dragon Lady; 11 cargo and utility aircraft; 4 helicopters; 3 remotely piloted vehicles; and missiles. The WR-ALC manages more than 200,000 items to support these systems. Robins AFB is also the exclusive technology repair center for airborne electronics, gyros, and life support systems for the USAF; it houses the largest repair facility in the world. The WR-ALC has various shops (plating, machining, metal bonding, etc.), which support major workload activities.

During operations Desert Shield and Desert Storm in the Middle East, aircraft managed by the WR-ALC were the backbone of the airlift to Saudi Arabia.



The changing requirements of a "Jet Age" Air Force added a new dimension to the logistics challenge and led to the development of Robins AFB as an avionics center and a huge, sprawling complex of diverse missions supporting the USAF worldwide.



Robins AFB is the main U.S. operating base for the E-8 Joint Surveillance Target Attack Radar System (J-STARS) aircraft, which gained national attention during the Persian Gulf War for its ability to detect, locate, and track stationary and slowmoving ground targets. During 1996, as part of this mission, the base became home to more than 2,400 additional personnel. An estimated \$129 million in military construction has been related to the J-STARS program.

In 1996, the 116th Fighter Wing, formerly located at Dobbins Air Reserve Base (ARB) in Georgia, converted from F-15A/B aircraft to the B-1 Bomber, became the 116th Bomb Wing, and relocated to Robins AFB. This transition involved a construction program of \$110 million and more than 1,100 new personnel. The 116th became the operational unit for the E-8C JSTARS in 2002 when the B-1 bombers were relocated from Robins AFB. The 116th Bomb Wing and the 93rd Air Control Wing (ACW) merged to become the 116th ACW on September 30, 2001. On September 30, 2011, the 116th ACW, which consisted of both guard and active duty personnel, de-blended and its sister unit, the 461st ACW was formed. The two wings are known today as Team JSTARS In 2010, the Marine Corps Light Attack Helicopter Squadron 773 (HMLA-773), formerly located at Naval Air Station Atlanta in Georgia, relocated to Robins AFB. Robins AFB provides support to worldwide customers for over 300 airborne electronics systems. This support involves integrated program management, engineering, and software services, as well as hardware repair for radar, infrared, communications, laser, navigation, and electro-optics systems.

Concurrently, Robins AFB's mission includes support for its more than 37 associate units. Major associate units include:

- Headquarters Air Force Reserve Command;
- Warner Robins Air Logistics Complex;
- 116th Air Control Wing;
- 461st Air Control Wing;
- 5th Combat Communications Group
- Defense Logistics Agency
- Air Force Sustainment Center Operating Locations
- Air Force Life Cycle Management Center Divisions and Operating Locations
- 638th Supply Chain Management Group; and
- Marine Aircraft Group-49, Det A.

### 2.2 ENVIRONMENTAL RESTORATION PROGRAM

The ERP is modeled after CERCLA, passed by Congress in 1980, and SARA, passed in 1986. Both of these laws establish the legal requirements for identifying, investigating, and cleaning up hazardous waste sites. Most ERP sites at Robins AFB are regulated under RCRA. One National Priorities List (NPL) site (consisting of two ERP sites) is regulated under CERCLA. The United States Environmental Protection Agency (US EPA) guidelines are applied in conducting all investigation and remediation work in the ERP, whether under CERCLA/SARA or RCRA. The ERP at Robins AFB is implemented and managed by the Air Force Civil Engineer Center (AFCEC)/CZO – Robins Installation Support Team.

#### 2.2.1 The ERP Process

Although the fundamental objectives and processes of both the CERCLA and RCRA



repair, modification, and overhaul of

numerous aircraft and helicopters.



corrective action programs are essentially the same, there are subtle differences in the processes used to implement the RCRA and CERCLA corrective action requirements. Figure 2-2 defines the primary steps of the ERP process under both of these corrective action programs.

#### 2.2.2 Regulatory Participation in the ERP Process

The Georgia Environmental Protection Division (GA EPD) is the state agency involved with the ERP process at Robins AFB and provides regulatory oversight and review for the RCRA sites. Under RCRA, the GA EPD has been delegated authority to manage hazardous waste in the state. As such, the GA EPD has primary regulatory authority for permitting hazardous waste treatment, storage, and disposal facilities in the state of Georgia and for corrective action at identified SWMUs and Areas of Concern (AOCs) that are located on those facilities. Because the base is a large quantity generator of hazardous waste and has a permit allowing storage of hazardous waste on the facility, a compliance officer has been assigned. The compliance officer is required to annually inspect the facility, manage, and modify the base's RCRA permit; review all documents/reports; and interpret regulatory requirements as needed. Other staff members from the GA EPD, such as hydrogeologists and risk assessors, assist the compliance officer as needed.

The Air Force is the lead agency for remedial activities involved with the ERP process focused on cleanup of the CERCLA site at Robins AFB, with concurrence by the US EPA and the GA EPD. In accordance with Section 120 of CERCLA, the Air Force has negotiated a Federal Facility Agreement with the US EPA and the GA EPD to establish a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions at the site in accordance with CERCLA, the National Oil and Hazardous Substances Contingency Plan, and the Georgia Hazardous Waste Management Act. The AFCEC/CZO – Robins Installation Support Team is responsible for remediating the NPL site at the base, and as such has assigned a Restoration Project Manager for this site. The US EPA and the GA EPD have each also assigned a Restoration Project Manager for this site, who is responsible for regulatory oversight and ensuring that site restoration is in compliance with CERCLA and State requirements.

#### 2.2.3 Community Participation Under the ERP Process

The DoD believes that the earlier the public is involved in the ERP process, the sooner their concerns can be incorporated into the cleanup process. The public involvement effort is generally composed of the following activities:

- community interviews;
- publication of a CRP;
- quarterly EAB meetings;
- establishment of a public information repository where citizens have access to technical documents and other materials related to the ERP;
- release of public information materials; and
- public meetings.

The community relations program is discussed in Section 4.0 of this CRP. The community participation process adheres to guidelines established by the US EPA.

Robins AFB recognizes the importance of involving the public in the environmental restoration process. The EAB was established to serve as a forum so that people in the local communities can be involved with Robins AFB and regulatory agencies working toward providing stewardship for our shared environment. All interested



The EAB was established to create a forum allowing local communities, Robins AFB, and regulatory agencies to work together with the common goal of sustaining our shared environment. All interested parties are invited to attend quarterly meetings.



parties are invited to attend each meeting. The EAB is described in Section 4.1. Throughout this document, except in historical references where the organization was the RAB, the term EAB is used.

#### 2.3 ROBINS AIR FORCE BASE ERP

#### 2.3.1 Restoration Background

In Fiscal Year (FY) 1982, Preliminary Assessment/Site Investigations (PA/SIs) were completed for 33 sites at Robins AFB. The most significant is the NPL site, consisting of Landfill No. 4 (LF04) and the Sludge Lagoon/Waste Pit 14 (WP14). The site is divided into three operable units (OUs): LF04 and WP14 contaminant source areas (OU1), wetlands (OU2), and groundwater (OU3). Primary contaminants at the site include trichloroethylene (TCE) and perchloroethylene (PCE) in soil and groundwater.

Remedial Investigation/Feasibility Study (RI/FS) activities were conducted at the NPL site in FY1986 and FY1988. An Interim Record of Decision (IROD) was completed in FY1991 for OU1, in FY1994 for OU2, and in FY1995 for OU3. In FY1993, the installation constructed run-on controls and completed the pilot-scale system for lagoon solidification at OU1. In FY1994, the installation completed Phase I of the Leachate Collection System. In FY1995, a pilot system for the Phase II Leachate Collection System was constructed. In FY1996, the following projects were completed: Full-scale Phase II Leachate Collection System Design, Sludge Lagoon Solidification, OU2 Sediment Containment Design, and Remedial Design (RD) for the Groundwater Treatment Facility for the NPL site. In FY1998, construction was completed on the Groundwater Treatment Facility for OU3 and the Base Industrial Area Site, as well as the OU1 Cover. The final Record of Decision (ROD) for OU1 and OU3 was signed in September 2004. A risk assessment for OU2 was completed in December 2000. In 2003, it was determined that contamination found in OU2 was not attributed to releases from the NPL site. Therefore, remediation in the wetlands is no longer being addressed under CERCLA, but was completed in compliance with the RCRA Corrective Action Program. A CERCLA-mandated five-year ROD review, the third involving the NPL site, was completed and the final document was approved in 2011.

Since the ERP was initiated, Robins AFB has identified 79 SWMUs. It is anticipated that an additional SWMU (i.e., Building 169) will be added during the next permit modification. Continuation of an aggressive restoration program has resulted in receiving decisions of "No Further Action" (NFA) from the GA EPD on 55 SWMUs.

Robins AFB has achieved unique success among Air Force installations in the aggressive implementation and management of the ERP. Robins AFB achieved Remedy-in-Place (RIP) at all ERP sites seven years ahead of Air Force goals. The base was the first Air Logistics Complex to reach this milestone and has been recognized as having a restoration program that is "one of the best in the Air Force" by the Deputy Assistant Secretary of the Air Force for Environment, Safety, and Occupational Health. The Robins AFB approach to cleaning up contaminated sites was recognized in 2010 by the Air Force Center for Engineering and the Environment (AFCEE) as one of the best in the Air Force.

In 2011, Robins AFB awarded a Performance-Based Remediation (or PBR) Contract for the remaining active restoration sites. PBR contracts focus on closing as many sites as possible, as soon as possible. Site closeout is defined by the Air Force as the point at which all active management and monitoring at an environmental cleanup site has been completed, no additional environmental cleanup funds are required, and regulatory concurrence has been obtained. The performance based cleanup





The major milestone of achievement of RIP at all ERP sites has been briefed to EAB members as well as presented at a public conference. contract for Robins AFB has a period of performance of nine years. The environmental sites at Robins AFB are listed on Figure 2-3. Figure 2-3 also shows the location of the sites and the current status of restoration at each site.

#### 2.3.2 Installation Commitment to Environmental Quality

Since about 1970, national leaders have realized that environmental protection and resource conservation are critical to sustainable national prosperity. Similarly, the DoD realized that protecting the environment, as well as worker health and safety, was essential to remaining a world power. The role of preserving freedom goes hand-in-hand with protecting the world's environment.

Robins AFB and the WR-ALC fulfill a key role in national defense. The Base has structured the restoration program around the AF Environmental Mission Statement for Readiness: sustain operational readiness through environmental excellence. For Robins AFB, this mission statement ensures that proper environmental practices are followed so that aircraft depot maintenance is not interrupted.

The installation is committed to effective stewardship of environmental excellence. The restoration program's responsibilities encompass the four major pillars of the environmental program at Robins AFB: cleanup of environmental sites (*restoration*) [the focus of this document], compliance with all current environmental laws and regulations (*compliance*), ensuring the preservation and protection of natural, cultural, and historic resources associated with the installation (*conservation*), and proactively ensuring a minimum impact on the environment from future base operations by aggressive optimization of processes and material uses (*pollution prevention*). Robins AFB personnel are further ensuring, through an active partnering program, that product directorates on base are working with the environmental staff to make weapons systems more "green" so they are safer and easier to maintain.

The resources allocated by Robins AFB continue to assure that the installation's commitment to environmental quality and stewardship is maintained and enhanced. In 2013, Robins AFB was recognized for the strength of its environmental program as the recipient of the Secretary of Defense Environmental Quality Award.



## Section 3 Community Overview

## 3.1 COMMUNITY PROFILE

This section summarizes the profile of the local area and communities that influence, and are influenced by, Robins AFB. An area location map is shown on Figure 2-1.

#### 3.1.1 Area History

#### Houston County

Houston (pronounced "Howston") County was named after John Houston, a famous Georgia congressional representative, governor, and judge. Following a treaty with the Creek Indians, the county was first laid out in 1821, with the Ocmulgee River as its eastern boundary, the Flint River on the west, and extending north as far as current-day Macon and south opposite the town of Hartford. The original Houston County encompassed all or parts of the city of Macon and the present-day Bibb, Crawford, Upson, Peach, Macon, and Pulaski Counties. The 1820s saw Houston County's area reduced when Bibb and Crawford Counties were given a large piece of the northern side of Houston's territory, Peach County was given a northwestern portion, and Pulaski County received sections from the south and southeast. In 1837, Macon County was created, taking from Houston a large part of the western territory.

Perry, the county seat, was settled in 1823 and named in honor of Commodore Oliver Hazard Perry of the 1813 Battle of Lake Erie fame. Centerville appeared on area maps as early as 1888 and was chartered as a city in 1958. Until World War II, Warner Robins was a tiny community of 47 people known as Wellston. On June 14, 1941 it was selected as the site for an Army Air Corps Depot, and on March 5, 1943, the new community of Warner Robins was officially chartered and incorporated.

#### Peach County

Peach County was formed in 1923 from portions of Macon and Houston Counties. Fort Valley, the county seat, was incorporated in 1856, but had a post office as early as 1825. Originally known as Fox Valley, a clerical error changed the name to Fort Valley. A newspaper article dated September 1925 boasted that "Fort Valley is the point from which more peaches are shipped annually than any other point on earth." Byron, formerly in Houston County, was incorporated in 1874, named after the English poet of the same name. Byron's early history and growth were closely linked to the historic Byron Rail Depot, which was an important railroad center for both passenger travel and peach shipping.

#### **Bibb County**

The Macon-Bibb County area has a long and interesting history. Macon is located on Georgia's Fall Line, where the Piedmont region meets the flat Coastal Plains. This is also the site of the Ocmulgee Old Fields, which were home to Creek native tribes and their predecessors for as long as 12,000 years before European settlers arrived. Archaeological excavations at the Ocmulgee National Monument indicate the presence of Native American settlements beginning about 8,000 years Before the Common Era (BCE). Spanish explorer Hernando DeSoto recorded the first Christian baptism on the "new continent" during his explorations in the area in 1540. His priests baptized two Native Americans in the Ocmulgee River near the funeral and temple mounds at Ocmulgee National Monument.



Gateway to Warner Robins, home of Robins AFB, in Houston County.



In 1806, after the Creeks ceded their lands east of the Ocmulgee River, Fort Hawkins was built as a trading post and for the protection of settlers moving across the Southeast. Following treaties with the Native Americans in 1821, Bibb County was created in 1822 and Macon, incorporated in 1823, was designated as the county seat. The first college in the world for women, Georgia Female College (now Wesleyan College) was chartered in Macon in 1836. During the Civil War, Macon resisted two attacks by Union troops but was occupied by the Federals in 1865. A Confederate depository was located in Macon, as well as foundries and munitions plants.

#### 3.1.2 Municipal Demographics

#### **Population**

The Middle Georgia area continues to exhibit significant growth, as documented by several state and federal sources. Houston County experienced a 26.3 percent increase in population from 2000 to 2010 and another 4.5 percent increase from 2010 to 2012 (factfinder2.census.gov). Peach County grew by 17 percent from 2000 to 2010, but experienced an estimated population decrease of 0.3 percent between 2010 and 2012. Bibb County had a 1.1 percent increase in population between 2000 and 2010 and an additional increase of 0.6 percent from 2010 to 2012. Table 3-1 provides more detailed recent population data for the three counties, as well as select cities in the vicinity of the base.

Approximately 29.4 percent of Houston County's population is African-American, with Hispanic/Latino and Asian representing 6.3 percent and 2.7 percent, respectively. The median age in Houston County is 34.5. Peach County is home to 45.7 percent of African-Americans, 7.3 percent Hispanic/Latinos, and 0.8 percent Asians. The median age in Peach County is 33.3. African-Americans make up 53.0 percent of the population in Bibb County with Hispanic/Latinos at 3.2 percent and Asians 1.8 percent, respectively. The median age in the area is 35.6. The above ethnicity and age statistics are based on the most currently available data from 2010 and 2011, respectively (factfinder2.census.gov and quickfacts.census.gov).

#### Local Government

Each county is governed by a Board of County Commissioners. Houston and Peach counties have a five-member county commission, while Bibb County has a fourmember county commission. The city governments of Warner Robins, Perry, and Fort Valley consist of a mayor and six city council members; Warner Robins and Fort Valley have full-time mayors, while Perry has a part-time mayor and a full-time city manager. Centerville is governed by a part-time mayor and four city council members, and Byron has a part-time mayor with five city council members. Macon city government consists of a mayor and a city council; three city council members are elected from each of the city's five wards for a total of 15 council members. Macon and Bibb County are currently going through a process to consolidate their governments. More information on this process will be provided in future updates to this CRP.

#### **Economics**

Robins AFB, covering approximately 7,000 acres, is one of Georgia's largest employers. Statistics from the Economic Impact Statement for FY2012 indicate that the base had an approximated \$2.9 billion impact on Georgia. Robins AFB employs approximately 24,000 personnel, with a net payroll of \$1.41 billion. Annual expenditures by the base in Georgia totaled \$245 million.

The 2012 data from the Georgia LaborMarket Explorer (explorer.dol.state.ga.us)



show the ten largest employers (excluding all government, except correctional institutions, state and local hospitals, and state colleges and universities) in Houston County, in alphabetical order, were Anchor Glass Container Corporation, Frito Lay Inc., Graphic Packaging International, Jacobs Field Services North America, Lowes Home Centers Inc., Northrop Grumman Technical Services, Perdue Farms Inc., Red Lobster, The Kroger Company, and Wal-Mart with the three primary employment sectors in 2012 employing the following percentages of the labor force: services (45.6 percent), goods and manufacturing (10.3 percent), and government (43.8 percent). Peach County's top ten employers of 2012 were, in alphabetical order, Advance Stores Co. Inc., Blue Bird Body Company, Burger King, General Shale Brick, Inc., Lane Packing LLC, Peach County Association for Mentally Retarded, Publix Super Market Inc., Sodexo USA, The Fort Valley State College, and The Wire Shop, Inc. Services (43.5 percent), goods and manufacturing (28.8 percent) and government (27.3 percent) made up the three primary employment sectors with employment percentages shown for 2012. The three primary employment sectors in Bibb County and associated employment percentages in 2012 were services (78.1 percent), goods and manufacturing (8.9 percent) and government (12.9 percent) with the ten largest employers in 2012 being, in alphabetical order, Academy Sports and Outdoors, Geico, Georgia Farm Bureau Mutual Insurance Company, Georgia Health Holdings Inc., Ikon Office Solutions Inc., Labor Finders, Mercer University, The Kroger Company, The Medical Center of Central Georgia Inc., and Wal-Mart.

#### **Education**

The Houston County School System and its 38 schools are district accredited by the AdvancED Accreditation Commission. With a total enrollment of approximately 27,800, the system consists of: 23 elementary (K-5) schools, eight middle (6-8) schools, six high (9-12) schools, which includes the Houston County Career Academy, and an alternative school (6-12). There are also several private schools in the area. Five Houston County schools are National Blue Ribbon Schools of Excellence and 23 schools have been named Georgia Schools of Excellence a total of 39 times. On state assessments, Houston County's students scored higher than the state average in every subject for every grade for the 36 Criterion Referenced Competency Test and 8 End of Course Tests. In addition, five of the high schools were named Georgia AP STEM Schools. Four were also named AP STEM Achievement Schools. Warner Robins is home to the Warner Robins Campus as well as the Robins Resident Center of Middle Georgia State College, a Georgia College and State University campus, a commuter campus for Fort Valley State University, and Central Georgia Technical College, which offers vocational training in business, health, technical, and skilled occupations.

The Peach County public education system, with an enrollment of approximately 3,800, consists of six schools: one elementary, one middle, and one high school in Fort Valley plus two elementary and one middle school in Byron. Also located in Peach County is Fort Valley State University, a four-year college, with an enrollment of 3,000 students, representing 130 of Georgia's 159 counties, more than 30 states, and approximately 10 countries.

The Bibb County public school system consists of 25 elementary schools, seven middle schools, seven high schools, and two special entity schools totaling nearly 25,000 students. There are also several private schools in the county. Institutions of higher education include three colleges: Wesleyan College, the first college in the world to grant degrees to women, Mercer University, and Macon State College. Also located in Macon are The Georgia Academy for the Blind and Central Georgia Technical College.



#### **Culture and Recreation**

Houston County lays claim to a number of cultural and recreational attractions. The Museum of Aviation, adjacent to Robins AFB, has 180,000 ft<sup>2</sup> of exhibits and more than 93 historical aircraft on a 51-acre site, including the F-15A Eagle that played a key role in Desert Storm. Perry and Warner Robins lie along the Peach Blossom Trail (U.S. Highway 341/41), where peach orchards have traditionally dotted the countryside. Perry is also the location of the Georgia National Fairgrounds and Agricenter, a 1,100+ acre site designed for meetings, trade shows, livestock events, horse shows, fairs, concerts, and sporting events. Perry's other claim to fame is its historic Colonial downtown.

Peach County, true to its name, produces the majority of all peaches grown in Georgia and offers several attractions related to peach production. Byron and Fort Valley are also along the Peach Blossom Trail, and a week long Georgia Peach Festival is held in the county in mid-June. Byron also characterizes itself as a "shopper's paradise" with many antique shops and a large outlet mall. Fort Valley is home to the Massee Lane Gardens, headquarters of the American Camellia Society. Peach County has three National Historic Register Districts and three National Historic Register sites.

Cultural and recreational attractions in Bibb County include the Museum of Arts and Sciences and Mark Smith Planetarium; Grand Opera House; Macon Little Theater; the Harriet Tubman Museum, which focuses on black history, culture, and art; the Ocmulgee National Monument, which preserves the funeral and temple mounds of ancient Native American peoples; and the Sports Hall of Fame. Macon has more than 5,500 National Register historic structures in 11 historic districts. The city is also known as the Cherry Blossom Capital of the World for its over 300,000 Yoshino cherry trees; its annual 10-day Cherry Blossom Festival has become one of the top events in the South.

#### 3.1.3 On-Base Community

Robins AFB houses a community that in 2013 included 259 on-base family housing units and 8 dormitories to accommodate airmen, non-commissioned officers, visiting airmen and officers as well as transient lodging facilities to accommodate guests of active duty members and retirees. In October 2007, the base transitioned to a privatized system of housing. Residents are supported by most of the services found in a community of this size. The base has more than 240 acres of land for recreation, as well as a medical clinic, daycare, youth center, a library, bowling alley, and a theater.

#### 3.1.4 Community Access to ERP Information

One primary avenue for ensuring community access to ERP information related to environmental sites at Robins AFB is the EAB. The Robins AFB EAB is co-chaired by two individuals, one representing Robins AFB and the other representing the local community. Chairing of quarterly EAB meetings alternates between the installation co-chair and the community co-chair.

A representative of Robins AFB serves as the installation co-chair. This individual promotes effective partnering of the Robins AFB on-base community and branch personnel with the local communities and environmental regulatory agencies. This partnership helps to achieve the most effective sharing of information of interest with the communities. The installation co-chair also ensures access to appropriate base personnel to provide briefings on topics of interest and to answer any questions raised by EAB community members.



Warner Robins Welcome Center, located in the former train station



The community co-chair serves as the lead representative of the local communities on the EAB. This individual brings any questions, suggestions, or special items of interest voiced by local constituents to the EAB membership and serves as the interface with local communities. The community co-chair ensures the effective partnering of the base with the community residents and organizations to exchange information and ideas. This individual also helps to ensure that complete information is disseminated to interested parties.

A second primary avenue for ensuring community access to ERP information related to environmental sites at Robins AFB is the Information Repository. Robins AFB has been highly proactive in developing and maintaining an electronic record of final documents related to the environmental cleanup program. These documents are available to the public for review at the Nola Brantley Memorial Library in Warner Robins.

#### 3.2 KEY COMMUNITY COMMENTS AND INTERESTS

Community interviews have been conducted every two years since 1996 throughout the cities of Warner Robins, Centerville, and Perry in Houston County, Byron and Fort Valley in Peach County, and Macon in Bibb County. The most recent interviews were conducted in September and October 2012. All interview sessions were conducted by Charline Logue, as a representative of Robins AFB and as EAB Manager, and an independent community relations consultant. Interviewees have included representatives of local municipalities, citizen groups, the business community, and private citizens. Members of the Robins AFB EAB have also been interviewed. The key comments expressed during these interviews are summarized below.

#### **General Perceptions About Robins AFB**

Over the years, almost everyone interviewed has spoken enthusiastically about the role Robins AFB plays as the single largest employer in the area and one of the largest in the state. "Everybody loves the base" was the view expressed by one respondent during the 2008 interviews, and this comment has been typical of local comment during the entire interview span. Accolades from interviewes have focused on the high morals, high integrity, and professionalism of Robins AFB employees, and the "awesome knowledge base" available to the community because of the presence of the base in the community.

During the 2012 interviews, the interviewees were presented with a brief history of the environmental cleanup program at Robins AFB. As part of this discussion, the 2012 Restoration Site Status Map (Figure 2-3) was compared to the 1998 Restoration Site Status Map (Figure 2-4) to provide a visual image of the significant progress that the base has made in cleaning up the environmental sites. One interviewee commented that the progress in the last 14 years is "remarkable...very impressive." This same interviewee also noted that the Base has always been a leader in environmental cleanup, and he encouraged the Base leadership to continue to maintain a culture of excellence. Another interviewee commented the Base for the progress that has been made, as he realizes that cleanup of environmental sites is not an easy or fast process.

#### **Relationship Between the Base and Local Communities**

During all sets of interviews, elected officials and business leaders have spoken highly of the cooperative ways in which local government, commerce, and the base work together. During the 2010 interviews, one of the EAB board members noted that during the May 2010 EAB tour to learn about the base's emergency response capabilities, he was very pleased to see the level of partnership that occurs between



the Base and the fire stations and emergency personnel in the surrounding counties.

Several interviewees have complimented the senior base leadership for being so open and accessible and for participating so actively in community affairs. "An A+ relationship!" and "a true spirit of cooperation" is how local officials have characterized the interactions between Robins AFB and local municipalities during recent interviews. During the 2008 interviews, one interviewee noted that it is a "miracle" and a true testament to effective teaming partnerships that the base has been able to come to an agreement on the cleanup strategies on so many sites with both the GA EPD and the US EPA in such a short time period.

A recurring theme in the interviews relates to progress of the base's environmental cleanup. "The base is seen as environmentally friendly," one interviewee asserted. Many interviewees consider the base's approach to cleanup to be so smooth and well-planned that the average citizen has no idea the cleanup is going on. In 2012, an elected official noted that "the community knows that the base has everything under control...people feel safe if you keep them informed." The community knows that the cleanup will progress in an expedited manner.

#### Knowledge of the Robins AFB Environmental Restoration Program

During the span between the first set of interviews in 1996 and the most recent in 2012, interviewees have revealed essentially constant knowledge and interest relative to the cleanup, but a significant increase in public confidence that Robins AFB is doing a good job has been noted during this time period. In fact, several elected officials have commented that the overall lack of interest and concern is reflective of the public's confidence that Robins AFB is a good steward of the environment.

During the 2010 interviews, the interviewees were informed that the environmental program has won several awards in recognition of the outstanding progress, including the 2009 Thomas D. White Restoration Award at the Air Force Materiel Command level for excellence in the cleanup program. Interviewees responded that these awards were "wonderful" and that the base should "take a lot of pride in them." Several 2010 interviewees complimented the base leadership for doing such a tremendous job and taking such a proactive approach. Many interviewees thanked the EAB Manager for taking the time to come out and inform them of the progress that has been made.

#### Public Knowledge of the Environmental Advisory Board

During early interview sessions, most of the interviewed municipal officials and members of the general public either did not know an EAB existed, or if they did, were unfamiliar with its purpose or activities. However, more recent interviews revealed a much higher level of familiarity with, and interest in, the EAB.

As part of the 2012 interviews, the interviewees received information about the methods used by the base to distribute information regarding the cleanup program to the community, including the EAB meetings, Fact Sheets, the EAB public website, this Community Relations Plan, etc. Several elected officials in recent interviews were aware of people in their communities who were EAB members, and most of the elected officials said they would like to attend an EAB meeting in the future.

During the 2012 interviews, the elected officials acknowledged receiving the EAB Fact Sheet. Several also commented that they copy and distribute the Fact Sheet to City Council members and city staff members. Several interviewees have complimented the base on the look and content of the materials. One official commented that he finds the Fact Sheets to be a tremendous help and "extremely



The Robins AFB EAB receives briefings and tours in regularly scheduled meetings throughout the year. Here EAB members listen to a technical briefing during a tour.

useful." Interviewees have expressed ongoing interest in receiving information related to environmental programs at the base.

During the interviews, the interviewees are also informed that the presentations from each EAB meeting, the Fact Sheets, as well as each year's CRP are posted on the EAB website (www.robinseab.org).

#### Member Opinions about the Environmental Advisory Board

Long-term EAB members have felt, in general, that their expectations about belonging to the EAB had been met and that their longevity with the EAB was due to the personal benefits they gained from their participation. Several EAB members have positively commented on the impact of the Robins EAB Manager in ensuring that topics of current interest are presented, the tours are efficiently conducted, and all member questions receive complete answers. Many have attributed their continued presence on the board to their interest in what is going on and what approaches are used to address the cleanup problems at the base, as well as the sense of doing something worthwhile. Some of the expectations other EAB members said had been realized included learning more about the "reality" of base operations and environmental issues, playing a role in communicating to others, and bringing items of interest to the base from the community. One member said he had learned more from his EAB participation than he had given, a sentiment shared by several of the other members that have been interviewed.

EAB members interviewed have had consistently high praise for how the EAB meetings are conducted and the support provided by the EAB staff. Members have commented that the EAB staff is very inviting and encouraging, presentations are very good, and the meetings are very informative. During the 2012 interviews, an EAB member commented that "I like what I am presented and the depth at which it is presented." Members have noted that they appreciate the willingness of the base to be open to communication and their honesty in "discussing where they are making progress and where they are not." One EAB member stated that the EAB staff had "never not filled a request [for information] I have had." New EAB members have said they were delightfully surprised that when they asked a question or requested additional information, the designated topic would appear on the next meeting's agenda and that any information promised would be delivered. One new member appreciated that there is a form he can complete at the end of each meeting with his questions, comments, and suggestions.

Interviews of EAB members have also yielded compliments for good agendas and concise presentations. Stated one member, "The presenters stay on time, are always knowledgeable, and all questions are answered." Another member said he "push[es] away from the table satisfied, with just enough information presented." Also appreciated by a new EAB member was the fact that the individuals who make presentations at the meetings come up afterwards to talk to the members. In that same vein, one interviewee liked the fact that the Air Force consultants are at every meeting and interact with the EAB members. Many EAB members over the years have attributed the smooth running of the EAB to the EAB Manager, who members have described as "responsive", "very versatile," with "keen flexibility" and good public relations and technical skills. During the 2012 interviews, one interviewee stated "I have never seen a community meetings that is better managed." Regarding the post EAB documentation, one EAB member commented that they are "inclusive, concise, and an excellent record of the meeting events."

Throughout the interviews, members have continued to lament the difficulty in



EAB meetings provide a forum for members, Environmental Management Branch staff, visitors, and briefers to discuss items of interest.



getting more public participation and community interest both in the Base's cleanup and in EAB activities. Most members have expressed the common observation that when they share information with friends, neighbors, relatives, or co-workers (as most of them say they do), people are usually mildly interested, but generally do not ask follow-up questions or show any inclination to get involved.

EAB members interviewed did cite several ways in which they share the cleanup information they learn with various audiences, including students and organizations. Several members discussed their efforts in sharing information with the professional, environmental, and civic organizations to which they belong.

#### Level of Public Environmental Awareness

Interviewees over the years have expressed differing opinions on the level of local environmental awareness. Some citizens had low knowledge of local environmental problems, while others said environmental awareness was higher than average. Elected officials in Macon and Fort Valley believe that the presence of Superfund sites in their communities has heightened the level of local environmental interest.

The current sentiment is that local environmental knowledge is adequate, but that real interest is generated only when a particular issue has potential to affect an individual or one's neighbors. One interviewee stated that the public interest is relatively low because the base is doing such a good job managing their environmental program and being transparent about any potential concerns.

#### **Considerations in Communicating ERP Environmental Information**

Three major local newspapers have been repeatedly mentioned as key mechanisms for dissemination of environmental information and widespreaed communications vehicles for the local communities. These are *The Telegraph*, the *Houston Home Journal*, and the *Rev-Up*. The *Telegraph* serves as the primary local printed medium and the *Houston Home Journal* often carries legal notices and the like. The *Rev-Up* serves as the official Robins AFB newspaper.

Related to other forms of communication, interviewees have indicated that local broadcast news media, including broadcast television, cable channels, and radio, are effective outlets for transmitting news. In particular, several interviewees have noted that brief presentations by Robins AFB officials to local organizations (e.g., the 21<sup>st</sup> Century Partnership) may be an effective means for disseminating information regarding the cleanup program to the local community.



## Section 4 Community Relations Objectives and Recommended Activities

This section briefly discusses previous community relations activities related to the Robins AFB ERP, summarizes the objectives of this CRP based on the community interviews, and outlines recommended community relations activities.

## 4.1 COMMUNITY RELATIONS ACTIVITIES

Based on the successes of the base's existing community relations programs and recommendations in previous CRPs, the following community relations activities occur:

• EAB meetings:



EAB meetings are chaired by the community-co-chair and the installation co-chair.



The mission of the EAB is to encourage community participation in the full range of environmental matters at Robins AFB, including the Air Force's ERP cleanup process, and to allow community members and other stakeholders to have meaningful dialog with Robins AFB officials. The EAB specifically serves to support Robins AFB and disseminate information to the public. The EAB is made up of representatives of regulatory agencies, local community members, and Robins AFB members.

EAB meetings are held quarterly. Prior to each EAB meeting, a public notice is run in local print media to announce and publicize the event. The meetings are attended by members, Robins AFB personnel, regulatory agency representatives, and members of the local community, as well as contractors, briefers, and others with an interest in the environment. Frequently, distinguished guests attend; these may include command personnel from the base and local elected officials. EAB meetings are open to the public.

EAB meetings are chaired by the Installation Co-chair and the Community Co-chair. Meetings normally open with a welcoming statement and announcements. Various briefings are presented by base personnel and others, supported with graphics and storyboards as appropriate. The topics presented are timely and of great interest to the membership and the general public. Generally, one meeting each year is conducted as a tour of environmental sites and facilities of interest at the base. Minutes documenting the activities of each meeting are prepared and submitted to the EAB members.



Fact Sheets:

A four page, color Fact Sheet is prepared after each EAB meeting to present technical and related information briefed at the EAB meeting in an easily understandable written format. The Fact Sheets from the February, May, and August 2013 EAB meetings are provided in Appendix C.

EAB Website:

An EAB website has been developed to enable communication of information related to the ERP and EAB through electronic means. The EAB website can be accessed at:

www.robinseab.org

Public Comment Periods:

All required public comment periods are scheduled and publicized.

## 4.2 OBJECTIVES OF THE COMMUNITY RELATIONS PLAN

Community participation is an important aspect of a site or installation cleanup. The Robins AFB ERP community relations program seeks to continue to facilitate communication that has existed between Robins AFB and local citizens for many years. The overall objective of the CRP is to increase direct communication with individual citizens who are interested in the Robins AFB ERP.

Specific objectives of the community relations program are as follows:

#### Objective #1:

Encourage community participation and facilitate two-way communication between surrounding communities and Robins AFB ERP officials. All written materials emphasize the various avenues through which community members can easily receive information, have questions answered, or convey comments. Technical information is provided to community members to increase the public's understanding of the ERP cleanup process. Information documents are archived and made available to the public through the Nola Brantley Memorial Library [also known as Houston County Libraries-Warner Robins Houston County Library; see Appendix B for location and contact information.

#### **Objective #2:**

<u>Educate community members about the ERP</u>. Through quarterly EAB meetings, the public is educated on the ERP process. Fact Sheets are published and distributed throughout the community following each meeting, and the EAB website is updated regularly.



Communication with local communities is enhanced through a series of environmental documents made available to the public at the Nola Brantley Memorial Library in Warner Robins.



#### Objective #3:

<u>Provide clear and accurate information about the location and boundaries of each</u> <u>ERP site</u>. Several ERP sites are close to areas that can be readily observed by military and/or civilian workers (see Figure 2-3). Because of this fact, all written and graphic materials define each site location and its specific boundaries.

#### Objective #4:

<u>Provide the community with clear, accurate, and timely information about activities</u> <u>associated with the cleanup</u>. If necessary, Robins AFB attempts to inform local citizens, officials, military housing representatives, and military/civilian workers of the schedule for conducting field investigations, removal actions, and other activities that involve the mobilization of workers and equipment. The advance notice ensures that people are not surprised by the presence of field personnel. It also helps the base anticipate increases in public interest that may occur when on-site activities begin.

#### **Objective #5:**

<u>Provide citizens with explanations of sampling and test results</u>. Results of sample analyses associated with the cleanup of environmental sites are made available to the EAB members and are recorded in reports made available to the public at the Nola Brantley Memorial Library.

#### **Objective #6:**

<u>Provide information on potential impacts on human health or the environment</u>. Robins AFB informs community members of public health issues. Bioenvironmental Engineering Services (78 MDS/SGPB at Robins AFB) communicates information on health risks to the community.

#### Objective #7:

<u>Coordinate with Robins AFB Public Affairs to facilitate communication</u>. Providing a central contact office who represents Robins AFB allows concerned citizens and officials to have access to government officials for site inquiries and concerns. It also allows the government officials to address promptly any community concerns when they arise. Direct communication enhances opportunities for community participation in the ERP process.

#### **Objective #8:**

<u>Maintain communication with local officials</u>. Members of local government are valuable contacts for citizens in surrounding communities. Citizens are more familiar with local officials and may tend to contact them before they contact Robins AFB representatives. Cooperation and ongoing personal contact between local officials and Robins AFB is necessary to ensure a harmonious working relationship and a reliable and constructive flow of information.

#### Objective #9:

<u>Maintain communication with on-base housing management.</u> The Robins AFB housing management office is a valuable contact for military families living on base. Family members may naturally tend to ask questions or pose concerns to these housing managers before they contact Robins AFB representatives. Cooperation between the housing managers and Robins AFB environmental and PA staffs may be necessary in certain situations to ensure a harmonious working relationship and a reliable and constructive flow of information.



#### Objective #10:

<u>Develop communication avenues with interested citizens not currently receiving ERP</u> <u>information</u>. Quarterly Fact Sheets sent to local elected officials provide the name and telephone number of the EAB Manager, the names of the EAB members, and the address of the EAB website.

#### Objective #11:

<u>Maintain consistency with Robins AFB PA Publication Guidelines</u>. Publications developed related to specific activities contained in this CRP will be consistent with Robins AFB PA publication guidance.

The following section presents the specific activities recommended to meet these objectives.

#### 4.3 RECOMMENDED COMMUNITY RELATIONS ACTIVITIES

This section describes the recommended community relations activities related to the Robins AFB ERP. These activities are divided into three categories: (1) General ERP Activities; (2) CERCLA Site Activities; and (3) RCRA Site Activities. The General ERP Activities are applicable to the entire program, regardless of whether a specific site is governed by CERCLA or RCRA. However, a distinction is made for certain activities, since CERCLA and RCRA each have different public communication requirements. The timing of the different CERCLA and RCRA activities will be tied to the appropriate technical milestones applicable to the two laws.

The activities outlined are designed to address the communities' interests summarized in Section 3.0 and to meet the community relations objectives discussed in Section 4.2. Following each activity are the specific objectives that each activity meets.

#### 4.3.1 General ERP Activities

## 1. Designate a central contact person(s) at Robins AFB.

The Robins AFB PA Office serves as the central contact person for the public. PA is responsible for coordinating accurate, consistent, and timely responses to questions from citizens, civic leaders, and local officials throughout the ERP process and for conveying community concerns to the EAB. If new restoration information or an unexpected environmental incident with the potential to affect the local community were to occur on the base, PA would be notified. PA would ensure timely public notification using methods deemed appropriate to the situation to inform those on the base and in the community who may be impacted. Contact information for PA can be found in Section 1 and in Appendix A. (Meets Community Relations Objectives #1 and #7.)

## 2. Update the ERP information repository.

The information repository contains both CERCLA and RCRA program documentation. The electronic information repository, which includes more than 2,400 Robins AFB



Representatives from the Public Affairs and Judge Advocate offices attend EAB meetings and are available to answer questions from the public.



documents, can be found at the Nola Brantley Memorial Library (also known as Houston County Libraries-Warner Robins Houston County Library). The repository enables community members to have access to information regarding ERP activities and to stay informed of findings at the individual sites. The Nola Brantley Memorial Library was chosen because of its centralized location, hours of availability, and accessibility. The information repository contains documents that were used to form the basis of the remedy selections made at the NPL site and is the official legal record of environmental investigative and remedial activities at the site. Appendix B provides the address, telephone number, and contact person for the library. (Meets Community Relations Objectives #2, #3, #4, #5, and #6.)

# 3. Maintain list of individuals and organizations interested in receiving information about the ERP at Robins AFB.

Robins AFB maintains a list (see Appendix A) of mayors and others interested in ERP activities. Anyone who wishes to be added to the list should contact PA (see Appendix A). (Meets Community Relations Objectives #1, #4, #8, #9, and #10.)

## 4. Channel information on ERP activities through the EAB and increase the visibility of the EAB.

Robins AFB has a very active EAB, including members from surrounding communities. Annually, at least three of the quarterly EAB meetings are held off base to ensure participation by elected officials and community members. The date, time, and location of each EAB meeting is published in *The Telegraph*, the *Houston Home Journal*, and *The Robins Rev-Up* newspapers prior to the meeting. After each meeting, a Fact Sheet is developed and distributed that contains an overview of the issues presented and discussed during the quarterly meeting. The public is welcome to contact the EAB Manager for questions and comments concerning the EAB. The contact information for the EAB Manager is identified on the Fact Sheets. In addition, an EAB website has been developed to channel information on ERP activities to the communities through electronic means. The web address for the EAB website is provided on all quarterly Fact Sheets. (Meets Community Relations Objectives #1, #2, and #10.)

## 5. Provide information about site boundaries and their relationship to family housing and on-base schools.

The locations for the environmental sites at Robins AFB are identified on Figure 2-3. Additionally, site boundaries are provided, as applicable, in documents available in information repository. EAB meetings are held on a quarterly basis and provide detailed information on the environmental sites on Robins AFB. These meetings are open to the public. Public notices are published in the local newspapers and the base paper to allow those living in base family housing an opportunity to attend the quarterly EAB meetings. (Meets Community Relations Objectives #3, #4, and #9.)



## 6. Send news releases and/or public notices to local media outlets.

Local media are made aware of environmental issues ongoing at Robins AFB. To ensure that the local communities receive timely notification of upcoming EAB meetings, public notices are published in the local media in advance of the meetings. (Meets Community Relations Objectives #1, #2, #4, #5, and #11.)

### 7. Develop articles for The Rev-Up base newspaper.

The Robins AFB PA Office reviews and approves branch-drafted ERP articles for publication in the base's newspaper, *The Robins Rev-Up.* The articles inform military personnel, their families, and civilian workers about the technical progress of the ERP, upcoming fieldwork, public meetings, and public comment periods. (Meets Community Relations Objectives #1, #2, #4, #5, #9, and #11.)

## 8. Develop and distribute updated Fact Sheets or newsletters that contain information on ERP sites.

Robins AFB publishes and distributes quarterly Fact Sheets to report on progress being made at the various ERP sites. (Meets Community Relations Objectives #2, #4, #5, #6, #8, #9, and #10.)

#### 9. Place ERP materials and announcements on the Environmental Advisory Board website.

The website is accessible to the public at www.robinseab.org. (Meets Community Relations Objectives #1, #2, #3, #4, #6, and #10.)

## 10. Summarize findings and announce availability of ERP Public Health Assessment.

In April 1998, the Agency for Toxic Substances and Disease Registry (ATSDR) conducted a Public Health Assessment, which reviewed the ERP at Robins AFB from the health perspective of the surrounding community. The Final Public Health Assessment Report was briefed to EAB members and is available for public review at the Nola Brantley Memorial Library (also known as Houston County Libraries-Warner Robins Houston County Library). (Meets Community Objectives #2 and #6.)

### 11. Revise this CRP.

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The Robins AFB CRP is updated annually. (Meets Community Relations Objectives #1 and #11.)

#### 4.3.2 CERCLA Site Activities

There are specific public activities that are either required by law or encouraged by the US EPA protocol for CERCLA sites. These apply to the CERCLA NPL site and related OUs. OU1 is the landfill and sludge lagoon source areas. OU2 is the wetlands and surface water downgradient of OU1, and OU3 is the groundwater.

A ROD has already been prepared for OU1 and OU3. A third five-year ROD review, including a public comment period, was completed and the final report issued in 2011. Since the contamination at OU2 was not attributed to the NPL site, OU2 was addressed under the RCRA program, and NFA status for the site was granted in September 2006.

The following activity will occur after the remedial action (RA) is complete for OU1 and OU3.

## 1. Provide public comment opportunities for a proposed deletion of the CERCLA site from the NPL.

Once the RA has been completed and the US EPA has placed a Notice of Intent to Delete in the Federal Register, the agency will announce a 30-day public comment period. The US EPA will respond to any significant comments submitted during the comment period before the agency carries out its final deletion. Once the deletion is finalized, a notice to that effect will be placed in the information repository. (Meets Community Relations Objectives #1, #2, #4, #6, #8, #9, and #10.)

#### 4.3.3 RCRA Site Activities

RCRA communication requirements were formerly not as stringent or as extensive as those under CERCLA. However, in December 1995, the US EPA issued a final rule expanding its public participation requirements. These requirements are listed under Parts 124 and 270 in Title 40 of the Code of Federal Regulations and apply to facilities undergoing Part B permitting or permit modifications under Subtitle C. Facilities such as Robins AFB that treat, store, or dispose of hazardous waste must apply for and receive a permit allowing them to manage this waste. Such permits spell out the conditions and requirements the facility must meet for a specific period of time. The permit may be modified to include new conditions or requirements, or to change existing conditions or requirements.

Following are key activities for the Robins AFB RCRA sites.

#### 1. Provide opportunities for the public to comment on Corrective Action Plans (CAPs) and/or RCRA permit modifications and develop a Public Participation Package for public review.

Upon regulatory approval of a CAP or a No Further Action status resulting in a permit modification, the GA EPD will prepare and submit a Public Participation Package to the information repository for public review. The Public Participation Package



contains a Statement of Basis concerning each proposed action. As part of the process, the GA EPD announces a 45-day public comment period. The public participation information is also provided to all persons on the GA EPD mailing list prior to the public comment period. During this time, interested community members may submit oral or written comments to the GA EPD. The public notice is published in the *Macon Telegraph* and announced on a local radio station. (Meets Community Relations Objectives #1, #2, #4, #6, #8, #9, and #10.)

## 2. Hold public meetings.

A public meeting can be held during the CAP/permit modification public comment period, if the GA EPD feels there is sufficient community interest or cause for such a meeting. Appendix B lists the suggested locations for public meetings. (Meets Community Relations Objectives #1, #2, #4, #8, #9, and #10.)

### 3. Announce the closure of a RCRA ERP site.

A RCRA ERP site is officially closed when an NFA decision is made by the GA EPD. Procedures for announcement of site closure action are contained in Activity 1 above. (Meets Community Relations Objectives #2, #4, #8, #9, and #10.) TABLES

# Table 2-1History of Base Operations at Robins Air Force Base

Period Types of Operations		Hazardous Substance Activities		
Pre-1941	Farmland, Swamp/Lowland	None		
1941-1943	Base Construction	Construction		
1943-1945	<ul> <li>Flight Training Center</li> <li>Logistics</li> <li>B-17, B-26, and B-29 Bombers</li> <li>C-46, C-47, C-54, and C-60 Cargo Aircraft</li> <li>A-20 and A-26 Attack Aircraft</li> <li>Piston Engine Spark Plugs</li> </ul>	Landfills, Airplane/Automotive Fuel Storage, Hangars, Machine Shops, Wastewater Treatment Facility, Fire Protection Training Areas		
1945-1956	Logistics	Landfills, Fuel and Oil Storage,		
	- B-29 Bombers	Low Level Radioactive Disposal,		
	- C-119, C-130, and Other Cargo	Wastewater Treatment Facility,		
	Aircraft	Fire Protection Training Areas, Hangars,		
	- Piston Engine Spark Plugs	Machine Shop, Paint, and Depaint		
1956-1961	Logistics - C-124, C-130, and C-133 Cargo Aircraft - Piston Engine Spark Plugs	Landfills, Fuel and Oil Storage, Wastewater Treatment Facility, Fire Protection Training Areas, Hangars, Machine Shop, Paint, and Depaint		
1961-1968	Operations	Landfills, Fuel and Oil Storage, Wastewater		
	<ul> <li>B-52 Bombers</li> <li>Logistics</li> <li>C-7, C-123, C-130, and C-141 Cargo Aircraft</li> </ul>	Treatment Facility, Fire Protection Training Areas, Hangars, Machine Shop, Paint, and Depaint		
1968-1983	Operations	Weapons Storage Area,		
	<ul> <li>B-52 Bombers</li> <li>Logistics</li> <li>AC-130 Special Operations Aircraft</li> <li>C-130 and C-141 Cargo Aircraft</li> <li>F-15 Fighters</li> <li>Avionics, Electronics, Communications, Radar, and Electronic Countermeasures</li> </ul>	Landfills, Fuel and Oil Storage, Wastewater Treatment Facility, Fire Protection Training Areas, Hangars, Machine Shop, Paint, and Depaint		
1983-1995	<ul> <li>Operations</li> <li>B-52 Bombers</li> <li>KC-135 Refuel Aircraft</li> <li>Logistics</li> <li>AC-130 Special Operations Aircraft</li> <li>C-130 and C-141 Cargo Aircraft</li> <li>F-15 Fighters</li> <li>Avionics, Electronics, Communications, Radar, and Electronic Countermeasures</li> </ul>	Fuel and Oil Storage, Wastewater Treatment Facility, Fire Protection Training Areas, Hangars, Machine Shop, Maintenance Facilities, Paint, and Depaint		

1995-	Operations	Fuel and Oil Storage, Wastewater Treatment
Present	- KC-135 Refuel Aircraft	Facility, Fire Protection Training Areas,
	- Joint STARS	Hangars, Machine Shop, Maintenance
	- Marine Corps Light Attack Helicopters	Facilities, Paint, and Depaint
	Logistics	
	<ul> <li>AC-130 Special Ops Aircraft</li> </ul>	
	- C-5, C-17, C-130, C-141 (Taken Out	
	of Service in 2006) Cargo Aircraft	
	- F-15 Fighters	
	- Avionics, Electronics,	
	Communications, Radar, and	
	Electronic Countermeasures	
	- U-2 Reconnaissance Aircraft	
	- Helicopters	

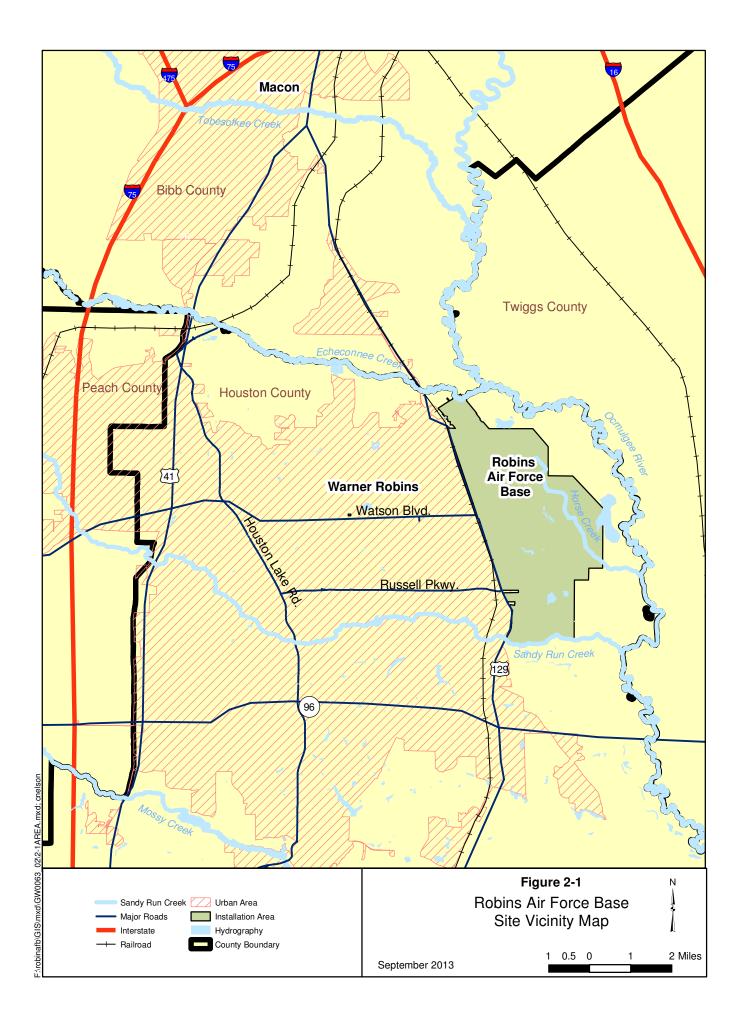
	2010 Census	2012 Estimate	2012 Rank	% Change 2010-2012	2025 Projected*	Projected % Change 2010-2025
Bibb County	155,547	156,462	13	0.6	170,910	9.9
City of Macon	91,351	91,234		-0.1		
Houston County	139,900	146,136	14	4.5	176,199	25.9
City of Warner Robins	66,588	70,712		6.2		
City of Perry	13,839	14,730		6.4		
Centerville	7,148	7,531		5.4		
Peach County	27,695	27,622	64	-0.3	35,299	27.5
Byron	4,512	4,718		4.6		
City of Fort Valley	9,815	9,721		-1.0		

Table 3-1Selected Middle Georgia Population Information

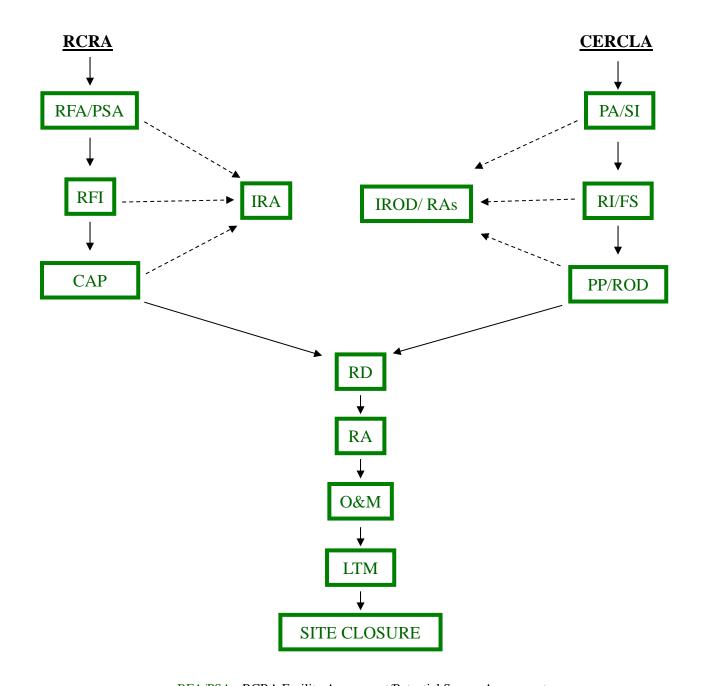
Notes: "Rank" indicates relative population among Georgia's 159 counties. \*Projected by the Governor's Office of Planning and Budget

Source: U.S. Census Bureau (factfinder2.census.gov) and State of Georgia (www.opb.georgia.gov)

FIGURES



## Figure 2-2 Environmental Restoration Program (ERP) Process



RFA/PSA - RCRA Facility Assessment/Potential Source Assessment **RFI - RCRA Facility Investigation** CAP - Corrective Action Plan IRA - Interim Remedial Action PA/SI - Preliminary Assessment/Site Inspection RI/FS - Remedial Investigation/Feasibility Study PP/ROD - Proposed Plan/Record of Decision IROD/RAs - Interim Record of Decision/Removal Actions RD - Remedial Design **RA** - Remedial Action O&M - Operations and Maintenance

LTM - Long-term Monitoring

#### **RCRA** (Resource Conservation and Recovery Act)

RCRA Facility Assessment/Potential Source Assessment: A study conducted to identify individual sites, SWMUs, that could pose a hazard to public health or the environment. If no hazard exists, the SWMU is categorized as "No Further Response Action Planned" (NFRAP).

RCRA Facility Investigation: An investigative phase to fully delineate the contamination at the site. The information that is gathered in this step is used to develop a cleanup strategy.

Corrective Action Plan: The Corrective Action Module of the Robins AFB Permit is the process for evaluating the cleanup alternatives that will provide adequate remediation to meet the regulatory requirements. The Corrective Action Module requires that CAPs integrate the Corrective Measures Study (CMS) and Corrective Measures Implementation (CMI) steps of the traditional RCRA corrective action process together. Once the CMS is complete, the CAP outlines the available data, the results of the CMS, and presents the proposed CMI. The CAP is submitted for formal regulatory review.

Interim Remedial Actions: Cleanup measures that are directed to address an imminent threat to public health or control contaminant releases to the environment. These may be initiated at anytime during the process and do not necessarily bring the site to close out.

> Remedial Design: A detailed engineering design for the cleanup technology outlined in the CAP or ROD.

> Remedial Action: The implementation phase of the corrective action including construction and installation.

> Operations and Maintenance: O&M of the approved corrective action to reduce the contaminant levels to meet required regulatory levels.

> Long-term Monitoring: Testing conducted to assure that the corrective action is removing contaminants and to evaluate when contaminant levels have stabilized below the required regulatory levels. Even after the corrective action is complete, LTM may continue to ensure that contaminant levels remain below the regulatory limits.

> Site Closure: Site is considered closed when no further response is required to protect human health and the environment.



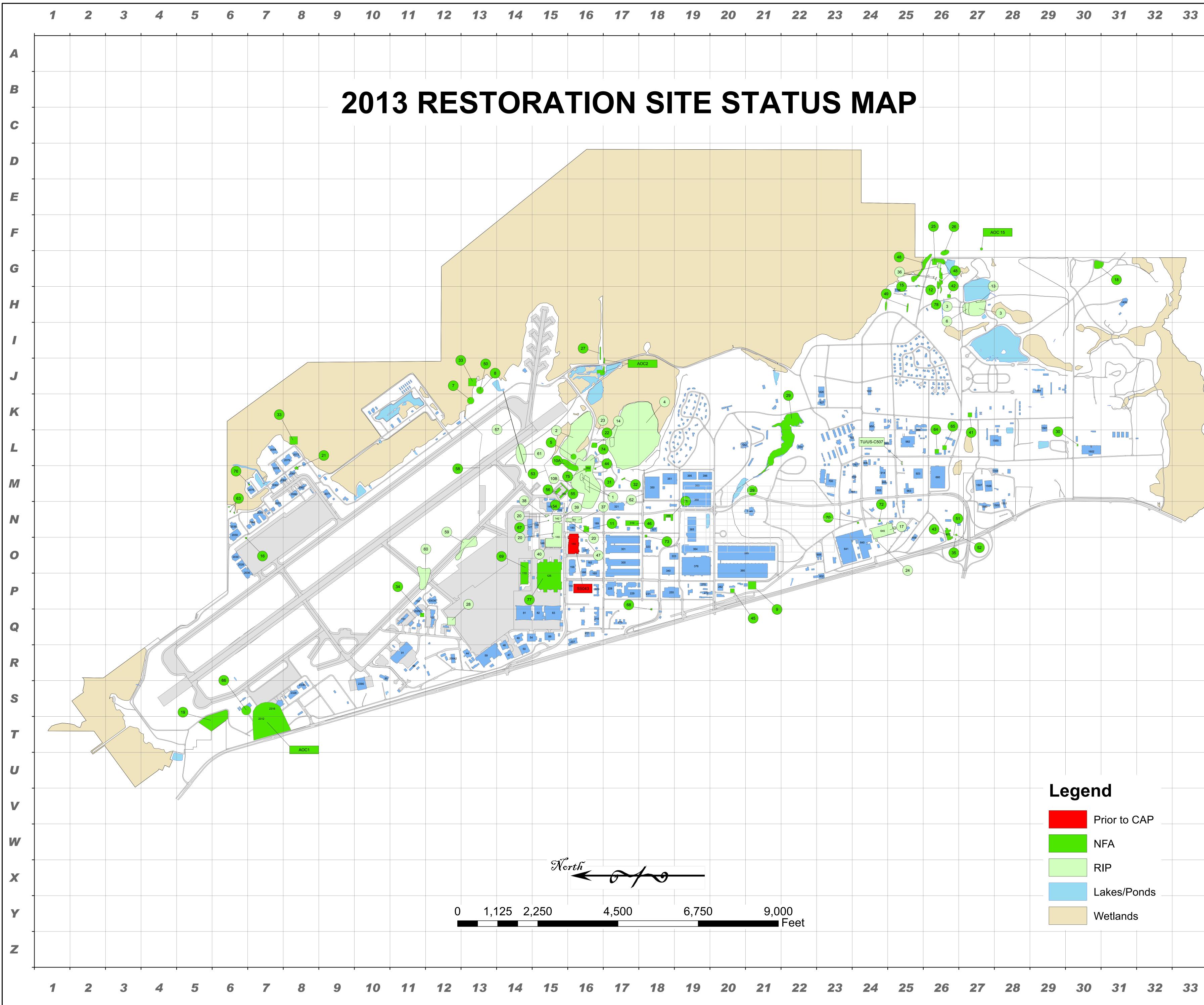
#### **CERCLA** (Comprehensive Environmental **Response, Compensation, and Liability Act**)

Preliminary Assessment/Site Inspection: A study to identify sites that may pose hazards to public health or the environment. Sites are scored using a Hazard Ranking System (HRS) based on the amount/toxicity of the contamination and the potential for migration/human exposure. If a site receives a sufficiently high score, it is proposed for inclusion on the National Priorities List (NPL).

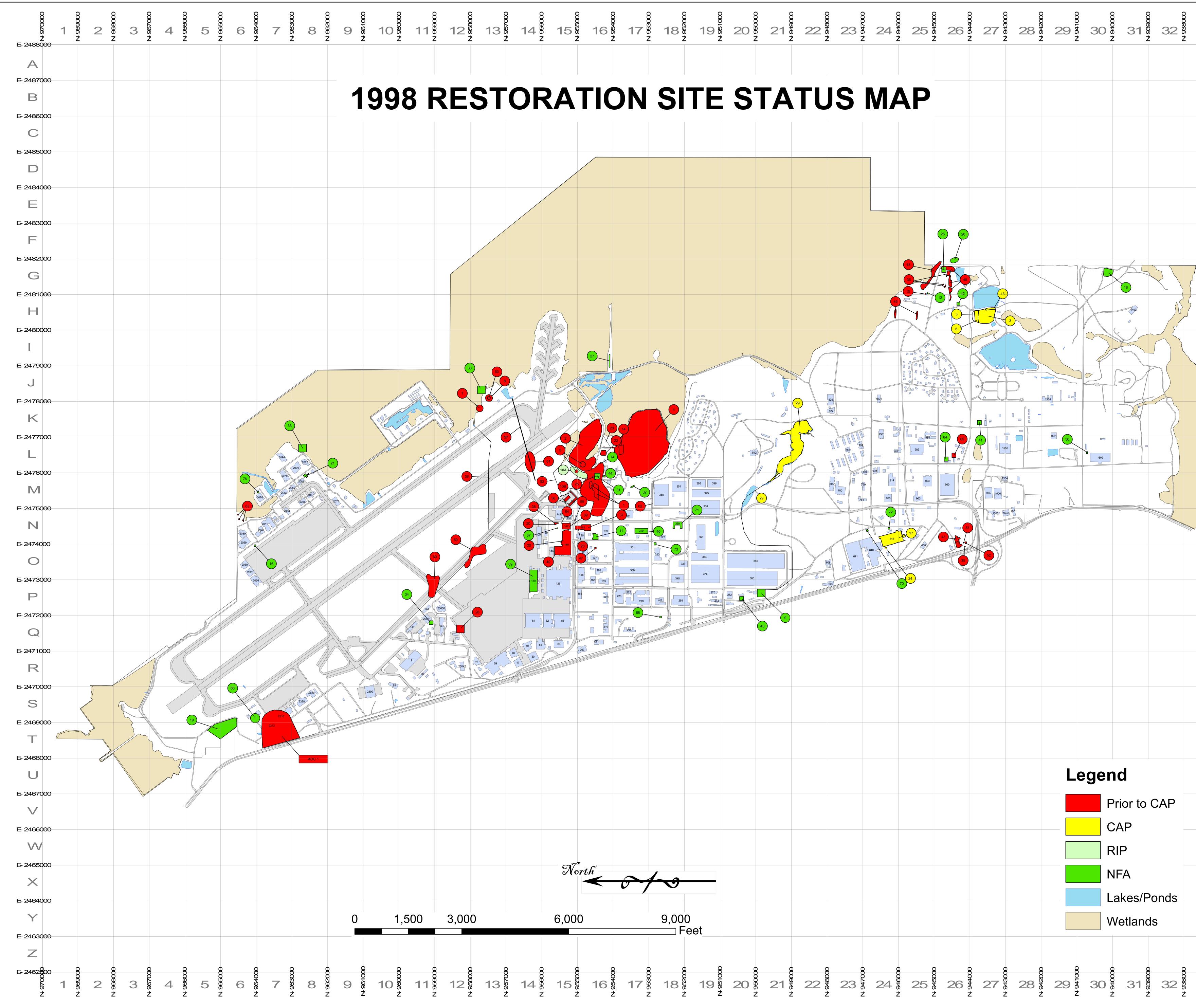
Remedial Investigation/Feasibility Study: An investigative phase to fully delineate the contamination at the site (RI) and an evaluation of potential cleanup strategies (FS).

Proposed Plan/Record of Decision: The PP describes the proposed cleanup method in a formal document that is released for public comment. After public comments are reviewed and an agreement is reached with appropriate regulatory authorities, the ROD is a record of the legal decision for site cleanup.

Interim Record of Decision/Removal Actions: Cleanup measures that are directed to address an imminent threat to public health or control contaminant releases to the environment. These may be initiated at anytime during the process and do not necessarily bring the site to close out. If an IROD is used, the process includes a formal regulatory review.



33		R	obi	ns Air Force Base Environm (Solid Waste Management			
				A	Areas of Concern, and Other		•
		А	SWMU			Correcti	-
		-	<b>AOC#</b>	LF01	Landfill No. 1	Action Sta	M-16
		B	2 3	LF02 LF03	Landfill No. 2 Landfill No. 3	RIP RIP	K-16, L-15,16 H-27
			4 5	LF04 FT05	Landfill No. 4 (CERCLA) NPL Site Fire Protection Training Area No. 1	RIP NFA	K,L-17,18 M-17
			6 7	FT06	Fire Protection Training Area No. 2 Fire Protection Training Area No. 3	RIP NFA	H-27 K-13
		С	8	FT08 SS09	Fire Protection Training Area No. 4 DDT Spill Site at Entomology Shop Buildings 295 & 296	NFA	J-13 P-21
		-	9 10A	SS10	JP4 Spill Site A	NFA	L, M-15,16
		D	10B 11	SS40 SS11	JP4 Spill Site B PCB Spill Site	RIP NFA	L,M,N-16
		-	12 13	WP12 WP13	Hazardous Waste Disposal Site Laboratory Chemical Disposal Area	NFA RIP	G-25 H-27
		E	14 15	WP14 RW15	Sludge Lagoon (CERCLA) NPL Site Low Level Radioactive Burial Site	RIP NFA	L-17 G-25
			<mark>16</mark> 17	OT16 OT17	Well No. 8 TCE Contamination         Building 645 TCE Contamination	NFA RIP	<mark>O-6</mark> N-24,25 O-24
		-	18 19	LF18 LF19	Construction Debris Landfill, East of Building 1400 (PAVE PAWS) Construction Debris Landfill at North End of Base	NFA NFA	G-30 S-6, T-5,6
		F	20	OT20	Greater Base Industrial Area TCE Groundwater Contamination	RIP	N-15,16; O-15
		-	21 22	OT21 OT22	Corrosion Control Facility at Building 80 Satellite Storage Area Southeast of Building 361	NFA NFA	M-8 L-16
<u>_</u>		G	23 24	OT23 OT17	Sanitary Sludge Placement Area Southeast of Building 361 Former Waste Solvent Underground Storage Tank at Building 645	RIP RIP	L-16 O-24
			25 26	OT25 OT26	Pasture Disposal Site Off-Base Drum Disposal Site	NFA NFA	G-26 F,G-26
5			<mark>27</mark> 28	OT27 CG028	Gas Line Road Dump Site Purge Fluid Leak at Building 45	NFA RIP	I,J-16 Q-12
J		H	29 30	OT29	Duck Lake and Stream SE of Building 295 & 296 Building 1601-DRMO Hazardous Waste Container Storage Building	NFA	K,L,M-21; L-22
		F	31	N/A	Building 352-Hazardous Waste Container Storage Building	NFA	M-16
		1	32 33	N/A AOC1	Building 369-Dioxin Container Storage Building SAC Drum Site	NFA NFA	M-17 L-8; J-13
		-	34 35	AOC3 N/A	Fire Fighting Foam Lagoon Methyl Ethyl Ketone Unit at Building 680	NFA NFA	Q-11 O-26
			36 37	DC34 OT20	Horse Pasture Trench Disposal Sites Solvent Reclamation Area (Building 181)	RIP RIP	G-26 N-15,16
		J	38 39	OT20 OT20	Industrial WWTP 1&2 at Building 141 Metal Finishing Shop at Building 142	RIP RIP	N-15
	)	-	40	OT20	Machine Shop at Building 140	RIP	N,O-15
		K	41 42	N/A N/A	Civil Engineer Pole Yard and Transformer Storage Yard Former Transformer Storage S38ite at Building 1178	NFA NFA	K-27 H-26
(		-	43 44	SS35 N/A	Plastic Shop Baghouses at Building 670 (Former Dry Cleaning Facility) Phenolic Treatment Facility at Building 363	NFA NFA	N,O-26 M-16
		,	45 46	N/A N/A	Chemical Site No. 25 and Truck Wash Area Vehicle Steam Cleaning Area at Building 319	NFA NFA	P-20 N-17
		L	47	CGC504		RIP	0-16
		-	48	DC34 DC34	Miscellaneous Disposal Sites	NFA NFA	G-25,26; H-26 H-25
		Μ	49 50	N/A	Horse Pasture West of Site RW15 Fire Protection Training Area No. 5	NFA	J-13
		-	51 52	N/A N/A	Oil/Water Separator at Building 680 Chemical Storage Shed at Building 680	NFA NFA	N-26 N-26
		N	53 54	OT20 OT20	Storm Sewer System from Base Industrial Area to Outfall 009 Industrial Wastewater Treatment Plant Process Line Between Building	NFA NFA	L-15, M-15 N-15
			55	SS40	Nos. 141 & 142 Soil Contamination at Monitoring Well RB20MW6	NFA	N-15
		-	56 57	ОТ20 ОТ41	Jet Engine Maintenance Building 145, 256 & 257 Twin 72-Inch Underground Storm Drain Culvert System Through South	NFA RIP	M-15 J,K,L,M-14
		0	58	ОТ20	Flightline Culvert Storm Drain From the Base Industrial Area to Drainage Ditch at Fire Protection Training Area No. 3 (SWMU 7)	e NFA	K,L,M,N-13
		-	59 60		JP-8 Product Line Along Main Controlled Taxiway JP-8 Product Line Near Intersection of Taxiway No. 2 and Taxiway No. 3	RIP RIP	O-12; N,O-13 O,P-11,12
		Р	61	CGC503	JP-8 Product Line Near South End of Main Runway	RIP	L-14
		_	62 63	OT37 OT38	Third Street Storm Sewer and Outfall Test Firing Range for M61-20mm Guns	RIP NFA	M-18
			64 65	N/A N/A	Two Former Heating Oil Tanks at Building 993 Former Heating Oil Underground Storage Tank at Building 994	NFA NFA	L-26 L-26
		Q	66 67	N/A N/A	Tarpit at ANG B-1 Site Former Building 113 Aboveground Storage Tank	NFA NFA	S,T-6, 7 N-15
		+	68 69	N/A N/A	Former Building 245 Underground Storage Tank Building 110-Aircraft Hangar	NFA NFA	Q-18 0,P-14
		R	69 70	N/A	Building 640 Industrial WWTP Process Line	NFA	0-24
		-	/1 72	N/A N/A	Building 359 - Hazardous Waste Container Storage Building Building 644 - Heating Oil Underground Storage Tank	NFA NFA	N-18 N-24
		•	73 74	N/A N/A	Building 325 - Old DRMO Hazardous Waste Container Storage Building Building 360 Heating Oil Underground Storage Tank	NFA NFA	N,O-18 L-16
		S	75 76	N/A N/A	Building 352 Heating Oil Underground Storage Tank Building 2076 Heating Oil Underground Storage Tank	NFA NFA	M-16 M-7
		F	77	N/A	Four Pairs of Vaults & Associated Piping at Building 125 (C-5 Hangar)	NFA	O-15, P-15
		<b>T</b>	78 AOC1	N/A SS36	Lead Slag Area in Horse Pasture Area of Concern Near Taxiway No. 4	NFA NFA	G,H-26 S-7,8 T-7,8
		-	AOC2 AOC15	N/A N/A	Wetlands Downgradient of the NPL Site and GBIA Unexploded Ordnance (UXO) Site	NFA NFA	J-16, 17 F-27
			TBD N/A	SS043 TU/US-	Building 169 Building 922	Prior to C/ RIP	AP N-16, O-15,16 L-25
		U		C507			
		F			ABBREVIATIONS & ACRON	<u>YMS</u>	
		V	CA		tive Action Plan NFA - No Further Action required RCRA	- Resource (	Dil, & Lubricants Conservation
		-	CE	En		Recovery A CRA Facility medial Inves	Investigation
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	SWMU AOC #	/ ERP No.	SWMU/AOC Description	Corrective Action Status	Location Grid
	A 1 2	LF01 LF02	Landfill No. 1 Landfill No. 2	Prior to CAP Prior to CAP	M-16 K-16, L-15,16
	R 4	LF03 LF04	Landfill No. 3         Landfill No. 4 (CERCLA) NPL Site	CAP Prior to CAP	H-27 K,L-17,18: M-
		FT05 FT06	Fire Protection Training Area No. 1 Fire Protection Training Area No. 2	Prior to CAP CAP	L-15,16 H-27
	E- 2486000 7	FT07 FT08 SS09	Fire Protection Training Area No. 3         Fire Protection Training Area No. 4         DDT Spill Site at Entomology Shop Bldgs. 295 & 296	Prior to CAP Prior to CAP NFA	K-13 J-13 P-21
	10A 10B	SS10 SS40	JP4 Spill Site B	RIP Prior to CAP	L, M-15,16
	E- 2485000	SS11 WP12	PCB Spill Site       Hazardous Waste Disposal Site	NFA NFA	N-16 G-25
		WP13 WP14 RW15	Laboratory Chemical Disposal Area         Sludge Lagoon (CERCLA) NPL Site         Low Level Radioactive Burial Site	CAP Prior to CAP Prior to CAP	H-27 L-17 G-25
	E- 2484000 15 16 17	OT16 OT17	Well No. 8 TCE Contamination       Building 645 TCE Contamination	NFA CAP	0-25 0-6 N-24
		LF18 LF19	Construction Debris Landfill, East of Bldg. 1400 (PAVE PAWS)Construction Debris Landfill at North End of Base	NFA NFA	G-30 S-6, T-5,6
	E- 2483000 20 21	OT20 OT21 OT22	Greater Base Industrial Area TCE Groundwater Contamination         Corrosion Control Facility at Building 80         Satellite Storage Area Southeast of Building 261	Prior to CAP NFA Prior to CAP	N-15,16; O-15 M-8 L-16
	= 22 $23$ $24$	OT23 OT17	Satellite Storage Area Southeast of Building 361         Sanitary Sludge Placement Area Southeast of Building 361         Former Waste Solvent Underground Storage Tank at Bldg, 645	Prior to CAP Prior to CAP CAP	L-16 L-16 O-24
	E- 2482000 25 26	OT25 OT26	Pasture Disposal Site       Off-Base Drum Disposal Site	NFA NFA	G-26 G-26
	27 28	OT27 SS28	Gas Line Road Dump Site         Purge Fluid Leak at Building 45	NFA Prior to CAP	I,J-16 Q-12
	E- 2481000 29 30	OT29 N/A	Duck Lake and Stream SE of Bldg.295 & 296         Bldg.1601-DRMO Hazardous Waste Container Storage Building         Dlla 252 Handler Wester Container Storage Duilding	CAP NFA	K,L,M-21; L-2
	31 32 33	N/A N/A AOC1	Bldg.352-Hazardous Waste Container Storage Building         Bldg.369-Dioxin Container Storage Building         SAC Drum Site	NFA NFA NFA	M-16 M-17 L-8; J-13
	E- 2480000 34 35	AOC3 N/A	Fire Fighting Foam Lagoon         Methyl Ethyl Ketone Unit at Bldg.680	NFA NFA Prior to CAP	Q-11 0-26
	36 37	DC34 OT20	Horse Pasture Trench Disposal Sites         Solvent Reclamation Area (Bldg.181)	Prior to CAP Prior to CAP	G-26 N-16
)	E- 2479000 38 39	OT20 OT20	Industrial WWTP 1&2 at Bldg. 141 Metal Finishing Shop at Building 142	Prior to CAP Prior to CAP	N-15 N-15
	40 41 42	OT20 N/A N/A	Machine Shop at Building 140         Civil Engineer Pole Yard and Transformer Storage Yard         Former Transformer Storage S38ite at Bldg.1178	Prior to CAP NFA NFA	O-15 K-27 H-26
	E- 2478000 43	SS35 N/A	Plastic Shop Baghouses at Building 670 (Former Dry Cleaning Facility) Phenolic Treatment Facility at Building 363	Prior to CAP NFA	N,O-26
	44 45 46	N/A N/A N/A	Chemical Site No. 25 and Truck Wash Area Vehicle Steam Cleaning Area at Building 319	NFA NFA	P-20 N-17
	E- 2477000 47	N/A	Aboveground Diesel Fuel Storage Tank at Building 177-2 & Fuel Line to Steam Plant	Prior to CAP	O-16
	48 49 50	DC34 DC34 N/A	Miscellaneous Disposal Sites         Horse Pasture West of Site RW15         Fire Protection Training Area No. 5	Prior to CAP Prior to CAP Prior to CAP	G-25,26; H-26 H-25 J-13
	E- 2476000 51	N/A N/A	Oil/Water Separator at Building 680         Chemical Storage Shed at Building 680	Prior to CAP Prior to CAP	N-26
	53 54	OT20 OT20	Storm Sewer System from Base Industrial Area to Outfall 009           Industrial Wastewater Treatment Plant Process Line Between           Building Nos. 141 & 142	Prior to CAP Prior to CAP	L-15, M-15 N-15
	E- 2475000 55	SS40 OT20	Soil Contamination at Monitoring Well RB20MW6         Jet Engine Maintenance Bldg. 145, 256 & 257	Prior to CAP Prior to CAP	N-15 M-15
	N 57	OT41	Twin 72-Inch Underground Storm Drain Culvert System Through South Flightline         Culvert Storm Drain From the Base Industrial Area to	Prior to CAP	J,K,L,M-14
	E- 2474000	OT20 N/A	Drainage Ditch at Fire Protection Training Area No. 3 (SWMU 7) JP-8 Product Line Along Main Controlled Taxiway	Prior to CAP Prior to CAP	K,L,M,N-13 0-12; N,0-13
	60           61	N/A N/A	JP-8 Product Line Near Intersection of Taxiway No. 2 and Taxiway No. 3 JP-8 Product Line Near South End of Main Runway	Prior to CAP Prior to CAP	O,P-11,12 L-14
	E- 2473000	OT37 OT38	Third Street Storm Sewer and Outfall       Test Firing Range for M61-20mm Guns	Prior to CAP Prior to CAP	M-18 N-6
	64 65 66	N/A N/A N/A	Two Former Heating Oil Tanks at Building 993         Former Heating Oil Underground Storage Tank at Bldg. 994         Tarpit at ANG B-1 Site	NFA Prior to CAP NFA	L-26 L-26 S,T-6, 7
	E- 2472000 67	N/A N/A	Former Building 113 Aboveground Storage Tank         Former Building 245 Underground Storage Tank	NFA NFA	N-15 Q-18
	Q 69 70	N/A N/A	Building 110-Aircraft Hangar         Building 640 Industrial WWTP Process Line	NFA NFA	O,P-14 N,O-24
	E- 2471000 72	N/A N/A	Building 359 - Hazardous Waste Container Storage Building         Building 644 - Heating Oil Underground Storage Tank         Building 325 - Old DRMO Hazardous Waste Container	NFA NFA	N-18 N-24
	R 73 74	N/A N/A	Storage Building         Building 360 Heating Oil Underground Storage Tank	NFA NFA	O-18 L-16
	75 E- 2470000 76 A0C1	N/A N/A SS36	Building 352 Heating Oil Underground Storage Tank         Building 2076 Heating Oil Underground Storage Tank         Area of Concern Near Taxiway No. 4	Prior to CAP NFA Prior to CAP	M-16 M-7 S-7, T-7
	S	5530	Area of Concent Near Taxiway No. 4	Phot to CAP	5-7, 1-7
	E- 2469000	ABE	<b>BREVIATIONS &amp; AG</b>	<u>CRONY</u>	<u>MS</u>
	•			tional Priorities L	
			- Comprehensive Dat	teral Facility Agr ed June 14, 198 prporated into th	39
	U		Compensation, & Liability by I Act POL - Pet	Reference troleum, Oil, & L	ubricants.
	E-2467000	_	Hazardous WasteRCRA - RManagement UnitR	Resource Conser Recovery Act	rvation
		Pro	ogram RI - Reme	RA Facility Inves edial Investigatic nedy in Place	•
		IFA - No	o Further Action required SWMU - S	Solid Waste Mar Unit	nagement
	W				
	E- 2465000				
	X	ENTAL MANAG	ENVIRONM	ENTAI	
	E- 2464000		MANAGEN		
		ROBINS AFB			
	E- 2463000		Figure 2-4		
	E- 2463000		1998 RESTORA		
			SITE STATUS	MAP	

APPENDIX A

COMMUNITY RELATIONS CONTACTS

#### **COMMUNITY RELATIONS CONTACTS**

#### **CENTRAL POINT OF CONTACT FOR THE PUBLIC**

(478) 926-2137

Public Affairs Office 78 ABW/PA 620 Ninth Street, Suite 230 Robins AFB, Georgia 31098-1662

#### **ROBINS AFB ERP PERSONNEL**

Mr. Alexander Stokes Director of Asset Management 78th Civil Engineer Group 775 Macon Street, Bldg. 1555 Robins AFB, Georgia 31098-2201

Mr. Fred Otto Restoration Program Manager AFCEC/CZO – Robins Installation Support Team 380 Robins Parkway, Building 359 Robins AFB, Georgia 31098-2201

Ms. Charline Logue Restoration Project Manager AFCEC/CZO – Robins Installation Support Team 380 Robins Parkway, Building 359 Robins AFB, Georgia 31098-2201 (478) 327-7439 e.stokes@us.af.mil

(478) 327-9272 ernest.otto@us.af.mil

(478) 327-9268 b.logue@us.af.mil

#### **OTHER ROBINS AFB PERSONNEL**

Mr. Robert Sharples Chief, Capital Asset Management 500 Warner Robins St. Robins AFB, Georgia 31098 (478) 327-7867 robert.sharples@robins.af.mil

#### FEDERAL AGENCIES

#### United States Environmental Protection Agency (US EPA)

Ms. Lila Llamas US EPA, Region IV Sam Nunn Atlanta Federal Center 10th Floor, Federal Facilities Branch 61 Forsyth Street, SW Atlanta, Georgia 30303 (404) 562-9969 llamas.lila@epamail.epa.gov

### **STATE AGENCIES**

#### Georgia Department of Natural Resources

Ms. Mary Brown Georgia Environmental Protection Division Department of Natural Resources Hazardous Waste Management Division Floyd Towers East, Suite 1054 2 Martin Luther King Jr. Drive Atlanta, Georgia 30334 (404) 656-0101 mary.brown@dnr.state.ga.us

### LOCAL MAYORS

Lawrence C. Collins, Mayor City of Byron P. O. Box 129 Byron, Georgia 31008	(478) 956-3600
John Harley, Mayor City of Centerville 300 Church Street Centerville, Georgia 31028	(478) 953-4734
Robert Reichert, Mayor City of Macon 700 Poplar Street Macon, Georgia 31201	(478) 751-7170
James Faircloth, Jr., Mayor City of Perry P.O. Box 2030 1211 Washington Street Perry, Georgia 31069	(478) 988-2700
Randy Toms, Mayor City of Warner Robins P.O. Box 1488 Warner Robins, Georgia 31099	(478) 929-1115
Barbara Williams, Mayor City of Fort Valley P.O. Box 956 Fort Valley, Georgia 31030	(478) 825-8567

#### **ROBINS AFB ENVIRONMENTAL ADVISORY BOARD**

Dr. Brian E. Rood Community Co-Chair Environmental Science Program Mercer University 1400 Coleman Avenue Macon, Georgia 31207

Mr. Alexander Stokes Installation Co-Chair 775 Macon Street, Bldg. 1555 Robins AFB, Georgia 31098-2201

Ms. Lila Llamas US EPA, Region IV Sam Nunn Atlanta Federal Center 10th Floor, Federal Facilities Branch 61 Forsyth Street, SW Atlanta, Georgia 30303

Ms. Mary Brown Georgia Environmental Protection Division Department of Natural Resources Hazardous Waste Management Division Floyd Towers East, Suite 1054 2 Martin Luther King Jr. Drive Atlanta, Georgia 30334

Dr. Dan Callahan 216 Trellis Walk Centerville, Georgia 31028

Mr. James Harden 112 Sandy Valley Drive Warner Robins, Georgia 31088

Mayor John Harley 403 Dogwood Glen Centerville, Georgia 31028

Mr. Stephen Johnson Walter F. George School of Law Mercer University 1021 Georgia Avenue Macon, Georgia 31207-0003 (478) 335-4960 brianerood@aol.com

(478) 327-7439 e.stokes@us.af.mil

(404) 562-9969 llamas.lila@epamail.epa.gov

(404) 656-0101 mary.brown@dnr.state.ga.us

(478) 971-1485 Dan216@cox.net

(478) 923-3327 jvharden@cox.net

(478) 929-8531 jsh2308@cox.net

(478) 301-2192 johnson\_s@law.mercer.edu Ms. Debra Jones Keep Warner Robins Beautiful 99 Armed Forces Boulevard, North Warner Robins, Georgia 31098

Mr. Mike Maffeo 4688 Savage Hills Drive Macon, Georgia 31210

Dr. Linda Smyth 108 Kentucky Downs Way Macon, Georgia 31210-7500

Dr. Joseph Swartwout P.O. Box 1315 Fort Valley, Georgia 31030-1315

Mr. Don Thompson 260 Matlock Lane Macon, Georgia 31210

Mr. Penrose Wolf 411 Yorktown Drive Perry, Georgia 31069

Ms. Charline Logue EAB Manager 380 Robins Parkway, Building 359 Robins AFB, Georgia 31098-2201 (478) 929-7258 kwrb@wrga.gov

(478) 477-1368 mikemaffeo@bellsouth.net

(478) 474-9916 drlindasmyth@cox.net

(478) 731-1881 jrswartwout@gdph.state.ga.us

(478) 474-7366 pops71\_2000@yahoo.com

(478) 224-0952 pwolf01@comsouth.net

(478) 327-9268 b.logue@robins.af.mil

#### **APPENDIX B**

### PUBLIC INFORMATION LOCATIONS

#### Information Repository/Administrative Record/Other Information Locations

The information repository and administrative record contain laws, work plans, technical reports, and other relevant information associated with the ERP. The information repository and administrative records for the Robins AFB ERP have been set up at the following locations:

Houston County Libraries: Nola Brantley Memorial Branch (Information Repository and Selected Administrative Record Documents) 721 Watson Boulevard Warner Robins, Georgia 31093 (478) 923-0128 Contact: Mark Bohnstedt, Branch Manager/Reference Librarian

AFCEC/CZO – Robins Installation Support Team 380 Robins Parkway, Building 359 Robins AFB, Georgia 31098-2201 (478) 327-9268 Contact: Ms. Charline Logue

#### **Public Meeting Locations**

The following locations could be used for public meetings or information open houses:

Museum of Aviation Highway 247 P. O. Box 2469 Warner Robins, Georgia 31099 (478) 222-7553 Contact: Ms. Karen Ross (Events Coordinator)

Warner Robins Civic Center 702 Watson Blvd. P.O. Box 1488 Warner Robins, Georgia 31099 (478) 929-1945 Contact: Ms. Kathy Opitz

Warner Robins City Hall 700 Watson Blvd. Warner Robins, Georgia 31099 (478) 929-1132 Contact: Mr. Alton Mattox

Centerville City Hall 300 East Church Street Centerville, Georgia 31028 (478) 953-4734 Contact: Ms. Krista Bedingfield

#### **APPENDIX C**

### EAB FACT SHEETS



# Robins Air Force Base Environmental Advisory Board (EAB)





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.

## Inside this issue...

Performance-Based Remediation Progress
Update for Building 169 page 3
Environmental Awards page 4
New EAB Member Elected page 4
Puge 1

## 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 (Continued on page 2)

## 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.

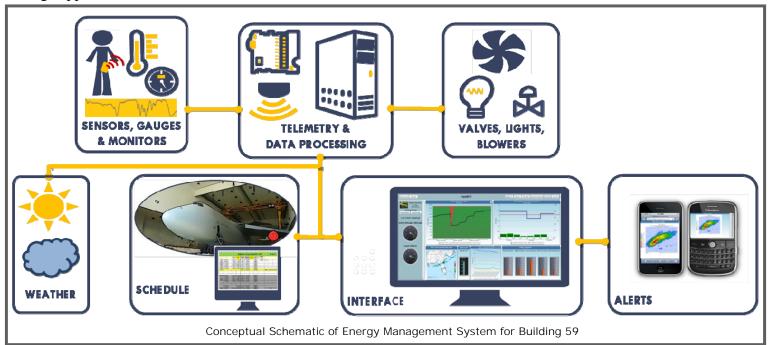
The funding for the project will be provided by the Department of Defense (DoD) through the Environmental Security Technology Certification Program (ESTCP). The ESTCP program promotes the transfer of innovative technologies from proof of concept to field or production use.

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<sup>TM</sup>), 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.

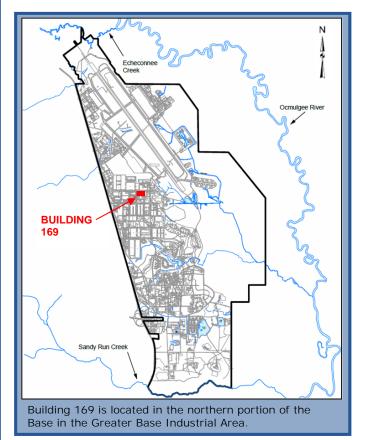
The EMS will also employ non-intrusive load monitors to improve equipment operations. As in the case of many industrial facilities, 20 percent or more of Building 59 energy is likely wasted when equipment is improperly operated or poorly maintained (e.g., clogged filters). Such waste often goes unnoticed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



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 Tech-
	nology Certification Program
GA EPD	Georgia Environmental Pro-
	tection 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 com-
	pound
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,	<b>Dr. Dan Callahan,</b>	<b>Ms. Debra Jones,</b>	<b>Mr. Don Thompson,</b>			
Robins AFB	Warner Robins	Warner Robins	Macon			
Installation Co-Chair	Community Member	Community Member	Community Member			
<b>Dr. Linda Smyth,</b>	<b>Mr. James Harden,</b>	<b>Mr. Mike Maffeo</b> ,				
Macon	Warner Robins	<b>Macon</b>				
Community Co-Chair	Community Member	Community Member				
<b>Ms. Lila Llamas,</b>	<b>Mr. John Harley,</b>	<b>Dr. Brian E. Rood,</b>				
US EPA Region 4	<b>Centerville</b>	Macon				
Hazardous Waste Division	Community Member	Community Member				
<b>Ms. Mary Brown,</b>	<b>Mr. Stephen Johnson,</b>	<b>Dr. Joseph Swartwout,</b>				
<b>GA EPD</b>	Macon	Fort Valley				
Hazardous Waste Management	Community Member	Community Member				

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# Robins Air Force Base Environmental Advisory Board (EAB)





Volume 7, Issue 4, May 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.

## Inside this issue...

Performance-Based Remediation Progress
Update for the Horse Pasture Disposal Site page 2
Performance-Based Remediation Progress
Update for Solid Waste Management Unit
(SWMU 20) page 3

New EAB Community Co-Chair Elected ...... page 4

## May 2013 EAB Meeting

The spring EAB meeting was held on Thursday, May 2, 2013, at Centerville City Hall in Centerville, Georgia. The topics briefed included: "DC034 Horse Pasture Trench Disposal Site (SWMU 36), Update on Progress" and "SWMU 20, Greater Base Industrial Area Chlorinated Solvent Plume, Update on Progress".

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

The next meeting will be a tour of restoration sites at the Base on Thursday, August 1, 2013.

## ROBINS AFB RECOGNIZED AS BEST IN DOD FOR ENVIRONMENTAL QUALITY

Robins AFB has once again been recognized for their outstanding environmental program. During the May EAB meeting, Mr. Alexander Stokes announced that the Robins AFB Environmental Management Branch won the Department of Defense (DoD) Environmental Quality - Industrial Installation Award for 2012. The award recognizes the environmental program being a leader in a number of areas, including air quality, hazardous materials and waste management, pollution prevention, green procurement, natural resources, restoration, and water quality. This is the first time the Base has won the award at the DoD level.



The GWTP was recognized as part of the award package for the numerous accolades it has received for successful, efficient, and safe operation.

Among the notable achievements was the Base's active involvement in environmental community groups and activities. The EAB was recognized as a vehicle for fostering a proactive and sincere partnership between the community, the regulators, and the Base.

Additionally, the state-of-the-art Groundwater Treatment Plant was recognized for the numerous accolades it has received for successful, efficient, and safe operation. The plant was the first industrial wastewater treatment facility in Georgia to receive the Platinum Award. It has also received Plant of the Year ten times since 2000, with zero lost time accidents.

## PERFORMANCE-BASED REMEDIATION UPDATE FOR THE HORSE PASTURE DISPOSAL SITE

The Horse Pasture Disposal Site was used as a disposal area from the 1950s until the 1970s. Soil and groundwater at the site were impacted by volatile organic compounds (VOCs) commonly associated with solvents and lubricants. Initial remediation activities at the site consisted of excavation of the contaminated soil and in-situ chemical oxidation (ISCO) for the contaminated groundwater.



The Horse Pasture Disposal Site is located on the southern end of the Base.

In 2004, approximately 72,000 tons of contaminated soils were excavated from the site. The excavated soil was characterized as non-hazardous and disposed of off-site at a landfill. No Further Action status was subsequently granted for site soils.

The ISCO program for groundwater remediation was conducted in 2005 and 2006. While ISCO resulted in notable decreases in groundwater contaminant concentrations, concentrations at many locations remain elevated and additional remediation is required. The CAPE Team's original approach to the additional remediation activities included: (i) an investigation to further delineate the contamination at the site; (ii) hot spot treatment of the contaminants in the clay layer at the site; and (iii) groundwater plume containment using an Air Sparge (AS) cutoff trench along the Base's eastern property line.

The field investigation was conducted in two phases in November and December 2012. The field activities included drilling using a Direct Push Technology (DPT) drill rig to collect both soil and groundwater samples. Groundwater samples were also collected from existing site injection wells.



Recent field activities at the Horse Pasture site included DPT drilling.

The results of the field investigation did not identify hot spots in the clay. As a result, the CAPE Team has transitioned their optimized remedial approach for the site to focus on the groundwater contamination. Technologies currently being considered include in situ bioremediation, as well as ISCO. The AS trench is still being planned for construction along the eastern site boundary.

A new Corrective Action Plan (CAP) for the site will be submitted to the Georgia Environmental Protection Division (GA EPD) and a Remedial Design/Remedial Action (RD/RA) Work Plan is under development. Field implementation of the remedial action is scheduled for September to December 2013.

### **PERFORMANCE-BASED REMEDIATION UPDATE FOR SWMU 20**

SWMU 20 is defined as the Greater Base Industrial Area (GBIA) chlorinated solvent groundwater plume. The plume extends from multiple soil SWMUs. Active remediation of the site currently includes operation of a groundwater extraction system and an AS/Soil Vapor Extractaion (SVE) system. Monitored Natural Attenuation (MNA) is implemented for portions of the plume not influenced by the active systems.



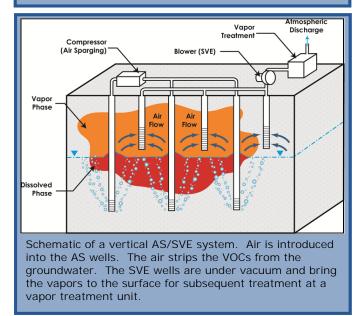
SWMU 20 is the chlorinated solvent groundwater plume associated with multiple soil SWMUs in the GBIA.

As part of the Performance-Based Remediation (PBR) contract, the CAPE Team proposed to: (i) conduct a source area investigation to further delineate the contamination at the site; (ii) phase out the groundwater extraction system; (iii) continue operation of the AS/SVE curtain; and (iv) implement a focused source area remediation using two horizontal directionally drilled AS/SVE wells.

During the investigation to further delineate the contamination at the site, a utility survey was conducted to evaluate utility locations. The results indicated a large amount of utilities along the proposed alignment for one of the two horizontal wells. As a result, a decision has been made to replace this horizontal AS/SVE well with a cluster of eight vertical AS wells, installed to a depth of 60 feet below ground surface (ft bgs) and 6 vertical SVE wells, installed to a depth of 9 ft bgs.



A large number of underground utilities were identified along the proposed alignment of one of the horizontal wells during a recent utility survey.



The CAPE Team is currently finalizing the design documents for the proposed system and developing the construction work plan. Construction of the AS/SVE system expansion is scheduled to be completed by August 2013.

## **ROBINS AFB ELECTS NEW COMMUNITY CO-CHAIR**

**Dr. Brian Rood** was elected the new Robins AFB EAB Community Co-Chair at the May meeting.

Dr. Rood holds a Ph.D. in Environmental Engineering Sciences from the University of Florida. He has been a professor at Mer-

cer University since 1994, and is currently the Director of Environmental Studies.

Dr. Rood is actively involved in the nonprofit Ocmulgee River Initiative, Inc. (ORI), which he founded along with two of his friends in 1996. ORI carries out a quarterly water quality monitoring program for the 222 river miles of the Ocmulgee, organizes river clean-ups, and gives presentations in area schools and social/ civic groups. Currently, ORI is working on producing a video documentary on the natural and cultural history of the Ocmulgee River watershed.



Dr. Rood was recently elected the new Robins AFB EAB Community Co-Chair.

#### <u>Acronyms</u>

AFB	Air Force Base
AS	Air Sparge
CAP	Corrective Action Plan
DoD	Department of Defense
DPT	Direct Push Technology
EAB	Environmental Advisory
	Board
ft bgs	feet below ground surface
GA EPD	Georgia Environmental Pro-
	tection Division
GBIA	Greater Base Industrial Area
ISCO	In-Situ Chemical Oxidation
MNA	Monitored Natural Attenua-
	tion
PBR	Performance-Based Remedia-
	tion
RD/RA	Remedial Design/Remedial
	Action
SVE	Soil Vapor Extraction
SWMU	Solid Waste Management
	Unit
VOC	Volatile Organic Compound

#### 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						
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Robins AFB	Warner Robins	Warner Robins	Macon			
Installation Co-Chair	Community Member	Community Member	Community Member			
<b>Dr. Linda Smyth</b> ,	<b>Mr. James Harden,</b>	<b>Mr. Mike Maffeo,</b>	<b>Mr. Penrose Wolf,</b>			
<b>Macon</b>	Warner Robins	Macon	Perry			
Community Co-Chair	Community Member	Community Member	Community Member			
<b>Ms. Lila Llamas,</b>	<b>Mr. John Harley,</b>	<b>Dr. Brian E. Rood,</b>				
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<b>GA EPD</b>	Macon	Fort Valley				
Hazardous Waste Management	Community Member	Community Member				



# Robins Air Force Base Environmental Advisory Board (EAB)





Volume 8, Issue 1, August 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.

## Inside this issue...

Qualified Recycling Program Highlighted
during EAB Tour page 3

## August 2013 EAB Meeting

The summer EAB meeting was held on Thursday, August 1, 2013. EAB members met at the Warner Robins City Hall in Warner Robins, Georgia, where they boarded a bus to tour the biosparge system at Solid Waste Management Units (SWMUs) 59 and 60 and the Qualified Recycling Program (QRP) Center.

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

The next meeting will also be a tour at the Base on Thursday, November 7, 2013.

## EAB MEMBERS TOUR BIOSPARGE SYSTEM AT SWMUs 59 AND 60

Contamination at SWMUs 59 and 60 resulted from the release of jet fuel from a pipeline that runs parallel to the flightline taxiways. Under the Performance Based Remediation (PBR) Contract, the remedy for both sites has been optimized with installation of a biosparge system.

During the summer EAB meeting, **Mr. Tom Kessler** and **Mr. Adrian Teal** from CH2M Hill gave the EAB members a tour of the system, which began operation in December 2012.



Mr. Tom Kessler of CH2M Hill gives the EAB members an overview of the biosparge system recently installed at SWMUs 59 and 60.

Biosparging involves the low flow injection [about 0.25 to 1 standard cubic foot per minute (scfm) of well screen] of atmospheric air to stimulate the aerobic biodegradation of hydrocarbons (e.g., jet fuel).

## EAB MEMBERS TOUR BIOSPARGE SYSTEM AT SWMUs 59 AND 60 (Cont'd)

#### (Continued from page 1)

The objectives for the system are to: (i) reduce dissolved hydrocarbon concentrations to drinking water standards at SWMUs 59 and 60; (ii) reduce hydrocarbon concentrations in soil at SWMU 59; and (iii) achieve site closeout at both sites by 2016.

The biosparge well network consists of 50 vertical wells and five horizontal wells. The vertical wells were installed as Air Sparge (AS) wells, as part of the original remedial action plan for the site. They are 40 feet deep with five feet of screen. Air is injected into each well at five scfm with 11 pounds per square inch (psi) of pressure. Air is injected for six hours and then the system is off for three hours; the on/off cycle repeats continuously.

The horizontal wells were drilled at an angle using horizontal directional drilling (HDD) technology. The wells are approximately 1,200 feet long and have 540 to 850 feet of screen. The screen is positioned 50 to 70 feet below ground surface (ft bgs). Air is injected continuously into each well at 135 to 280 scfm with 14 psi of pressure.

The controls for the system components are located in a fenced area about 100 feet southwest of the Base's control tower. The major components of the vertical system include blowers/heat exchangers and an air distribution manifold and control panel for the SWMU 60 wells. For the horizontal system, the major components include an air compressor, an after-cooler, a receiving tank, and a manifold building. Aboveground components located outside the fenced area include well vaults and the SWMU 59 air distribution manifold The system is monitored on a weekly, monthly, and quarterly basis for various parameters. Based on data from groundwater samples from the site, there has been a considerable decrease in the size

(Continued on page 4)



EAB members brave the rain to see the vaults for the horizontal wells at SWMU 60.



View inside the biosparge equipment compound. The manifolds for each of the five horizontal wells can be seen on the right of the photograph.



### **QRP HIGHLIGHTED DURING EAB TOUR**

The Robins AFB Solid Waste Program manages non-hazardous solid waste generation, recycling, and disposal at the Base. One key goal of the Program is to divert the solid waste generated on the Base from the landfill through the QRP. During the summer meeting, the EAB members were given a tour of the QRP Center by **Mr. Randy Stillwell** and **Mr. Darryl Mercer** of Robins AFB.



The QRP Center is located centrally on the Base south of Duck Lake and just west of Warner Robins Street.



EAB members are given an overview of the QRP during the summer EAB meeting.

The Center was opened in 2010, and is centrally located on the Base, south of Duck Lake and just west of Warner Robins Street. Anyone with access to the Base is allowed to bring recyclable material to the Center, which is open 24 hours a day, seven days a week. The main types of items collected for recycling include paper, plastic bottles, glass, aluminum cans, and toner cartridges. The Base teams with Happy Hour, who comes to the Base three times a week to collect the materials. A portion of the proceeds from Happy Hour's sale of the material is provided back to the base to put into the QRP fund. In 2012, the program had net proceeds of over \$250,000.

Future plans for the QRP Center include installing a concrete pad near the back of the facility to allow for increased operational space and purchasing a bailer to bail aluminum cans and plastic bottles. The bailing of these materials will reduce the number of service trips that Happy Hour has to make to the Base each week. There are also future plans to consolidate the scrap metal yard at Building 1555.



Recyclables are dropped off at the center and placed through the windows (top photograph) into bins (bottom photograph) for Happy Hour to collect.

# EAB MEMBERS TOUR BIOSPARGE SYSTEM AT SWMUs 59 AND 60 (Cont'd)

(Continued from page 2)

(50 and 60 percent reduction, respec-

tively). Contami-

creased by an aver-

age of 70 percent.

The biosparge system will operate

until site COCs in

groundwater are

below Maximum

Contaminant Lev-

els (MCLs). Fol-

lowing achieve-

ment of MCLs,

nant of concern (COC) concentra-

tions have de-

of the groundwater contaminant plumes at SWMUs 59 and 60 since the startup of the system groundwater concentrations for the site COCs must remain below MCLs for three years prior to site closeout.

### Interesting Facts about the Horizontal Biosparge System

- Horizontal wells were installed using a single entry (blind end).
- The head of the horizontal drill bit was tracked to an accuracy of less than 1 foot using radio frequency equipment.
- Two miles of pipe sections were installed to convey air to the wells.
- ◊ 1.7 million cubic feet of air is injected per day, which is enough air to fill eight blimps.
- ♦ The length of the well screens and capacity of the air compressor make this horizontal system one of the largest in the country, if not the world.

#### <u>Acronyms</u>

AFB	Air Force Base
AS	Air Sparge
COC	Contaminants of Concern
EAB	Environmental Advisory
	Board
ft bgs	feet below ground surface
HDD	Horizontal Directional Drill-
	ing
MCL	Maximum Contaminant Lev-
	els
QRP	Qualified Recycling Program
PBR	Performance-Based Remedia-
	tion
psi	pounds per square inch
scfm	standard cubic feet per minute
SWMU	Solid Waste Management
	Unit

#### 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

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